

**3GPP2 C.S0005-E**

**Version 1.0**

**Date: September 2009**



**3RD GENERATION  
PARTNERSHIP  
PROJECT 2  
"3GPP2"**

---

## ***Upper Layer (Layer 3) Signaling Standard for cdma2000 Spread Spectrum Systems***

### ***Revision E***

© 3GPP2 2009

*3GPP2 and its Organizational Partners claim copyright in this document and individual Organizational Partners may copyright and issue documents or standards publications in individual Organizational Partner's name based on this document. Requests for reproduction of this document should be directed to the 3GPP2 Secretariat at [secretariat@3gpp2.org](mailto:secretariat@3gpp2.org). Requests to reproduce individual Organizational Partner's documents should be directed to that Organizational Partner. See [www.3gpp2.org](http://www.3gpp2.org) for more information.*



## CONTENTS

1	FOREWORD AND SCOPE .....	xlvi
2	NOTES .....	xlvi
3	REFERENCES .....	li
4	1. GENERAL.....	1-1
5	1.1 Terms and Numeric Information.....	1-1
6	1.1.1 Terms .....	1-1
7	1.1.2 Numeric Information.....	1-28
8	1.1.2.1 Reserved .....	1-29
9	1.1.2.2 CDMA Numeric Information .....	1-29
10	1.2 Signaling Architecture .....	1-61
11	1.3 Signaling and Functionality .....	1-61
12	1.3.1 General Architecture .....	1-61
13	1.3.2 Interface to Layer 2 .....	1-61
14	1.3.2.1 Message Control and Status Block (MCSB) .....	1-61
15	1.3.2.2 Interface Primitives .....	1-62
16	1.3.3 Reserved .....	1-63
17	1.3.4 Functional Description .....	1-63
18	1.3.5 PDU Transmission and Reception .....	1-63
19	2. REQUIREMENTS FOR MOBILE STATION CDMA OPERATION .....	2-1
20	2.1 Reserved .....	2-1
21	2.2 Reserved .....	2-1
22	2.3 Security and Identification .....	2-1
23	2.3.1 Mobile Station Identification Number.....	2-1
24	2.3.1.1 Encoding of IMSI_M_S and IMSI_T_S .....	2-3
25	2.3.1.2 Encoding of IMSI_M_11_12 and IMSI_T_11_12.....	2-6
26	2.3.1.3 Encoding of the MCC_M and MCC_T .....	2-6
27	2.3.1.4 Mobile Directory Number.....	2-6
28	2.3.2 Electronic Serial Number (ESN), R-UIM Identifier (UIM_ID), and Mobile	
29	Equipment Identifier (MEID) .....	2-6
30	2.3.2.1 Electronic Serial Number (ESN) .....	2-6
31	2.3.2.2 Mobile Equipment Identifier (MEID) .....	2-6
32	2.3.2.2.1 Pseudo-ESN .....	2-7

**CONTENTS**

1	2.3.2.3 R-UIM Identifier (UIM_ID, EXT_UIM_ID).....	2-7
2	2.3.3 Station Class Mark .....	2-7
3	2.3.4 Registration Memory.....	2-8
4	2.3.5 Access Overload Class .....	2-9
5	2.3.6 Public Long Code Mask and Private Long Code Mask .....	2-10
6	2.3.6.1 Public Long Code Mask Formats .....	2-10
7	2.3.6.1.1 Public Long Code Mask PLCM_42, ADD_PLCM_FOR_FCH_42 and	
8	ADD_PLCM_FOR_SCH_42 .....	2-12
9	2.3.6.2 Private Long Code Mask PVTLCM_42 .....	2-13
10	2.3.7 Reserved .....	2-14
11	2.3.8 Home System and Network Identification .....	2-14
12	2.3.9 Local Control Option.....	2-14
13	2.3.10 Preferred Operation Selection.....	2-14
14	2.3.10.1 Preferred System .....	2-14
15	2.3.10.2 Reserved .....	2-14
16	2.3.11 Discontinuous Reception .....	2-14
17	2.3.12 Authentication, Encryption of Signaling Information/User Data and Voice	
18	Privacy.....	2-14
19	2.3.12.1 Authentication.....	2-14
20	2.3.12.1.1 Shared Secret Data (SSD).....	2-15
21	2.3.12.1.2 Random Challenge Memory (RAND) .....	2-15
22	2.3.12.1.3 Call History Parameter (COUNT <sub>S-p</sub> ).....	2-15
23	2.3.12.1.4 Unique Challenge-Response Procedure.....	2-16
24	2.3.12.1.5 Updating the Shared Secret Data (SSD) .....	2-17
25	2.3.12.2 Signaling Message Encryption.....	2-21
26	2.3.12.2.1 Encrypted Messages on the f-dsch .....	2-22
27	2.3.12.2.2 Encrypted Messages on the r-dsch.....	2-24
28	2.3.12.3 Voice Privacy.....	2-27
29	2.3.12.4 Extended Encryption for Signaling Message and User Information .....	2-28
30	2.3.12.4.1 Extended Encryption for Signaling Messages .....	2-28
31	2.3.12.4.1.1 Extended Encryption for Signaling on f/r-csch .....	2-28
32	2.3.12.4.1.2 Extended Encryption for Signaling on f/r-dsch .....	2-29



**CONTENTS**

1	2.3.12.4.1.3 Signaling Encryption/Decryption Procedures.....	2-29
2	2.3.12.4.1.4 Computation of the 8-bit Layer 3 PDU CRC Field.....	2-31
3	2.3.12.4.1.5 Duplicate Detection of Security Sequence Number .....	2-32
4	2.3.12.4.2 Extended Encryption for User Information .....	2-33
5	2.3.12.4.2.1 User Information Encryption/Decryption Procedures .....	2-34
6	2.3.12.4.3 Interface to the Encryption Algorithms .....	2-34
7	2.3.12.4.4 Encryption Negotiation .....	2-37
8	2.3.12.4.5 Computation of NEW_SSEQ_H_SIG .....	2-38
9	2.3.12.5 Authentication and Key Set-up Procedures when P_REV_IN_USE <sub>S</sub> >=	
10	10 .....	2-38
11	2.3.12.5.1 2G Authentication when P_REV_IN_USE <sub>S</sub> >= 10 .....	2-40
12	2.3.12.5.2 3G Authentication (AKA) when P_REV_IN_USE <sub>S</sub> >= 10.....	2-41
13	2.3.12.5.3 Restoring (IK, CK) upon power on.....	2-46
14	2.3.12.5.4 Key Strength Reduction Algorithm .....	2-46
15	2.3.12.5.5 Message Integrity Check Negotiation and Other Requirements.....	2-47
16	2.3.13 Lock and Maintenance Required Orders.....	2-48
17	2.3.14 Mobile Station Revision Identification .....	2-48
18	2.3.15 Temporary Mobile Subscriber Identity.....	2-48
19	2.3.15.1 Overview .....	2-48
20	2.3.15.2 TMSI Assignment Memory .....	2-50
21	2.4 Accumulated Statistics.....	2-50
22	2.4.1 Monitored Quantities and Statistics .....	2-50
23	2.4.2 Accumulated Paging, Broadcast, and Forward Common Control Channel	
24	Statistics .....	2-50
25	2.5 Reserved .....	2-52
26	SECTION (Continued) .....	2-53
27	2.6 Layer 3 Processing.....	2-53
28	2.6.1 Mobile Station Initialization State.....	2-55
29	2.6.1.1 System Determination Substate .....	2-57
30	2.6.1.1.1 Custom System Selection Process.....	2-63
31	2.6.1.1.2 System Selection Using Current Redirection Criteria .....	2-63
32	2.6.1.1.2.1 System Selection Using Current Redirection Record .....	2-64

**CONTENTS**

1	2.6.1.1.3 System Selection Using System Reselection Criteria .....	2-65
2	2.6.1.1.4 Acquiring the Selected System.....	2-65
3	2.6.1.2 Pilot Channel Acquisition Substate .....	2-66
4	2.6.1.3 Sync Channel Acquisition Substate .....	2-66
5	2.6.1.4 Timing Change Substate.....	2-69
6	2.6.2 Mobile Station Idle State.....	2-72
7	2.6.2.1 Idle Procedures .....	2-75
8	2.6.2.1.1 Forward Channel Monitoring Procedures .....	2-75
9	2.6.2.1.1.1 General Overview .....	2-75
10	2.6.2.1.1.1.1 General Overview for Individually Addressed Messages .....	2-76
11	2.6.2.1.1.1.1.1 Overview of Stopping Monitoring via the General Page	
12	Message.....	2-78
13	2.6.2.1.1.1.1.2 Overview of Stopping Monitoring via the Universal Page	
14	Message.....	2-80
15	2.6.2.1.1.1.2 Overview of Broadcast Messages on Paging Channel.....	2-80
16	2.6.2.1.1.1.2.1 Method 1: Multi-Slot Broadcast Message Transmission.....	2-80
17	2.6.2.1.1.1.2.2 Method 2: Periodic Broadcast Paging .....	2-81
18	2.6.2.1.1.1.3 Overview of Broadcast Messages on Broadcast Control	
19	Channel.....	2-82
20	2.6.2.1.1.1.3.1 Method 1: Multi-Slot Enhanced Broadcast Paging.....	2-82
21	2.6.2.1.1.1.3.2 Method 2: Periodic Enhanced Broadcast Paging .....	2-83
22	2.6.2.1.1.1.4 Overview of Broadcast Messages on Forward Common	
23	Control Channel.....	2-83
24	2.6.2.1.1.1.4.1 Method 1: Multi-Slot Broadcast Message Transmission.....	2-83
25	2.6.2.1.1.1.4.2 Method 2: Periodic Enhanced Broadcast Paging .....	2-84
26	2.6.2.1.1.2 Non-Slotted Mode Requirements .....	2-84
27	2.6.2.1.1.3 Slotted Mode Requirements .....	2-85
28	2.6.2.1.1.3.1 Monitoring Assigned Slots .....	2-85
29	2.6.2.1.1.3.2 Determination of the Slot Cycle Index.....	2-88
30	2.6.2.1.1.3.3 Slot Cycles for Broadcast Message Transmission.....	2-88
31	2.6.2.1.1.3.3.1 Slot Cycles for Broadcast Message Transmission on the	
32	Paging Channel .....	2-88
33	2.6.2.1.1.3.3.2 Slot Cycles for Broadcast Message Transmission on the	
34	Forward Common Control Channel.....	2-89

## CONTENTS

1	2.6.2.1.1.3.4 Monitoring Paging Channel Broadcasts .....	2-89
2	2.6.2.1.1.3.5 Support of Broadcast Delivery Options on the Paging	
3	Channel.....	2-91
4	2.6.2.1.1.3.6 Monitoring the Forward Common Control Channel for the	
5	Enhanced Broadcast Page.....	2-91
6	2.6.2.1.1.3.7 Support of Broadcast Delivery Options on the Forward	
7	Common Control Channel/Broadcast Control Channel	
8	when NUM_BCCH_BCAST <sub>S</sub> does not equal '000' .....	2-93
9	2.6.2.1.1.3.7.1 Support of Broadcast Delivery Options on the Forward	
10	Common Control Channel when NUM_BCCH_BCAST <sub>S</sub>	
11	equals '000' .....	2-93
12	2.6.2.1.1.3.8 Slot Cycles for BSPM Transmission.....	2-94
13	2.6.2.1.1.3.8.1 BSPM Slot Cycle on the Paging Channel .....	2-94
14	2.6.2.1.1.3.8.2 BSPM Slot Cycle on the Primary Broadcast Control	
15	Channel .....	2-94
16	2.6.2.1.1.4 Common Channel Supervision.....	2-94
17	2.6.2.1.2 Quick Paging Channel Monitoring Procedures.....	2-95
18	2.6.2.1.2.1 Overview.....	2-95
19	2.6.2.1.2.2 Requirements .....	2-98
20	2.6.2.1.3 Registration.....	2-100
21	2.6.2.1.4 Idle Handoff.....	2-100
22	2.6.2.1.4.1 Pilot Search .....	2-100
23	2.6.2.1.4.2 Idle Handoff Procedures .....	2-103
24	2.6.2.1.5 Primary Broadcast Control Channel Monitoring.....	2-113
25	2.6.2.1.5.1 General Overview .....	2-113
26	2.6.2.1.5.2 Requirements .....	2-113
27	2.6.2.1.6 System Reselection Procedures.....	2-113
28	2.6.2.1.7 Slotted Timer Expiration .....	2-114
29	2.6.2.1.8 Exiting the Reduced Slot Cycle Mode.....	2-114
30	2.6.2.1.9 Radio Environment Report Timer Expiration .....	2-114
31	2.6.2.2 Response to Overhead Information Operation .....	2-114
32	2.6.2.2.1 System Parameters Message .....	2-120
33	2.6.2.2.1.1 Stored Parameters .....	2-121
34	2.6.2.2.1.2 Paging Channel Assignment Change .....	2-125

**CONTENTS**

1	2.6.2.2.1.3 RESCAN Parameter .....	2-125
2	2.6.2.2.1.4 Roaming Status .....	2-125
3	2.6.2.2.1.5 Registration.....	2-126
4	2.6.2.2.1.6 Slot Cycle Index .....	2-126
5	2.6.2.2.1.7 PACA Disable for SID Change .....	2-126
6	2.6.2.2.1.8 Retry Delay Disable for Packet Zone ID or SID/NID Change .....	2-126
7	2.6.2.2.1.9 Encryption key reset for SID/NID Change .....	2-126
8	2.6.2.2.2 Access Parameters Message .....	2-127
9	2.6.2.2.3 Neighbor List Message .....	2-129
10	2.6.2.2.4 CDMA Channel List Message .....	2-130
11	2.6.2.2.5 Extended System Parameters Message .....	2-131
12	2.6.2.2.6 Global Service Redirection Message .....	2-140
13	2.6.2.2.7 Extended Neighbor List Message .....	2-141
14	2.6.2.2.8 General Neighbor List Message .....	2-143
15	2.6.2.2.9 User Zone Identification Message .....	2-148
16	2.6.2.2.10 Private Neighbor List Message .....	2-149
17	2.6.2.2.11 Extended Global Service Redirection Message .....	2-150
18	2.6.2.2.12 Extended CDMA Channel List Message Overview .....	2-151
19	2.6.2.2.12.1 Extended CDMA Channel List Message on Paging Channel .....	2-152
20	2.6.2.2.12.2 Extended CDMA Channel List Message on Primary Broadcast	
21	Control Channel .....	2-156
22	2.6.2.2.13 ANSI-41 System Parameters Message .....	2-161
23	2.6.2.2.13.1 Stored Parameters.....	2-161
24	2.6.2.2.13.2 Roaming Status .....	2-165
25	2.6.2.2.13.3 Registration.....	2-165
26	2.6.2.2.13.4 PACA Disable for SID Change .....	2-165
27	2.6.2.2.14 MC-RR Parameters Message .....	2-165
28	2.6.2.2.14.1 Stored Parameters.....	2-166
29	2.6.2.2.14.2 Slot Cycle Index .....	2-174
30	2.6.2.2.14.3 Forward Common Control Channel Assignment Change.....	2-175
31	2.6.2.2.14.4 RESCAN Parameter .....	2-175
32	2.6.2.2.15 Enhanced Access Parameters Message .....	2-175

## CONTENTS

1	2.6.2.2.16 ANSI-41 RAND Message .....	2-180
2	2.6.2.2.17 Universal Neighbor List Message.....	2-181
3	2.6.2.2.18 <i>BCMC Service Parameters Message</i> .....	2-186
4	2.6.2.2.19 Access Point Pilot Information Message .....	2-197
5	2.6.2.2.20 Access Point Identification Message.....	2-198
6	2.6.2.2.21 Access Point Identification Text Message .....	2-200
7	2.6.2.2.22 <i>General Overhead Information Message</i> .....	2-200
8	2.6.2.2.23 Flex Duplex CDMA Channel List Message Overview .....	2-201
9	2.6.2.2.23.1 Flex Duplex CDMA Channel List Message on Paging Channel ..	2-204
10	2.6.2.2.23.2 Flex Duplex CDMA Channel List Message on Primary	
11	Broadcast Control Channel.....	2-207
12	2.6.2.2.24 Alternative Technologies Information Message .....	2-211
13	2.6.2.3 Mobile Station Page Match Operation.....	2-212
14	2.6.2.4 Mobile Station Order and Message Processing Operation.....	2-213
15	2.6.2.5 Mobile Station Origination Operation .....	2-223
16	2.6.2.6 Mobile Station Message Transmission Operation .....	2-224
17	2.6.2.7 Mobile Station Power-Down Operation .....	2-225
18	2.6.2.8 Mobile Station PACA Cancel Operation .....	2-225
19	2.6.3 System Access State .....	2-225
20	2.6.3.1 Access Procedures .....	2-226
21	2.6.3.1.1 Access Attempts .....	2-226
22	2.6.3.1.2 Reserved.....	2-227
23	2.6.3.1.3 Handoffs.....	2-227
24	2.6.3.1.3.1 Pilot Search .....	2-228
25	2.6.3.1.3.2 Access Handoff.....	2-229
26	2.6.3.1.3.3 Access Probe Handoff.....	2-230
27	2.6.3.1.4 System Access State Exit Procedures.....	2-232
28	2.6.3.1.5 Reserved.....	2-232
29	2.6.3.1.6 Full-TMSI Timer .....	2-232
30	2.6.3.1.7 Monitoring Pilots.....	2-232
31	2.6.3.1.7.1 Generation of the Initial Access Handoff List .....	2-232
32	2.6.3.1.7.2 Update of the Access Handoff List.....	2-233

**CONTENTS**

1	2.6.3.1.7.3 Generation of the Other Reported List .....	2-233
2	2.6.3.1.7.4 Update of OTHER_REPORTED_LIST .....	2-234
3	2.6.3.1.8 Paging Channel and Forward Common Control Channel/ Primary	
4	Broadcast Control Channel Monitoring .....	2-234
5	2.6.3.2 Update Overhead Information Substate.....	2-235
6	2.6.3.3 Page Response Substate .....	2-240
7	2.6.3.4 Mobile Station Order/Message Response Substate .....	2-280
8	2.6.3.5 Mobile Station Origination Attempt Substate.....	2-284
9	2.6.3.6 Registration Access Substate.....	2-328
10	2.6.3.7 Mobile Station Message Transmission Substate.....	2-334
11	2.6.3.8 PACA Cancel Substate.....	2-341
12	2.6.4 Mobile Station Control on the Traffic Channel State .....	2-345
13	2.6.4.1 Special Functions and Actions .....	2-347
14	2.6.4.1.1 Forward Traffic Channel Power Control .....	2-347
15	2.6.4.1.1.1 Forward Traffic Channel Power Control Initialization .....	2-350
16	2.6.4.1.1.2 Processing the Power Control Parameters Message .....	2-350
17	2.6.4.1.1.3 Processing the Power Control Message .....	2-351
18	2.6.4.1.1.4 Processing the Rate Change Message .....	2-353
19	2.6.4.1.2 Service Configuration and Negotiation.....	2-355
20	2.6.4.1.2.1 Use of Variables .....	2-360
21	2.6.4.1.2.1.1 Maintaining the Service Request Sequence Number .....	2-360
22	2.6.4.1.2.1.2 Maintaining the Service Negotiation Indicator Variable .....	2-360
23	2.6.4.1.2.1.3 Maintaining the Service Option Request Number .....	2-360
24	2.6.4.1.2.1.4 Stored Service Configuration and Reconnection .....	2-360
25	2.6.4.1.2.2 Service Subfunctions .....	2-361
26	2.6.4.1.2.2.1 Normal Service Subfunction.....	2-364
27	2.6.4.1.2.2.2 Waiting for Service Request Message Subfunction.....	2-366
28	2.6.4.1.2.2.3 Waiting for Service Response Message Subfunction .....	2-369
29	2.6.4.1.2.2.4 Waiting for Service Connect Message Subfunction .....	2-372
30	2.6.4.1.2.2.5 Waiting for Service Action Time Subfunction.....	2-375
31	2.6.4.1.2.2.5.1 Storing a Service Configuration with SYNC_ID .....	2-382

## CONTENTS

1	2.6.4.1.2.2.5.2 Restoring a stored Service Configuration based on	
2	SYNC_ID .....	2-383
3	2.6.4.1.2.2.6 SO Negotiation Subfunction.....	2-383
4	2.6.4.1.3 Ordering of Messages .....	2-385
5	2.6.4.1.4 Processing the In-Traffic System Parameters Message.....	2-385
6	2.6.4.1.5 Message Action Times .....	2-388
7	2.6.4.1.6 Long Code Transition Request Processing .....	2-388
8	2.6.4.1.7 Power Up Function (PUF) .....	2-389
9	2.6.4.1.7.1 Processing the Power Up Function Message .....	2-390
10	2.6.4.1.7.2 Power Up Function Procedures .....	2-391
11	2.6.4.1.7.2.1 PUF Probe On Serving Frequency.....	2-391
12	2.6.4.1.7.2.2 PUF Probe On PUF Target Frequency.....	2-392
13	2.6.4.1.7.3 Processing the Power Up Function Completion Message .....	2-393
14	2.6.4.1.8 Forward Traffic Channel Supervision.....	2-393
15	2.6.4.1.8.1 Forward Traffic Channel Supervision when a Forward Common	
16	Power Control Channel is not assigned .....	2-394
17	2.6.4.1.8.1.1 Triggers.....	2-395
18	2.6.4.1.8.2 Forward Traffic Channel Supervision when a Forward Common	
19	Power Control Channel is assigned .....	2-395
20	2.6.4.1.9 Processing the Extended Release Message and the Extended Release	
21	Mini Message .....	2-396
22	2.6.4.1.10 Processing the Resource Allocation Message and Resource	
23	Allocation Mini Message .....	2-400
24	2.6.4.1.11 Reserved.....	2-400
25	2.6.4.1.12 Processing the Service Configuration Record.....	2-400
26	2.6.4.1.13 Processing the Non-Negotiable Service Configuration Record.....	2-404
27	2.6.4.1.14 Processing the Security Mode Command Message.....	2-419
28	2.6.4.1.15 Processing the Handoff Supplementary Information Solicit Message	
29	.....	2-421
30	2.6.4.2 Traffic Channel Initialization Substate .....	2-421
31	2.6.4.2.1 Return to Traffic Channel Initialization Substate with Initialization	
32	Failure Indication .....	2-445
33	2.6.4.2.2 Exiting the Traffic Channel Initialization Substate .....	2-447
34	2.6.4.3 Traffic Channel Substate .....	2-450

**CONTENTS**

1	2.6.4.4 Release Substate.....	2-477
2	2.6.4.4.1 Procedures for Exiting the Release Substate.....	2-486
3	2.6.5 Registration .....	2-490
4	2.6.5.1 Forms of Registration.....	2-490
5	2.6.5.1.1 Power-Up Registration .....	2-492
6	2.6.5.1.2 Power-Down Registration.....	2-492
7	2.6.5.1.3 Timer-Based Registration.....	2-492
8	2.6.5.1.3.1 Timer-Based Registration based on Frequency of Implicit	
9	Registrations.....	2-493
10	2.6.5.1.4 Distance-Based Registration.....	2-494
11	2.6.5.1.5 Zone-Based Registration.....	2-495
12	2.6.5.1.6 Parameter-Change Registration .....	2-497
13	2.6.5.1.7 Ordered Registration.....	2-498
14	2.6.5.1.8 Implicit Registration.....	2-498
15	2.6.5.1.9 Traffic Channel Registration .....	2-498
16	2.6.5.1.10 User Zone Registration.....	2-498
17	2.6.5.1.11 Encryption/Message Integrity Re-sync Required Registration.....	2-498
18	2.6.5.1.12 BCMC Registration .....	2-498
19	2.6.5.2 Systems and Networks.....	2-499
20	2.6.5.3 Roaming.....	2-500
21	2.6.5.4 Registration Timers and Indicators.....	2-502
22	2.6.5.5 Registration Procedures.....	2-502
23	2.6.5.5.1 Actions in the Mobile Station Initialization State.....	2-502
24	2.6.5.5.1.1 Power-Up or Change to a Different Operating Mode, Band Class,	
25	Serving System, Frequency Block Designator, or R-UIM	
26	Insertion. ....	2-502
27	2.6.5.5.1.2 Timer Maintenance .....	2-504
28	2.6.5.5.1.3 Entering the Mobile Station Idle State .....	2-504
29	2.6.5.5.2 Actions in the Mobile Station Idle State.....	2-504
30	2.6.5.5.2.1 Idle Registration Procedures .....	2-504
31	2.6.5.5.2.2 Processing the Registration Fields of the System Parameters	
32	Message and ANSI-41 System Parameters Message .....	2-506
33	2.6.5.5.2.3 Ordered Registration.....	2-506



**CONTENTS**

1	2.6.5.5.2.4 Power Off.....	2-506
2	2.6.5.5.2.5 Full-TMSI Timer Expiration .....	2-507
3	2.6.5.5.3 Actions in the System Access State.....	2-507
4	2.6.5.5.3.1 Successful Access, Registration, or Implicit Registration.....	2-507
5	2.6.5.5.3.2 Unsuccessful Access .....	2-509
6	2.6.5.5.3.3 Power Off.....	2-510
7	2.6.5.5.4 Actions in the Mobile Station Control on the Traffic Channel State...	2-510
8	2.6.5.5.4.1 Traffic Channel Initialization.....	2-510
9	2.6.5.5.4.2 Timer Maintenance .....	2-510
10	2.6.5.5.4.3 Processing the Mobile Station Registered Message .....	2-511
11	2.6.5.5.4.4 Power Off.....	2-512
12	2.6.6 Handoff Procedures.....	2-512
13	2.6.6.1 Overview .....	2-512
14	2.6.6.1.1 Types of Handoff.....	2-512
15	2.6.6.1.2 Pilot Sets .....	2-513
16	2.6.6.2 Requirements.....	2-514
17	2.6.6.2.1 Pilot Search .....	2-514
18	2.6.6.2.2 Pilot Strength Measurements.....	2-517
19	2.6.6.2.3 Handoff Drop Timer.....	2-518
20	2.6.6.2.4 Pilot PN Phase .....	2-520
21	2.6.6.2.5 Handoff Messages .....	2-521
22	2.6.6.2.5.1 Processing of Forward Traffic Channel Handoff Messages .....	2-521
23	2.6.6.2.5.1.1 Processing of the Forward Supplemental Burst Assignment..	2-611
24	2.6.6.2.5.1.2 Processing of the Reverse Supplemental Burst Assignment...	2-614
25	2.6.6.2.5.2 Processing of Reverse Traffic Channel Handoff Messages .....	2-619
26	2.6.6.2.6 Set Maintenance .....	2-623
27	2.6.6.2.6.1 Maintenance of the Active Set.....	2-623
28	2.6.6.2.6.2 Maintenance of the Candidate Set .....	2-623
29	2.6.6.2.6.3 Maintenance of the Neighbor Set .....	2-625
30	2.6.6.2.7 Soft Handoff .....	2-626
31	2.6.6.2.7.1 Forward Traffic Channel Processing.....	2-626
32	2.6.6.2.7.2 Reverse Traffic Channel Power Control During Soft Handoff .....	2-626

**CONTENTS**

1	2.6.6.2.7.3 Starting Periodic Search following Soft Handoff.....	2-627
2	2.6.6.2.8 CDMA-to-CDMA Hard Handoff .....	2-627
3	2.6.6.2.8.1 Hard Handoff without Return on Failure .....	2-628
4	2.6.6.2.8.2 Hard Handoff with Return on Failure .....	2-629
5	2.6.6.2.8.2.1 Restoring the Configuration .....	2-633
6	2.6.6.2.8.3 Search of Pilots on the CDMA Candidate Frequency .....	2-636
7	2.6.6.2.8.3.1 CDMA Candidate Frequency Single Search .....	2-636
8	2.6.6.2.8.3.2 Candidate Frequency Periodic Search.....	2-638
9	2.6.6.2.8.3.3 Candidate Frequency Pilot Measurements .....	2-642
10	2.6.6.2.8.3.4 Aborting CDMA Candidate Frequency Periodic Search.....	2-644
11	2.6.6.2.9 Reserved.....	2-645
12	2.6.6.2.10 Reserved.....	2-645
13	2.6.6.2.11 Processing of Reverse Supplemental Code Channels and Reverse	
14	Supplemental Channels .....	2-645
15	2.6.6.2.12 Periodic Serving Frequency Pilot Report Procedure .....	2-645
16	2.6.6.2.13 Call Rescue Soft Handoff.....	2-647
17	2.6.6.2.13.1 Overview .....	2-647
18	2.6.6.2.13.2 Requirements.....	2-647
19	2.6.6.2.13.3 Service Configuration Update Due to Call Rescue .....	2-648
20	2.6.6.3 Typical Message Exchanges During Handoffs .....	2-649
21	2.6.7 Hash Functions and Randomization .....	2-654
22	2.6.7.1 Hash Function.....	2-654
23	2.6.7.2 Pseudorandom Number Generator .....	2-655
24	2.6.8 CODE_CHAN_LIST <sub>S</sub> Maintenance .....	2-656
25	2.6.9 CDMA Tiered Services.....	2-658
26	2.6.9.1 Overview .....	2-658
27	2.6.9.1.1 Definition .....	2-658
28	2.6.9.1.2 Types of User Zones .....	2-658
29	2.6.9.2 Requirements.....	2-659
30	2.6.9.2.1 User Zone Operation in the Mobile Station Idle State:.....	2-659
31	2.6.9.2.2 User Zone Operation in the Mobile Station Control on the Traffic	
32	Channel State.....	2-660

## CONTENTS

1	2.6.10 Call Control Processing.....	2-660
2	2.6.10.1 Alerting .....	2-663
3	2.6.10.1.1 Waiting for Order Substate.....	2-663
4	2.6.10.1.2 Waiting for Mobile Station Answer Substate .....	2-665
5	2.6.10.2 Conversation Substate.....	2-669
6	2.6.10.3 Call Release Substate.....	2-675
7	2.6.11 Common Procedures for Extended Encryption and Message Integrity.....	2-676
8	2.6.11.1 Registration Accepted Order .....	2-676
9	2.6.11.2 Extended Channel Assignment Message .....	2-678
10	2.6.11.3 General Handoff Direction Message and Universal Handoff Direction	
11	Message.....	2-680
12	2.6.11.4 Security Mode Command Message on f-csch.....	2-681
13	2.6.11.5 Base Station Reject Order on f-csch and f-dsch.....	2-683
14	2.6.11.6 Mobile Station processing when decryption or MACI check failed .....	2-683
15	2.6.12 Common Procedures for Processing f-csch Messages .....	2-684
16	2.6.12.1 Fast Call Setup Order .....	2-684
17	2.6.13 Mobile Station BCMC Operation.....	2-686
18	2.6.13.1 Procedures for commencing reception of a BCMC Flow .....	2-689
19	2.6.13.2 Procedures while monitoring an Forward Supplemental Channel .....	2-693
20	2.6.13.3 Procedures for BCMC Registration.....	2-695
21	2.6.13.4 Procedures for Idle Handoff while Monitoring Forward Supplemental	
22	Channel.....	2-695
23	2.6.13.5 Procedures for stopping reception of a BCMC Flow .....	2-700
24	2.6.13.6 Procedures for Handling <i>BCMC Service Parameters Message</i> Updates ..	2-700
25	2.6.13.7 Procedures for Browsing BCMC Flows.....	2-703
26	2.6.13.8 Procedures for BCMC Operation while on Traffic Channel .....	2-703
27	2.6.13.9 Procedures for Computation of Authorization Signature .....	2-703
28	2.6.13.10 Procedures for Public Long Code Mask schemes .....	2-704
29	2.6.13.10.1 Procedures for BCMC Flow ID based autonomous PLCM	
30	generation .....	2-704
31	2.6.13.10.2 Procedures for index based PLCM generation .....	2-705
32	2.6.13.11 BCMC_FLOW_ID generation .....	2-705
33	2.6.13.12 BCMC TDM .....	2-706

**CONTENTS**

1	2.6.13.12.1 BCMC TDM period alignment requirement .....	2-707
2	2.6.14 Common Procedures for Processing r-csch Messages.....	2-707
3	2.6.14.1 Reporting Band Class – Band Subclass Capabilities .....	2-708
4	2.6.15 MEID procedures when communicating with P_REV 6, 7, 8, 10 Base	
5	Stations.....	2-709
6	2.6.16 Initialization of RC parameters .....	2-709
7	2.6.17 RC_PARAMS_RECORD update procedures.....	2-710
8	2.6.18 Processing of General Extension Message .....	2-710
9	2.7 PDU Formats for Mobile Stations .....	2-713
10	2.7.1 r-csch.....	2-714
11	2.7.1.1 Reserved .....	2-714
12	2.7.1.2 Reserved .....	2-714
13	2.7.1.3 PDU Formats on r-csch .....	2-714
14	2.7.1.3.1 Reserved.....	2-715
15	2.7.1.3.2 PDU Contents .....	2-715
16	2.7.1.3.2.1 Registration Message .....	2-716
17	2.7.1.3.2.2 Order Message .....	2-734
18	2.7.1.3.2.3 Data Burst Message.....	2-735
19	2.7.1.3.2.4 Origination Message .....	2-737
20	2.7.1.3.2.5 Page Response Message .....	2-773
21	2.7.1.3.2.6 Authentication Challenge Response Message .....	2-794
22	2.7.1.3.2.7 Status Response Message .....	2-795
23	2.7.1.3.2.8 TMSI Assignment Completion Message .....	2-796
24	2.7.1.3.2.9 PACA Cancel Message.....	2-797
25	2.7.1.3.2.10 Extended Status Response Message .....	2-798
26	2.7.1.3.2.11 Device Information Message .....	2-800
27	2.7.1.3.2.12 Security Mode Request Message.....	2-801
28	2.7.1.3.2.13 Authentication Response Message.....	2-804
29	2.7.1.3.2.14 Authentication Resynchronization Message .....	2-806
30	2.7.1.3.2.15 Reconnect Message.....	2-807
31	2.7.1.3.2.16 Radio Environment Message.....	2-811
32	2.7.1.3.2.17 Call Recovery Request Message .....	2-812

**CONTENTS**

1	2.7.1.3.2.18 General Extension Message .....	2-813
2	2.7.2 r-dsch.....	2-815
3	2.7.2.1 Reserved.....	2-815
4	2.7.2.2 Reserved.....	2-815
5	2.7.2.3 PDU Formats for Messages on r-dsch .....	2-815
6	2.7.2.3.1 Reserved.....	2-817
7	2.7.2.3.2 Message Body Contents .....	2-817
8	2.7.2.3.2.1 Order Message.....	2-818
9	2.7.2.3.2.2 Authentication Challenge Response Message .....	2-819
10	2.7.2.3.2.3 Flash With Information Message .....	2-820
11	2.7.2.3.2.4 Data Burst Message .....	2-821
12	2.7.2.3.2.5 Pilot Strength Measurement Message .....	2-823
13	2.7.2.3.2.6 Power Measurement Report Message .....	2-825
14	2.7.2.3.2.7 Send Burst DTMF Message .....	2-829
15	2.7.2.3.2.8 Status Message .....	2-831
16	2.7.2.3.2.9 Origination Continuation Message.....	2-832
17	2.7.2.3.2.10 Handoff Completion Message .....	2-834
18	2.7.2.3.2.11 Parameters Response Message.....	2-835
19	2.7.2.3.2.12 Service Request Message.....	2-836
20	2.7.2.3.2.13 Service Response Message .....	2-838
21	2.7.2.3.2.14 Service Connect Completion Message .....	2-840
22	2.7.2.3.2.15 Service Option Control Message.....	2-841
23	2.7.2.3.2.16 Status Response Message .....	2-842
24	2.7.2.3.2.17 TMSI Assignment Completion Message.....	2-844
25	2.7.2.3.2.18 Supplemental Channel Request Message.....	2-845
26	2.7.2.3.2.19 Candidate Frequency Search Response Message .....	2-852
27	2.7.2.3.2.20 Candidate Frequency Search Report Message.....	2-855
28	2.7.2.3.2.21 Periodic Pilot Strength Measurement Message.....	2-859
29	2.7.2.3.2.22 Outer Loop Report Message .....	2-864
30	2.7.2.3.2.23 Resource Request Message .....	2-866
31	2.7.2.3.2.24 Resource Request Mini Message .....	2-867
32	2.7.2.3.2.25 Extended Release Response Message.....	2-868

**CONTENTS**

1	2.7.2.3.2.26 Extended Release Response Mini Message .....	2-869
2	2.7.2.3.2.27 Pilot Strength Measurement Mini Message .....	2-870
3	2.7.2.3.2.28 Supplemental Channel Request Mini Message .....	2-871
4	2.7.2.3.2.29 Resource Release Request Message .....	2-872
5	2.7.2.3.2.30 Resource Release Request Mini Message .....	2-876
6	2.7.2.3.2.31 User Zone Update Request Message .....	2-877
7	2.7.2.3.2.32 Enhanced Origination Message .....	2-878
8	2.7.2.3.2.33 Extended Flash With Information Message .....	2-895
9	2.7.2.3.2.34 Extended Pilot Strength Measurement Message .....	2-897
10	2.7.2.3.2.35 Extended Handoff Completion Message .....	2-903
11	2.7.2.3.2.36 Security Mode Request Message .....	2-905
12	2.7.2.3.2.37 Call Cancel Message .....	2-909
13	2.7.2.3.2.38 Device Information Message .....	2-910
14	2.7.2.3.2.39 Base Station Status Request Message .....	2-911
15	2.7.2.3.2.40 CDMA Off Time Report Message .....	2-915
16	2.7.2.3.2.41 Authentication Response Message .....	2-917
17	2.7.2.3.2.42 Authentication Resynchronization Message .....	2-919
18	2.7.2.3.2.43 ITBSPM Request Message .....	2-920
19	2.7.2.3.2.44 Handoff Supplementary Information Notification Message .....	2-923
20	2.7.2.3.2.45 General Extension Message .....	2-925
21	2.7.3 Orders .....	2-926
22	2.7.3.2 Service Option Request Order .....	2-934
23	2.7.3.3 Service Option Response Order .....	2-935
24	2.7.3.4 Mobile Station Reject Order .....	2-936
25	2.7.3.5 Release Order .....	2-939
26	2.7.3.6 Fast Call Setup Order .....	2-941
27	2.7.4 Information Records .....	2-942
28	2.7.4.1 Reserved .....	2-946
29	2.7.4.2 Keypad Facility .....	2-947
30	2.7.4.3 Called Party Number .....	2-948
31	2.7.4.4 Calling Party Number .....	2-949
32	2.7.4.5 Reserved .....	2-951

**CONTENTS**

1	2.7.4.6 Call Mode .....	2-952
2	2.7.4.7 Terminal Information .....	2-953
3	2.7.4.8 Roaming Information .....	2-956
4	2.7.4.9 Security Status .....	2-958
5	2.7.4.10 Connected Number .....	2-959
6	2.7.4.11 IMSI .....	2-961
7	2.7.4.12 ESN .....	2-962
8	2.7.4.13 Band Class Information .....	2-963
9	2.7.4.14 Power Class Information .....	2-964
10	2.7.4.15 Operating Mode Information .....	2-965
11	2.7.4.16 Service Option Information .....	2-967
12	2.7.4.17 Multiplex Option Information .....	2-968
13	2.7.4.18 Service Configuration.....	2-973
14	2.7.4.19 Called Party Subaddress .....	2-974
15	2.7.4.20 Calling Party Subaddress.....	2-976
16	2.7.4.21 Connected Subaddress .....	2-977
17	2.7.4.22 Power Control Information .....	2-978
18	2.7.4.23 IMSI_M .....	2-979
19	2.7.4.24 IMSI_T .....	2-980
20	2.7.4.25 Capability Information .....	2-981
21	2.7.4.26 Extended Record Type - International.....	2-990
22	2.7.4.27 Channel Configuration Capability Information .....	2-991
23	2.7.4.27.1 FCH Type-specific Fields .....	2-995
24	2.7.4.27.2 DCCH Type-Specific Fields.....	2-998
25	2.7.4.27.3 FOR_SCH Type-Specific Fields.....	2-1000
26	2.7.4.27.4 REV_SCH Type-Specific Fields .....	2-1004
27	2.7.4.27.5 FOR_PDCH Type-specific Fields.....	2-1006
28	2.7.4.27.6 REV_PDCH Type-specific Fields .....	2-1009
29	2.7.4.27.7 FUNDICATED_BCNC Type-specific Fields .....	2-1012
30	2.7.4.28 Extended Multiplex Option Information .....	2-1014
31	2.7.4.29 Geo-Location Capability.....	2-1024
32	2.7.4.30 Band Subclass Information.....	2-1025

**CONTENTS**

1	2.7.4.31 Global Emergency Call.....	2-1026
2	2.7.4.32 Hook Status.....	2-1028
3	2.7.4.33 QoS Parameters .....	2-1029
4	2.7.4.34 Encryption Capability.....	2-1030
5	2.7.4.35 Signaling Message Integrity Capability.....	2-1031
6	2.7.4.36 UIM_ID.....	2-1032
7	2.7.4.37 ESN_ME.....	2-1033
8	2.7.4.38 MEID.....	2-1034
9	2.7.4.39 Extended Keypad Facility .....	2-1035
10	2.7.4.40 SYNC_ID .....	2-1037
11	2.7.4.41 Extended Terminal Information.....	2-1039
12	2.7.4.42 Extended Service Option Information.....	2-1043
13	2.7.4.43 Band Class and Band Subclass Information .....	2-1047
14	2.7.4.44 EXT_UIM_ID .....	2-1049
15	2.7.4.45 MEID_ME.....	2-1050
16	2.7.4.46 Additional Geo-Location Capability .....	2-1051
17	3. REQUIREMENTS FOR BASE STATION CDMA OPERATION.....	3-1
18	3.1 Reserved .....	3-1
19	3.2 Reserved .....	3-1
20	3.3 Security and Identification .....	3-1
21	3.3.1 Authentication.....	3-1
22	3.3.2 Encryption.....	3-1
23	3.3.3 Voice Privacy.....	3-1
24	3.3.4 Extended-Encryption.....	3-1
25	3.3.5 Message Integrity.....	3-1
26	3.4 Supervision .....	3-1
27	3.4.1 Access Channel or Enhanced Access Channel .....	3-1
28	3.4.2 Reverse Traffic Channel .....	3-2
29	3.5 Reserved .....	3-2
30	3.6 Layer 3 Processing.....	3-2
31	3.6.1 Pilot and Sync Channel Processing .....	3-2
32	3.6.1.1 Preferred Set of CDMA Channels .....	3-2



## CONTENTS

1	3.6.1.2 Pilot Channel Operation.....	3-3
2	3.6.1.3 Sync Channel Operation.....	3-3
3	3.6.2 Common Channel Processing .....	3-3
4	3.6.2.1 Paging Channel and Forward Common Control Channel Procedures.....	3-3
5	3.6.2.1.1 CDMA Channel Determination.....	3-4
6	3.6.2.1.2 Common Channel Determination.....	3-4
7	3.6.2.1.3 Paging Slot Determination .....	3-4
8	3.6.2.1.4 Message Transmission and Acknowledgment Procedures.....	3-5
9	3.6.2.2 Overhead Information .....	3-5
10	3.6.2.3 Mobile Station Directed Messages .....	3-10
11	3.6.2.3.1 Processing when the General Page Message is Used.....	3-12
12	3.6.2.3.2 Processing when the Universal Page Message is Used .....	3-13
13	3.6.2.4 Broadcast Messages.....	3-15
14	3.6.2.4.1 Broadcast Messages Sent on the Paging Channel.....	3-15
15	3.6.2.4.1.1 Broadcast Procedures for Slotted Mode.....	3-15
16	3.6.2.4.1.1.1 General Overview.....	3-15
17	3.6.2.4.1.1.2 Requirements for Sending Broadcast Messages .....	3-16
18	3.6.2.4.1.1.2.1 Broadcast Delivery Options .....	3-16
19	3.6.2.4.1.1.2.1.1 Method 1: Multi-Slot Broadcast Message	
20	Transmission .....	3-16
21	3.6.2.4.1.1.2.1.2 Method 2: Periodic Broadcast Paging .....	3-16
22	3.6.2.4.1.1.2.2 Duplicate Broadcast Message Transmission .....	3-16
23	3.6.2.4.1.1.2.3 Periodic Broadcast Paging .....	3-17
24	3.6.2.4.1.1.2.4 Broadcast Message Slot Determination .....	3-17
25	3.6.2.4.2 Broadcast Messages Sent on the Broadcast Control Channel.....	3-17
26	3.6.2.4.2.1 Broadcast Procedures for Slotted Mode.....	3-17
27	3.6.2.4.2.1.1 General Overview.....	3-18
28	3.6.2.4.2.1.2 Requirements for Sending Broadcast Messages .....	3-18
29	3.6.2.4.2.1.2.1 Broadcast Delivery Options .....	3-18
30	3.6.2.4.2.1.2.1.1 Method 1: Multi-Slot Enhanced Broadcast Paging ....	3-18
31	3.6.2.4.2.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging.....	3-19
32	3.6.2.4.2.1.2.2 Duplicate Broadcast Message Transmission .....	3-19

**CONTENTS**

1	3.6.2.4.2.1.2.3 Periodic Enhanced Broadcast Paging .....	3-19
2	3.6.2.4.2.1.2.4 Broadcast Message Slot Determination .....	3-20
3	3.6.2.4.3 Broadcast Messages Sent on the Forward Common Control Channel ..	3-20
4	3.6.2.4.3.1 Broadcast Procedures for Slotted Mode .....	3-20
5	3.6.2.4.3.1.1 General Overview .....	3-20
6	3.6.2.4.3.1.2 Requirements for Sending Broadcast Messages .....	3-21
7	3.6.2.4.3.1.2.1 Broadcast Delivery Options .....	3-21
8	3.6.2.4.3.1.2.1.1 Method 1: Multi-Slot Broadcast Message	
9	Transmission .....	3-21
10	3.6.2.4.3.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging .....	3-21
11	3.6.2.4.3.1.2.2 Duplicate Broadcast Message Transmission .....	3-22
12	3.6.2.4.3.1.2.3 Periodic Enhanced Broadcast Paging .....	3-22
13	3.6.2.4.3.1.2.4 Broadcast Message Slot Determination .....	3-23
14	3.6.2.5 Quick Paging Channel Processing .....	3-23
15	3.6.2.5.1 Quick Paging Channel Determination .....	3-24
16	3.6.2.5.2 Quick Paging Channel Slot Determination .....	3-24
17	3.6.2.5.3 Paging Indicator Position Determination .....	3-24
18	3.6.2.5.4 Configuration Change Indicator Position Determination .....	3-25
19	3.6.2.5.5 Broadcast Indicator Position Determination .....	3-25
20	3.6.2.5.6 Reserved Indicator Positions .....	3-25
21	3.6.3 Access Channel and Enhanced Access Channel Processing .....	3-26
22	3.6.3.1 Reserved .....	3-27
23	3.6.3.2 Reserved .....	3-27
24	3.6.3.3 Response to Page Response Message and Reconnect Message .....	3-27
25	3.6.3.4 Response to Orders .....	3-27
26	3.6.3.5 Response to Origination Message and Reconnect Message .....	3-27
27	3.6.3.6 Response to Registration Message .....	3-28
28	3.6.3.7 Response to Data Burst Message .....	3-29
29	3.6.3.8 Reserved .....	3-29
30	3.6.3.9 Reserved .....	3-29
31	3.6.3.10 Service Redirection .....	3-29
32	3.6.3.11 Response to General Extension Message .....	3-29

## CONTENTS

1	3.6.4 Traffic Channel Processing.....	3-29
2	3.6.4.1 Special Functions and Actions .....	3-29
3	3.6.4.1.1 Forward Traffic Channel Power Control .....	3-30
4	3.6.4.1.2 Service Configuration and Negotiation.....	3-30
5	3.6.4.1.2.1 Use of Variables.....	3-35
6	3.6.4.1.2.1.1 Maintaining the Service Request Sequence Number .....	3-35
7	3.6.4.1.2.1.2 Maintaining the Service Connect Sequence Number.....	3-36
8	3.6.4.1.2.1.3 Assigning Service Option Connection References .....	3-36
9	3.6.4.1.2.1.4 Maintaining the Service Negotiation Indicator Variable .....	3-36
10	3.6.4.1.2.1.5 Maintaining the Service Option Request Number .....	3-36
11	3.6.4.1.2.2 Service Subfunctions .....	3-37
12	3.6.4.1.2.2.1 Normal Service Subfunction.....	3-39
13	3.6.4.1.2.2.2 Waiting for Service Request Message Subfunction.....	3-40
14	3.6.4.1.2.2.3 Waiting for Service Response Message Subfunction .....	3-42
15	3.6.4.1.2.2.4 Waiting for Service Action Time Subfunction .....	3-44
16	3.6.4.1.2.2.5 Waiting for Service Connect Completion Message	
17	Subfunction .....	3-45
18	3.6.4.1.2.2.6 SO Negotiation Subfunction.....	3-46
19	3.6.4.1.3 Ordering of Messages .....	3-48
20	3.6.4.1.4 Message Action Times .....	3-49
21	3.6.4.1.5 Long Code Transition Request Processing .....	3-49
22	3.6.4.1.6 Processing Resource Request Messages.....	3-50
23	3.6.4.1.7 Response to Enhanced Origination Message .....	3-50
24	3.6.4.1.8 Processing Resource Release Request Message and Resource	
25	Release Request Mini Message.....	3-52
26	3.6.4.1.9 Processing Base Station Status Request Message.....	3-52
27	3.6.4.1.10 Base Station assigned PLCM.....	3-53
28	3.6.4.2 Traffic Channel Initialization Substate .....	3-54
29	3.6.4.3 Traffic Channel Substate .....	3-56
30	3.6.4.4 Release Substate.....	3-67
31	3.6.5 Registration.....	3-71
32	3.6.5.1 Registration on the Common Channels .....	3-73

**CONTENTS**

1	3.6.5.2 Registration on the Traffic Channels .....	3-73
2	3.6.6 Handoff Procedures .....	3-73
3	3.6.6.1 Overview .....	3-73
4	3.6.6.1.1 Types of Handoff .....	3-73
5	3.6.6.1.2 Active Set .....	3-74
6	3.6.6.2 Requirements.....	3-74
7	3.6.6.2.1 Overhead Information .....	3-74
8	3.6.6.2.1.1 System Parameters .....	3-74
9	3.6.6.2.1.2 Neighbor List.....	3-75
10	3.6.6.2.1.3 Candidate Frequency Neighbor List.....	3-75
11	3.6.6.2.1.4 Candidate Frequency Search List .....	3-75
12	3.6.6.2.2 Call Processing During Handoff.....	3-75
13	3.6.6.2.2.1 Processing the Pilot Strength Measurement Message.....	3-75
14	3.6.6.2.2.2 Processing the Extended Handoff Direction Message .....	3-76
15	3.6.6.2.2.3 Processing the Candidate Frequency Search Request Message .....	3-78
16	3.6.6.2.2.4 Processing the Candidate Frequency Search Response Message....	3-78
17	3.6.6.2.2.5 Processing the Candidate Frequency Search Control Message .....	3-78
18	3.6.6.2.2.6 Processing the Candidate Frequency Search Report Message .....	3-79
19	3.6.6.2.2.7 Transmitting During Handoff.....	3-79
20	3.6.6.2.2.8 Ordering Pilot Measurements From the Mobile Station .....	3-79
21	3.6.6.2.2.9 Processing the Supplemental Channel Assignment Message .....	3-79
22	3.6.6.2.2.10 Processing the General Handoff Direction Message .....	3-83
23	3.6.6.2.2.11 Processing the Universal Handoff Direction Message .....	3-87
24	3.6.6.2.2.12 Processing of Extended Supplemental Channel Assignment	
25	Message .....	3-91
26	3.6.6.2.2.13 Processing of Forward Supplemental Channel Assignment Mini	
27	Message .....	3-93
28	3.6.6.2.2.14 Processing of Reverse Supplemental Channel Assignment Mini	
29	Message .....	3-94
30	3.6.6.2.2.15 Processing of the Mobile Assisted Burst Operation Parameters	
31	Message .....	3-95
32	3.6.6.2.2.16 Processing of the Handoff Supplementary Information	
33	Notification Message.....	3-96

## CONTENTS

1	3.6.6.2.3 Active Set Maintenance .....	3-97
2	3.6.6.2.4 Soft Handoff .....	3-97
3	3.6.6.2.4.1 Receiving During Soft Handoff .....	3-97
4	3.6.6.2.4.2 Transmitting During Soft Handoff.....	3-97
5	3.6.6.2.4.3 Call Rescue Soft Handoff.....	3-98
6	3.6.6.2.5 Reserved.....	3-98
7	3.6.7 CDMA Tiered Services.....	3-98
8	3.6.7.1 Overview .....	3-98
9	3.6.7.1.1 Definition .....	3-98
10	3.6.7.1.2 Types of User Zones .....	3-98
11	3.6.7.2 Requirements.....	3-99
12	3.6.7.2.1 User Zone Identification Message.....	3-99
13	3.6.7.2.2 Private Neighbor List Message .....	3-99
14	3.6.7.2.3 User Zone Update Message and User Zone Reject Message on f-dsch .	3-99
15	3.6.7.2.4 User Zone Reject Message on f-csch .....	3-99
16	3.6.8 Call Control Processing.....	3-100
17	3.6.8.1 Alerting .....	3-101
18	3.6.8.1.1 Waiting for Order Substate.....	3-101
19	3.6.8.1.2 Waiting for Answer Substate.....	3-101
20	3.6.8.2 Conversation Substate.....	3-102
21	3.6.8.3 Call Release Substate.....	3-104
22	3.6.9 MEID procedures when communicating with MOB_P_REV 6, 7, 8, 9, 10	
23	Mobile Stations .....	3-105
24	3.7 PDU Formats for Messages .....	3-106
25	3.7.1 Reserved.....	3-106
26	3.7.2 f-csch .....	3-106
27	3.7.2.1 Reserved.....	3-106
28	3.7.2.2 Reserved.....	3-106
29	3.7.2.3 PDU Formats for Messages on the f-csch.....	3-107
30	3.7.2.3.1 Reserved.....	3-110
31	3.7.2.3.2 Message Body Contents .....	3-110
32	3.7.2.3.2.1 System Parameters Message .....	3-111

**CONTENTS**

1	3.7.2.3.2.2 Access Parameters Message .....	3-125
2	3.7.2.3.2.3 Neighbor List Message .....	3-133
3	3.7.2.3.2.4 CDMA Channel List Message .....	3-136
4	3.7.2.3.2.5 Reserved.....	3-137
5	3.7.2.3.2.6 Reserved.....	3-138
6	3.7.2.3.2.7 Order Message .....	3-139
7	3.7.2.3.2.8 Channel Assignment Message .....	3-140
8	3.7.2.3.2.9 Data Burst Message .....	3-150
9	3.7.2.3.2.10 Authentication Challenge Message .....	3-152
10	3.7.2.3.2.11 SSD Update Message .....	3-153
11	3.7.2.3.2.12 Feature Notification Message .....	3-154
12	3.7.2.3.2.13 Extended System Parameters Message .....	3-155
13	3.7.2.3.2.14 Extended Neighbor List Message .....	3-189
14	3.7.2.3.2.15 Status Request Message .....	3-195
15	3.7.2.3.2.16 Service Redirection Message .....	3-199
16	3.7.2.3.2.17 General Page Message.....	3-203
17	3.7.2.3.2.18 Global Service Redirection Message.....	3-207
18	3.7.2.3.2.19 TMSI Assignment Message.....	3-211
19	3.7.2.3.2.20 PACA Message.....	3-212
20	3.7.2.3.2.21 Extended Channel Assignment Message .....	3-214
21	3.7.2.3.2.22 General Neighbor List Message .....	3-291
22	3.7.2.3.2.23 User Zone Identification Message .....	3-313
23	3.7.2.3.2.24 Private Neighbor List Message .....	3-315
24	3.7.2.3.2.25 Reserved.....	3-327
25	3.7.2.3.2.26 Sync Channel Message .....	3-328
26	3.7.2.3.2.27 Extended Global Service Redirection Message.....	3-337
27	3.7.2.3.2.28 Extended CDMA Channel List Message .....	3-344
28	3.7.2.3.2.29 User Zone Reject Message.....	3-351
29	3.7.2.3.2.30 ANSI-41 System Parameters Message .....	3-353
30	3.7.2.3.2.31 MC-RR Parameters Message .....	3-363
31	3.7.2.3.2.32 ANSI-41 RAND Message.....	3-400
32	3.7.2.3.2.33 Enhanced Access Parameters Message .....	3-401

**CONTENTS**

1	3.7.2.3.2.34 Universal Neighbor List Message.....	3-420
2	3.7.2.3.2.35 Security Mode Command Message.....	3-445
3	3.7.2.3.2.36 Universal Page Message .....	3-446
4	3.7.2.3.2.37 Authentication Request Message .....	3-449
5	3.7.2.3.2.38 BCMC Service Parameters Message .....	3-450
6	3.7.2.3.2.39 Access Point Identification Message.....	3-477
7	3.7.2.3.2.40 Access Point Identification Text Message .....	3-484
8	3.7.2.3.2.41 Access Point Pilot Information Message .....	3-486
9	3.7.2.3.2.42 General Overhead Information Message.....	3-491
10	3.7.2.3.2.43 Flex Duplex CDMA Channel List Message .....	3-494
11	3.7.2.3.2.44 General Extension Message .....	3-499
12	3.7.2.3.2.45 Alternative Technologies Information Message .....	3-501
13	3.7.3 f-dsch.....	3-505
14	3.7.3.3 PDU Formats on the f-dsch.....	3-508
15	3.7.3.3.1 Reserved.....	3-511
16	3.7.3.3.2 Message Body Contents .....	3-511
17	3.7.3.3.2.1 Order Message.....	3-512
18	3.7.3.3.2.2 Authentication Challenge Message .....	3-514
19	3.7.3.3.2.3 Alert With Information Message .....	3-515
20	3.7.3.3.2.4 Data Burst Message .....	3-516
21	3.7.3.3.2.5 Reserved.....	3-518
22	3.7.3.3.2.6 Reserved.....	3-519
23	3.7.3.3.2.7 In-Traffic System Parameters Message.....	3-520
24	3.7.3.3.2.8 Neighbor List Update Message .....	3-529
25	3.7.3.3.2.9 Send Burst DTMF Message .....	3-530
26	3.7.3.3.2.10 Power Control Parameters Message.....	3-532
27	3.7.3.3.2.11 Retrieve Parameters Message .....	3-534
28	3.7.3.3.2.12 Set Parameters Message.....	3-535
29	3.7.3.3.2.13 SSD Update Message .....	3-536
30	3.7.3.3.2.14 Flash With Information Message.....	3-537
31	3.7.3.3.2.15 Mobile Station Registered Message .....	3-538
32	3.7.3.3.2.16 Status Request Message.....	3-540

**CONTENTS**

1	3.7.3.3.2.17 Extended Handoff Direction Message .....	3-542
2	3.7.3.3.2.18 Service Request Message .....	3-549
3	3.7.3.3.2.19 Service Response Message .....	3-551
4	3.7.3.3.2.20 Service Connect Message .....	3-553
5	3.7.3.3.2.21 Service Option Control Message .....	3-562
6	3.7.3.3.2.22 TMSI Assignment Message.....	3-563
7	3.7.3.3.2.23 Service Redirection Message .....	3-564
8	3.7.3.3.2.24 Supplemental Channel Assignment Message .....	3-567
9	3.7.3.3.2.25 Power Control Message .....	3-576
10	3.7.3.3.2.26 Extended Neighbor List Update Message .....	3-626
11	3.7.3.3.2.27 Candidate Frequency Search Request Message .....	3-640
12	3.7.3.3.2.28 Candidate Frequency Search Control Message .....	3-656
13	3.7.3.3.2.29 Power Up Function Message .....	3-658
14	3.7.3.3.2.30 Power Up Function Completion Message .....	3-660
15	3.7.3.3.2.31 General Handoff Direction Message .....	3-662
16	3.7.3.3.2.32 Resource Allocation Message .....	3-681
17	3.7.3.3.2.33 Resource Allocation Mini Message.....	3-682
18	3.7.3.3.2.34 Extended Release Message.....	3-683
19	3.7.3.3.2.35 Extended Release Mini Message .....	3-704
20	3.7.3.3.2.36 Universal Handoff Direction Message .....	3-706
21	3.7.3.3.2.37 Extended Supplemental Channel Assignment Message .....	3-797
22	3.7.3.3.2.38 Forward Supplemental Channel Assignment Mini Message .....	3-818
23	3.7.3.3.2.39 Reverse Supplemental Channel Assignment Mini Message .....	3-820
24	3.7.3.3.2.40 Mobile Assisted Burst Operation Parameters Message .....	3-823
25	3.7.3.3.2.41 User Zone Reject Message.....	3-826
26	3.7.3.3.2.42 User Zone Update Message .....	3-827
27	3.7.3.3.2.43 Call Assignment Message.....	3-828
28	3.7.3.3.2.44 Extended Alert With Information Message .....	3-833
29	3.7.3.3.2.45 Extended Flash With Information Message.....	3-835
30	3.7.3.3.2.46 Security Mode Command Message .....	3-837
31	3.7.3.3.2.47 Base Station Status Response Message.....	3-840
32	3.7.3.3.2.48 Authentication Request Message .....	3-845



**CONTENTS**

1	3.7.3.3.2.49 Rate Change Message.....	3-846
2	3.7.3.3.2.50 In-Traffic BCMC Service Parameters Message.....	3-854
3	3.7.3.3.2.51 Radio Configuration Parameters Message.....	3-858
4	3.7.3.3.2.52 Handoff Supplementary Information Solicit Message.....	3-867
5	3.7.3.3.2.53 General Extension Message .....	3-868
6	3.7.4 Orders .....	3-869
7	3.7.4.1 Base Station Challenge Confirmation Order .....	3-875
8	3.7.4.2 Service Option Request Order.....	3-876
9	3.7.4.3 Service Option Response Order .....	3-877
10	3.7.4.4 Status Request Order.....	3-878
11	3.7.4.5 Registration Accepted Order .....	3-879
12	3.7.4.6 Periodic Pilot Measurement Request Order.....	3-883
13	3.7.4.7 Retry Order .....	3-885
14	3.7.4.8 Reserved.....	3-889
15	3.7.4.9 Base Station Reject Order .....	3-890
16	3.7.4.10 BCMC Order.....	3-892
17	3.7.4.11 Fast Call Setup Order .....	3-897
18	3.7.4.12 Service Status Order .....	3-901
19	3.7.4.13 Location Services Order .....	3-903
20	3.7.5 Information Records.....	3-904
21	3.7.5.1 Display .....	3-908
22	3.7.5.2 Called Party Number .....	3-909
23	3.7.5.3 Calling Party Number.....	3-910
24	3.7.5.4 Connected Number .....	3-912
25	3.7.5.5 Signal.....	3-914
26	3.7.5.6 Message Waiting .....	3-919
27	3.7.5.7 Service Configuration.....	3-920
28	3.7.5.7.1 Channel Configuration for the Supplemental Channel .....	3-952
29	3.7.5.8 Called Party Subaddress .....	3-954
30	3.7.5.9 Calling Party Subaddress.....	3-955
31	3.7.5.10 Connected Subaddress .....	3-956
32	3.7.5.11 Redirecting Number .....	3-957

**CONTENTS**

1	3.7.5.12 Redirecting Subaddress .....	3-960
2	3.7.5.13 Meter Pulses .....	3-961
3	3.7.5.14 Parametric Alerting .....	3-962
4	3.7.5.15 Line Control .....	3-964
5	3.7.5.16 Extended Display .....	3-965
6	3.7.5.17 Extended Record Type - International .....	3-969
7	3.7.5.18 Reserved .....	3-970
8	3.7.5.19 Reserved .....	3-971
9	3.7.5.20 Non-Negotiable Service Configuration .....	3-972
10	3.7.5.21 Multiple Character Extended Display .....	3-1061
11	3.7.5.22 Call Waiting Indicator .....	3-1063
12	3.7.5.23 Enhanced Multiple Character Extended Display .....	3-1064
13	3.7.6 Information Elements .....	3-1067
14	3.7.6.1 Pilot Record Type Specific Fields .....	3-1067
15	ANNEX A RESERVED .....	A-1
16	ANNEX B CDMA CALL FLOW EXAMPLES .....	B-1
17	ANNEX C ADDITIONAL CDMA CALL FLOW EXAMPLES .....	C-1
18	C-1 Regular Call Setup .....	C-1
19	C-1.1 Call setup with F-PDCH and no F-Fundicated .....	C-1
20	C-1.2 Call setup with F-PDCH and F-Fundicated .....	C-2
21	C-1.3 Call setup with F/R-PDCH .....	C-3
22	C-2 Fast Call Setup Enhancements .....	C-4
23	C-2.1 Direct Channel Assignment - Normal setup .....	C-4
24	C-2.2 Direct Channel Assignment - With unassured page response .....	C-5
25	C-2.3 Direct Channel Assignment - With failure recovery .....	C-6
26	C-2.4 Radio Environment Reporting Mode Example .....	C-7
27	C-2.5 Tracking zone reporting example .....	C-8
28	C-2.6 Call setup with bypass two good frames .....	C-9
29	C-2.7 Call setup with fixed duration preamble transmission .....	C-10
30	C-2.8 Call setup with bypass two good frames + fixed duration preamble	
31	transmission .....	C-11
32	C-2.9 Reduced Slot Cycle Mode - MS initiated release; MS request .....	C-12

## CONTENTS

1	C-2.10 Reduced Slot Cycle Mode - MS initiated release; BS request .....	C-13
2	C-2.11 Reduced Slot Cycle Mode - BS initiated release; BS request .....	C-14
3	C-2.12 Reduced Slot Cycle Mode - BS initiated release; MS request .....	C-15
4	C-2.13 Reduced Slot Cycle Mode - MS initiated in Idle State.....	C-16
5	C-2.14 Reduced Slot Cycle Mode - BS initiated in Idle State .....	C-17
6	C-2.15 Direct to Idle transition example .....	C-18
7	C-3 SYNC_ID enhancements.....	C-19
8	C-3.1 SYNC_ID in Origination/Page Response/Reconnect Message and BS	
9	grants it via ECAM or SCM.....	C-19
10	C-3.2 SYNC_ID in Origination/Page Response/Reconnect Message and BS	
11	assigns a different one in ECAM or SCM.....	C-20
12	C-3.3 Incremental restoration of stored service option connections with	
13	SYNC_ID (ORM + EOM example) .....	C-21
14	C-3.4 Initiate M of N service option connections from SYNC_ID .....	C-22
15	C-4 DV Control Hold.....	C-23
16	C-4.1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-	
17	DCCH) .....	C-23
18	C-4.2 BS initiated transition from DV Control Hold Mode (F-PDCH with F-	
19	DCCH) .....	C-24
20	C-5 Multiple Services Support.....	C-25
21	C-5.1 Initiate multiple calls in Origination Message .....	C-25
22	C-5.2 Request release of multiple calls via RRRM.....	C-26
23	C-6 BCMC.....	C-27
24	C-6.1 Initiating BCMC monitoring in idle state that results in Registration	
25	Message.....	C-27
26	C-6.2 Initiating BCMC monitoring in idle state that results in Origination	
27	Message and directed to Idle State BCMC .....	C-28
28	C-6.3 Initiating BCMC monitoring in idle state that results in Origination	
29	Message and assigned to Traffic State BCMC.....	C-29
30	C-6.4 Dynamic BCMC in idle state .....	C-30
31	C-6.5 Initiating BCMC in traffic state.....	C-31
32	C-6.6 Traffic State BCMC to Idle State BCMC transition .....	C-32
33	C-6.7 Concurrent BCMC flows monitoring .....	C-33
34	C-6.8 Concurrent BCMC and Point-to-Point call .....	C-34

## CONTENTS

1	ANNEX D CDMA CONSTANTS.....	D-1
2	ANNEX E CDMA RETRIEVABLE AND SETTABLE PARAMETERS .....	E-1
3	ANNEX F MOBILE STATION DATABASE.....	F-1
4	F.1 Introduction .....	F-1
5	F.2 Mobile Station Indicators .....	F-2
6	F.2.1 Permanent Mobile Station Indicators .....	F-2
7	F.2.2 Semi-permanent Mobile Station Indicators .....	F-3
8	F.3 NAM Indicators.....	F-4
9	ANNEX G CDMA EXTENDED ENCRYPTION CALL FLOW EXAMPLES .....	G-1
10		

**FIGURES**

1	Figure 1.3.1-1. cdma2000 Signaling – General Architecture.....	1-61
2	Figure 2.3.1-1. IMSI Structure .....	2-1
3	Figure 2.3.1-2. IMSI_S Binary Mapping .....	2-2
4	Figure 2.3.6.1-1. Public Long Code Mask PLCM_42, ADD_PLCM_FOR_FCH_42, or	
5	ADD_PLCM_FOR_SCH_42 Format .....	2-13
6	Figure 2.3.6.2-1 Private Long Code Mask PVTLCM_42 Format .....	2-14
7	Figure 2.3.12.1.1-1. Partitioning of SSD.....	2-15
8	Figure 2.3.12.1.5-1. SSD Update Message Flow.....	2-19
9	Figure 2.3.12.1.5-2. Computation of Shared Secret Data (SSD).....	2-20
10	Figure 2.3.12.1.5-3. Computation of AUTHBS.....	2-20
11	Figure 2.3.12.4.1.4-1. 8-Bit Layer 3 SDU CRC Field Calculation .....	2-32
12	Figure 2.3.12.4.1.5-1 An 8-bit Encryption Sequence Number Space Divided into 3	
13	Segments .....	2-33
14	Figure 2.3.12.4.5-1. Message Bits .....	2-38
15	Figure 2.3.12.5.2-1. Authentication and Key Agreement Procedures Message Flow.....	2-44
16	Figure 2.3.12.5.2-2. User Authentication Function used by the Mobile Station.....	2-45
17	Figure 2.3.12.5.2-3. Function used by the Mobile Station for Calculation of	
18	CON_MS_SQN and MACS in case of Out-of-Synch SQN.....	2-45
19	Figure 2.3.12.5.2-4. Function used for Calculation of UAK.....	2-45
20	Figure 2.3.12.5.4-1. Key Strength Reduction .....	2-47
21	Figure 2.3.15-1. TMSI Zone Example .....	2-49
22	Figure 2.6-1. Mobile Station Layer 3 Processing States.....	2-54
23	Figure 2.6.1-1. Mobile Station Initialization State .....	2-56
24	Figure 2.6.1.4-1. Mobile Station Internal Timing.....	2-71
25	Figure 2.6.2.1.1.1-1. Mobile Station Idle Slotted Mode Structure Example.....	2-78
26	Figure 2.6.2.1.1.1.2.1-1. Multi-Slot Broadcast Message Transmission Example.....	2-81
27	Figure 2.6.2.1.1.1.2.2-1. Periodic Broadcast Paging Example .....	2-82
28	Figure 2.6.2.1.1.1.3.1-1. Multi-Slot Enhanced Broadcast Paging Example .....	2-83
29	Figure 2.6.2.1.1.1.4.1-1. Multi-Slot Broadcast Message Transmission Example.....	2-84
30	Figure 2.6.2.1.2.1-1. Quick Paging Channel Timeline .....	2-97
31	Figure 2.6.2.2.12.1-1. Hashing Example .....	2-154
32	Figure 2.6.3-1. System Access State.....	2-226

**FIGURES**

1	Figure 2.6.4-1. Mobile Station Control on the Traffic Channel State .....	2-346
2	Figure 2.6.4.1.2.2-1. Mobile Station Service Subfunctions .....	2-363
3	Figure 2.6.4.1.7-1. Structure of PUF Attempt.....	2-390
4	Figure 2.6.4.3-1. Mobile Station Modes When a F-PDCH is not Assigned in Control	
5	Hold Mode.....	2-451
6	Figure 2.6.4.3-2. Mobile Station Modes When a F-PDCH is Assigned in Control Hold	
7	Mode: Mobile Station Initiated Exit from Control Hold. ....	2-452
8	Figure 2.6.4.3-3. Mobile Station Modes when a F-PDCH is Assigned in Control Hold:	
9	Base Station Initiated Exit from Control Hold. ....	2-453
10	Figure 2.6.5.2-1. Systems and Networks Example .....	2-500
11	Figure 2.6.6.2.5.1.1-1. New Supplemental Channel Assignment Received while a	
12	Previous Supplemental Channel Assignment is in Progress.....	2-612
13	Figure 2.6.6.2.5.1.1-2. New Supplemental Channel Assignment Received before a	
14	Previous Supplemental Channel Assignment starts .....	2-612
15	Figure 2.6.6.3-1. Handoff Threshold Example if P_REV_IN_USE <sub>S</sub> is Less Than or Equal	
16	to Three, or SOFT_SLOPE <sub>S</sub> is Equal to '000000' .....	2-650
17	Figure 2.6.6.3-2. Handoff Threshold Example if P_REV_IN_USE <sub>S</sub> is Greater Than	
18	Three, and SOFT_SLOPE <sub>S</sub> is Not Equal to '000000'.....	2-651
19	Figure 2.6.6.3-3. Pilot Strength Measurements Triggered by a Candidate Pilot if	
20	P_REV_IN_USE <sub>S</sub> = 3 or SOFT_SLOPE <sub>S</sub> = '000000' .....	2-652
21	Figure 2.6.6.3-4. Pilot Strength Measurements Triggered by a Candidate Pilot if	
22	P_REV_IN_USE <sub>S</sub> > 3 and SOFT_SLOPE <sub>S</sub> is Not Equal to '000000'.....	2-653
23	Figure 2.6.10-1. Call Control.....	2-662
24	Figure 2.6.14.1-1. Illustration of Band Class - Band Subclass Reporting.....	2-709
25	Figure 2.7.4.13-1. BAND_CLASS_INFO field coding.....	2-963
26	Figure 2.7.4.30-1. BAND_SUBCLASS_INFO field coding.....	2-1025
27	Figure B-1A. Simple Call Flow, Mobile Station Origination Example Using Service	
28	Option Negotiation with Service Option 1 .....	B-2
29	Figure B-1B. Simple Call Flow, Mobile Station Origination Example Using Service	
30	Negotiation with Service Option 1.....	B-3
31	Figure B-2A. Simple Call Flow, Mobile Station Termination Example Using Service	
32	Option Negotiation with Service Option 1 .....	B-4
33	Figure B-2B. Simple Call Flow, Mobile Station Termination Example Using Service	
34	Negotiation with Service Option 1.....	B-5
35	Figure B-3. Simple Call Flow, Mobile Station Initiated Call Disconnect Example .....	B-6
36	Figure B-4. Simple Call Flow, Base Station Initiated Call Disconnect Example .....	B-6

**FIGURES**

1	Figure B-5. Simple Call Flow, Three-Party Calling Example.....	B-7
2	Figure B-6. Simple Call Flow, Call-Waiting Example.....	B-8
3	Figure B-7. Call Processing During Soft Handoff.....	B-9
4	Figure B-8. Call Processing During Sequential Soft Handoff (Part 1 of 2).....	B-10
5	Figure B-8. Call Processing During Sequential Soft Handoff (Part 2 of 2).....	B-11
6	Figure B-9. PACA Call Processing (Part 1 of 2) .....	B-12
7	Figure B-9. PACA Call Processing (Part 2 of 2) .....	B-13
8	Figure B-10. Call Flow for Same Frequency Hard Handoff Failure Recovery .....	B-14
9	Figure B-11. Call Flow for Inter-Frequency Hard Handoff Failure Recovery without	
10	Search .....	B-15
11	Figure B-12. Call Flow for Inter-Frequency Handoff (Single Search Using Candidate	
12	Frequency Search Control Message) (Part 1 of 2).....	B-16
13	Figure B-12. Call Flow for Inter-Frequency Handoff (Single Search Using Candidate	
14	Frequency Search Control Message) (Part 2 of 2).....	B-17
15	Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate	
16	Frequency Search Control Message) (Part 1 of 3).....	B-18
17	Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate	
18	Frequency Search Control Message) (Part 2 of 3).....	B-19
19	Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate	
20	Frequency Search Control Message) (Part 3 of 3).....	B-20
21	Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General	
22	Handoff Direction Message) (Part 1 of 3) .....	B-21
23	Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General	
24	Handoff Direction Message) (Part 2 of 3) .....	B-22
25	Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General	
26	Handoff Direction Message) (Part 3 of 3) .....	B-23
27	Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General	
28	Handoff Direction Message) (Part 1 of 4) .....	B-24
29	Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General	
30	Handoff Direction Message) (Part 2 of 4) .....	B-25
31	Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General	
32	Handoff Direction Message) (Part 3 of 4) .....	B-26
33	Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General	
34	Handoff Direction Message) (Part 4 of 4) .....	B-27
35	Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to	
36	F3, Continued Periodic Search of F2 from F1 (Part 1 of 3) .....	B-28

**FIGURES**

1	Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to	
2	F3, Continued Periodic Search of F2 from F1 (Part 2 of 3).....	B-29
3	Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to	
4	F3, Continued Periodic Search of F2 from F1 (Part 3 of 3).....	B-30
5	Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3,	
6	Continued Periodic Search on F2 from F3 (Part 1 of 2).....	B-31
7	Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3,	
8	Continued Periodic Search on F2 from F3 (Part 2 of 2).....	B-32
9	Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission	
10	on Forward Supplemental Code Channels (Part 1 of 2) .....	B-33
11	Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission	
12	on Forward Supplemental Code Channels (Part 2 of 2) .....	B-34
13	Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission	
14	on Reverse Supplemental Code Channels (Part 1 of 2) .....	B-35
15	Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission	
16	on Reverse Supplemental Code Channels (Part 2 of 2) .....	B-36
17	Figure B-20. Simple Call Flow, Mobile Station Termination Example with	
18	Transmission on Forward Supplemental Code Channel(s) (Part 1	
19	of 3).....	B-37
20	Figure B-20. Simple Call Flow, Mobile Station Termination Example with	
21	Transmission on Forward Supplemental Code Channel(s) (Part 2	
22	of 3).....	B-38
23	Figure B-20. Simple Call Flow, Mobile Station Termination Example with	
24	Transmission on Forward Supplemental Code Channel(s) (Part 3	
25	of 3).....	B-39
26	Figure B-21. Simple Call Flow, Mobile Station Termination Example with	
27	Transmission on Reverse Supplemental Code Channel(s) (Part 1	
28	of 3).....	B-40
29	Figure B-21. Simple Call Flow, Mobile Station Termination Example with	
30	Transmission on Reverse Supplemental Code Channel(s) (Part 2	
31	of 3).....	B-41
32	Figure B-21. Simple Call Flow, Mobile Station Termination Example with	
33	Transmission on Reverse Supplemental Code Channel(s) (Part 3	
34	of 3).....	B-42
35	Figure B-22. Active/Control Hold to Idle State Transition; Release all services (BS	
36	Initiated) .....	B-43
37	Figure B-23. Active/Control Hold to Idle State Transition; Release all services (MS	
38	Initiated) .....	B-44



**FIGURES**

1	Figure B-24. Active to Control Hold State Transition (BS Initiated).....	B-45
2	Figure B-25. Active to Control Hold State Transition (MS Initiated).....	B-46
3	Figure B-26. Control Hold to Active Transition (BS Initiated).....	B-47
4	Figure B-27. Control Hold to Active Transition (MS Initiated) .....	B-48
5	Figure B-28. Connecting an Additional Service (MS Initiated).....	B-49
6	Figure B-29. Connecting an Additional Service (BS Initiated) .....	B-50
7	Figure B-30. Releasing a Service that is not the last one connected (MS Initiated) .....	B-51
8	Figure B-31. Releasing a Service that is not the last one connected (BS Initiated).....	B-52
9	Figure C-1. 1 Call setup with F-PDCH and no F-Fundicated .....	C-1
10	Figure C-1. 2 Call setup with F-PDCH and F-Fundicated .....	C-2
11	Figure C-1. 3 Call setup with F/R-PDCH .....	C-3
12	Figure C-2. 1 Direct Channel Assignment - Normal setup .....	C-4
13	Figure C-2. 2 Direct Channel Assignment - With unassured page response .....	C-5
14	Figure C-2. 3 Direct Channel Assignment - With failure recovery .....	C-6
15	Figure C-2. 4 Radio Environment Reporting Mode Example .....	C-7
16	Figure C-2. 5 Tracking zone reporting example .....	C-8
17	Figure C-2. 6 Call setup with bypass two good frames .....	C-9
18	Figure C-2. 7 Call setup with fixed duration preamble transmission .....	C-10
19	Figure C-2. 8 Call setup with bypass two good frames + fixed duration preamble	
20	transmission .....	C-11
21	Figure C-2. 9 Reduced Slot Cycle Mode - MS initiated release; MS request .....	C-12
22	Figure C-2. 10 Reduced Slot Cycle Mode (MS Initiated Release; BS Request) .....	C-13
23	Figure C-2. 11 Reduced Slot Cycle Mode - BS initiated release; BS request .....	C-14
24	Figure C-2. 12 Reduced Slot Cycle Mode - BS initiated release; MS request.....	C-15
25	Figure C-2. 13 Reduced Slot Cycle Mode - MS initiated in Idle State .....	C-16
26	Figure C-2. 14 Reduced Slot Cycle Mode - BS initiated in Idle State.....	C-17
27	Figure C-2. 15 Direct to Idle Transition Example (BS Initiated Release to BCCH).....	C-18
28	Figure C-3. 1 SYNC_ID in Origination/Page Response/Reconnect Message and BS	
29	grants it via ECAM or SCM .....	C-19
30	Figure C-3. 2 SYNC_ID in Origination/Page Response/Reconnect Message and BS	
31	assigns a different one in ECAM or SCM.....	C-20
32	Figure C-3. 3 Incremental restoration of stored service option connections with	
33	SYNC_ID (ORM + EOM example).....	C-21

**FIGURES**

1	Figure C-3. 4 Initiate M of N service option connections from SYNC_ID .....	C-22
2	Figure C-4. 1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-	
3	DCCH).....	C-23
4	Figure C-4. 2 BS initiated transition from DV Control Hold Mode (F-PDCH with F-	
5	DCCH).....	C-24
6	Figure C-5. 1 Initiate multiple calls in Origination Message .....	C-25
7	Figure C-5. 2 Request release of multiple calls via RRRM .....	C-26
8	Figure C-6. 1 Initiating BCMC monitoring in idle state that results in Registration	
9	Message .....	C-27
10	Figure C-6. 2 Initiating BCMC monitoring in idle state that results in Origination	
11	Message and directed to Idle State BCMC .....	C-28
12	Figure C-6. 3 Initiating BCMC monitoring in idle state that results in Origination	
13	Message and assigned to Traffic State BCMC .....	C-29
14	Figure C-6. 4 Dynamic BCMC in idle state.....	C-30
15	Figure C-6. 5 Initiating BCMC in traffic state.....	C-31
16	Figure C-6. 6 Traffic State BCMC to Idle State BCMC transition.....	C-32
17	Figure C-6. 7 Concurrent BCMC flows monitoring.....	C-33
18	Figure C-6. 8 Concurrent BCMC and Point-to-Point call .....	C-34
19	Figure G-1. Power-Up Registration, Origination, and Call Release (BS waits for the new	
20	CMEKEY before sending CAM/ECAM).....	G-2
21	Figure G-2. Quick Channel Assignment (BS does not wait for the new key before	
22	sending CAM/ECAM).....	G-3
23	Figure G-3. MS Initiates Call Origination During the Registration Access Substate.....	G-4
24	Figure G-4. Implicit Registration (MS crosses a SID/NID boundary during MS Idle	
25	State. MS originates before registering) .....	G-5
26	Figure G-5. BS Lost the Stored Key (A rare out-of-sync case) .....	G-6
27	Figure G-6. MS Fails to Decrypt Messages (MS recovers by re-synchronizing the crypt-	
28	sync) .....	G-7
29	Figure G-7. MS Fails to Decrypt Messages (MS recovers by re-registering after failing to	
30	re-synchronize the crypto-sync).....	G-8
31	Figure G-8. BS Fails to Decrypt Messages (BS recovers by re-synchronizing the crypt-	
32	sync) .....	G-9
33	Figure G-9. BS Fails to Decrypt Messages (BS recovers by forcing the MS to re-register	
34	after failing to re-synchronize the crypto-sync).....	G-10

35

**TABLES**

1	Table 2.3.1.1-1. Decimal to Binary Conversion Table.....	2-4
2	Table 2.3.1.1-2. BCD Mapping.....	2-5
3	Table 2.3.3-1. Station Class Mark .....	2-8
4	Table 2.3.5-1. ACCOLCp Mapping for ACCOLC 0 through ACCOLC 9 .....	2-10
5	Table 2.3.5-2. ACCOLCp Mapping for ACCOLC 10 through ACCOLC 15 .....	2-10
6	Table 2.3.12.1-1. Auth_Signature Input Parameters .....	2-15
7	Table 2.4.1-1. Monitored Quantities and Statistics .....	2-50
8	Table 2.4.2-1. Accumulated PCH/BCCH/F-CCCH Channel Statistics.....	2-50
9	Table 2.6.4.2-1. Default Logical to Physical Mapping Table, ASSIGN_MODE <sub>r</sub> equal to	
10	'000' or '100' .....	2-427
11	Table 2.6.4.2-2. Default Logical to Physical Mapping Table, ASSIGN_MODE <sub>r</sub> equal to	
12	'101' .....	2-428
13	Table 2.6.4.2-3. Default REV_PDCH_STEP_UP and REV_PDCH_STEP_DOWN tables..	2-437
14	Table 2.6.5.1.3-1. Percentage of Randomization for Timer-based registration.....	2-493
15	Table 2.6.6.2.1-1. Searcher Window Sizes .....	2-515
16	Table 2.6.6.2.1-2. Search Window Offset .....	2-515
17	Table 2.6.6.2.3-1. Handoff Drop Timer Expiration Values .....	2-519
18	Table 2.6.6.2.3-2. Handoff Drop Timer Expiration Range Values .....	2-520
19	Table 2.6.6.2.5.1-1. Search Parameter Settings.....	2-531
20	Table 2.6.6.2.8.3.2-1. Search Period Values .....	2-640
21	Table 2.6.7.1-1. Hash Function Modifier .....	2-655
22	Table 2.6.13.9-1. Subfields of the input working buffer .....	2-704
23	Table 2.7.1.3-1. Messages on r-csch.....	2-715
24	Table 2.7.1.3.2.1-1. Registration Type (REG_TYPE) Codes .....	2-719
25	Table 2.7.1.3.2.1-2. RETURN_CAUSE Codes .....	2-720
26	Table 2.7.1.3.2.1-3. WLL Device Types .....	2-722
27	Table 2.7.1.3.2.1-4. Hook Status Values .....	2-723
28	Table 2.7.1.3.2.1-5. Encoding of the SIG_ENCRYPT_SUP Field.....	2-724
29	Table 2.7.1.3.2.1-6. Encoding of the SIG_INTEGRITY_SUP Field .....	2-726
30	Table 2.7.1.3.2.1-7. Encoding of the SIG_INTEGRITY_REQ Field .....	2-726
31	Table 2.7.1.3.2.4-1. REQUEST_MODE Codes.....	2-743
32	Table 2.7.1.3.2.4-2. Number Types.....	2-744

**TABLES**

1	Table 2.7.1.3.2.4-3. Numbering Plan Identification .....	2-745
2	Table 2.7.1.3.2.4-4. Representation of DTMF Digits.....	2-746
3	Table 2.7.1.3.2.4-5. Encryption Algorithms Supported .....	2-747
4	Table 2.7.1.3.2.4-6. Channel Indicator .....	2-748
5	Table 2.7.1.3.2.4-7. Geo-location Types .....	2-751
6	Table 2.7.1.3.2.4-8. ORIG_COUNT field for ORIG_REASON = '0' .....	2-752
7	Table 2.7.1.3.2.4-9. Encoding of the UI_ENCRYPT_SUP Field.....	2-757
8	Table 2.7.1.3.2.4-10. Encoding of the SO_BITMAP_IND Field .....	2-759
9	Table 2.7.1.3.2.4-11. Extended Channel Indicator .....	2-763
10	Table 2.7.1.3.2.5-1. Channel indicator .....	2-780
11	Table 2.7.1.3.2.17-1. General Extension Record Type values.....	2-813
12	Table 2.7.2.3-1. Messages on r-dsch (Part 1 of 2).....	2-815
13	Table 2.7.2.3-1. Messages on r-dsch (Part 2 of 2).....	2-816
14	Table 2.7.2.3.2.7-1. Recommended DTMF Pulse Width.....	2-829
15	Table 2.7.2.3.2.7-2. Recommended Minimum Inter-digit Interval .....	2-830
16	Table 2.7.2.3.2.12-1. REQ_PURPOSE Codes .....	2-836
17	Table 2.7.2.3.2.13-1. RESP_PURPOSE Codes.....	2-838
18	Table 2.7.2.3.2.32-1. Channel Indicator .....	2-882
19	Table 2.7.2.3.2.34-1. Pilot Record Types .....	2-898
20	Table 2.7.2.3.2.39-1. Base Station Status Request Information Record Types.....	2-912
21	Table 2.7.2.3.2.40-1. CDMA Off Time Unit .....	2-916
22	Table 2.7.2.3.2.43-1 BCMC Request Type .....	2-921
23	Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch	
24	(Part 1 of 6) .....	2-927
25	Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch	
26	(Part 2 of 6) .....	2-928
27	Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch	
28	(Part 3 of 6) .....	2-929
29	Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch	
30	(Part 4 of 6) .....	2-930
31	Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch	
32	(Part 5 of 6) .....	2-931
33	Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch	
34	(Part 6 of 6) .....	2-932

**TABLES**

1	Table 2.7.3.4-1. REJECTED_PDU_TYPE codes.....	2-938
2	Table 2.7.3.5-1. RSC_END_TIME_UNIT and MAX_RSC_END_TIME_UNIT values.....	2-940
3	Table 2.7.4-1. Information Record Types (Part 1 of 3).....	2-943
4	Table 2.7.4-1. Information Record Types (Part 2 of 3).....	2-944
5	Table 2.7.4-1. Information Record Types (Part 3 of 3).....	2-945
6	Table 2.7.4.4-1. Presentation Indicators.....	2-950
7	Table 2.7.4.4-2. Screening Indicators .....	2-950
8	Table 2.7.4.15-1. OP_MODE for P_REV_IN_USE <sub>S</sub> Less Than or Equal to Three .....	2-965
9	Table 2.7.4.15-2. OP_MODE for P_REV_IN_USE <sub>S</sub> Greater Than Three .....	2-966
10	Table 2.7.4.17-1. Forward Fundamental Traffic Channel Number of Bits per Frame for	
11	Forward Multiplex Option 1 .....	2-970
12	Table 2.7.4.17-2. Forward Fundamental Traffic Channel Number of Bits per Frame for	
13	Forward Multiplex Option equal to 2 .....	2-970
14	Table 2.7.4.17-3. Reverse Fundamental Traffic Channel Number of Bits per Frame for	
15	Reverse Multiplex Option equal to 1 .....	2-971
16	Table 2.7.4.17-4. Reverse Fundamental Traffic Channel Number of Bits per Frame for	
17	Reverse Multiplex Option equal to 2 .....	2-971
18	Table 2.7.4.19-1. Subaddress Types.....	2-974
19	Table 2.7.4.19-2. Odd/Even Indicator .....	2-975
20	Table 2.7.4.25-1. Set of Supported Reverse Pilot Gating Rates.....	2-984
21	Table 2.7.4.25-2. RLP Capability Information Block.....	2-985
22	Table 2.7.4.27.1-1. Forward Channel Radio Configurations Supported .....	2-996
23	Table 2.7.4.27.1-2. Reverse Channel Radio Configurations Supported .....	2-997
24	Table 2.7.4.27.2-1. DCCH Frame Size Supported.....	2-998
25	Table 2.7.4.27.3-1. Block Size .....	2-1001
26	Table 2.7.4.27.3-2. SCH Data Rate .....	2-1003
27	Table 2.7.4.27.5-1. Forward Packet Data Channel Radio Configurations Supported	2-1007
28	Table 2.7.4.27.5-2. F-PDCH Channel Configurations Supported .....	2-1008
29	Table 2.7.4.27.6-1. Reverse Packet Data Channel Radio Configurations Supported .	2-1009
30	Table 2.7.4.27.6-2. F/R-PDCH Channel Configurations Supported .....	2-1011
31	Table 2.7.4.27.6-3. Maximum supported encoder packet size.....	2-1011
32	Table 2.7.4.27.7-1. Fundicated BCMC Channel Configurations Supported .....	2-1013
33	Table 2.7.4.28-1. Forward Fundamental Channel Number of Bits per Frame for	

**TABLES**

1	MO_FOR_FCH equal to 1 .....	2-1017
2	Table 2.7.4.28-2. Forward Fundamental Channel Number of Bits per Frame for	
3	MO_FOR_FCH equal to 2 .....	2-1017
4	Table 2.7.4.28-3. Forward Fundamental Channel Number of Bits per Frame for	
5	MO_FOR_FCH equal to 0x704 .....	2-1018
6	Table 2.7.4.28-4. Reverse Fundamental Channel Number of Bits per Frame for	
7	MO_REV_FCH equal to 1 .....	2-1019
8	Table 2.7.4.28-5. Reverse Fundamental Channel Number of Bits per Frame for	
9	MO_REV_FCH equal to 2 .....	2-1019
10	Table 2.7.4.28-6. Reverse Fundamental Channel Number of Bits per Frame for	
11	MO_REV_FCH equal to 0x704 .....	2-1020
12	Table 2.7.4.29-1. Geo-location Codes.....	2-1024
13	Table 2.7.4.46-1. Encoding Additional Geo-location Codes.....	2-1052
14	Table 3.6.4.1.10-1. The Base Station Assigned Public Long Code Mask Type.....	3-53
15	Table 3.7.2.3-1. f-csch Messages.....	3-107
16	Table 3.7.2.3-1. f-csch Messages.....	3-108
17	Table 3.7.2.3.2.1-1. Value of Zone Timer.....	3-114
18	Table 3.7.2.3.2.1-2. Horizontal Position Uncertainty.....	3-122
19	Table 3.7.2.3.2.1-3. Vertical Position Uncertainty.....	3-123
20	Table 3.7.2.3.2.2-1. ACCT Access Overload Class Bitmap Subfields.....	3-131
21	Table 3.7.2.3.2.3-1. Neighbor Configuration Field.....	3-134
22	Table 3.7.2.3.2.8-1. Assignment Mode .....	3-142
23	Table 3.7.2.3.2.8-2. Message Encryption Modes .....	3-143
24	Table 3.7.2.3.2.8-3. Default Configuration .....	3-146
25	Table 3.7.2.3.2.13-1. Preferred MSID Types for P_REV_IN_USE < 11 .....	3-160
26	Table 3.7.2.3.2.13-1a. Preferred MSID Types for P_REV_IN_USE >= 11 .....	3-161
27	Table 3.7.2.3.2.13-1a. Preferred MSID Types for P_REV_IN_USE >= 11 .....	3-162
28	Table 3.7.2.3.2.13-1a. Preferred MSID Types for P_REV_IN_USE >= 11 .....	3-163
29	Table 3.7.2.3.2.13-1a. Preferred MSID Types for P_REV_IN_USE >= 11 .....	3-164
30	Table 3.7.2.3.2.13-1a. Preferred MSID Types for P_REV_IN_USE >= 11 .....	3-165
31	Table 3.7.2.3.2.13-2. QPCH Indicator Data Rate .....	3-171
32	Table 3.7.2.3.2.13-3 Quick Paging Channel Transmit Power Level .....	3-172
33	Table 3.7.2.3.2.13-4. AUTO_MSG_INTERVAL Values.....	3-174

**TABLES**

1	Table 3.7.2.3.2.13-5. CDMA Off Time Report Threshold Unit.....	3-177
2	Table 3.7.2.3.2.14-1. Neighbor Configuration Field.....	3-191
3	Table 3.7.2.3.2.14-2. Search Priority Field .....	3-193
4	Table 3.7.2.3.2.15-1. Qualification Information Type .....	3-195
5	Table 3.7.2.3.2.15-2. Operating Mode for MOB_P_REV Less Than or Equal to Three..	3-197
6	Table 3.7.2.3.2.15-3. Operating Mode for MOB_P_REV Greater Than Three .....	3-197
7	Table 3.7.2.3.2.16-1. Redirection Types.....	3-199
8	Table 3.7.2.3.2.16-2. Redirection Record Types.....	3-200
9	Table 3.7.2.3.2.20-1. Purpose of PACA Message.....	3-212
10	Table 3.7.2.3.2.20-2. Value of PACA State Timer.....	3-213
11	Table 3.7.2.3.2.21-1. Assignment Mode.....	3-230
12	Table 3.7.2.3.2.21-2. Default Configuration .....	3-231
13	Table 3.7.2.3.2.21-3. Mapping between Multiplex Options and Radio Configurations	3-233
14	Table 3.7.2.3.2.21-4. Radio Configurations .....	3-235
15	Table 3.7.2.3.2.21-5. The Public Long Code Mask Type .....	3-238
16	Table 3.7.2.3.2.21-6. SR_ID_RESTORE_BITMAP Subfields. ....	3-242
17	Table 3.7.2.3.2.21-7. Channel Indicator .....	3-243
18	Table 3.7.2.3.2.21-8. 1X Reverse Link Frequency Offset .....	3-245
19	Table 3.7.2.3.2.21-13 Traffic Channel Preamble Length.....	3-249
20	Table 3.7.2.3.2.21-9. Pilot Record Types.....	3-250
21	Table 3.7.2.3.2.21-12 Rate of the Forward Common Power Control Channel.....	3-269
22	Table 3.7.2.3.2.21-13 CPCCH/RCCH Update rate.....	3-270
23	Table 3.7.2.3.2.21-10 Number of slots per frame for R-CQICH switching.....	3-275
24	Table 3.7.2.3.2.21-11 Repetition factor for the F-RCCH. ....	3-279
25	Table 3.7.2.3.2.22-1. Search Mode Field .....	3-294
26	Table 3.7.2.3.2.22-2. Neighbor Configuration Field.....	3-296
27	Table 3.7.2.3.2.22-3. Search Priority Field .....	3-298
28	Table 3.7.2.3.2.22-4. Cellular System A/B .....	3-300
29	Table 3.7.2.3.2.22-5. Neighbor Pilot Record Types .....	3-301
30	Table 3.7.2.3.2.22-6. Walsh Code Length .....	3-302
31	Table 3.7.2.3.2.22-7. Auxiliary Transmit Diversity Pilot Transmit Power Level .....	3-304
32	Table 3.7.2.3.2.24-1. Radio Interface Type .....	3-316

**TABLES**

1	Table 3.7.2.3.2.26-1. Paging Channel Data Rate .....	3-330
2	Table 3.7.2.3.2.26-2. Broadcast Control Channel Data Rate.....	3-332
3	Table 3.7.2.3.2.26-3. TD Mode .....	3-333
4	Table 3.7.2.3.2.26-4. TD Transmit Power Level .....	3-334
5	Table 3.7.2.3.2.26-5. The Position of the Primary SR3 Pilot .....	3-335
6	Table 3.7.2.3.2.26-6. Pilot Transmission Power .....	3-336
7	Table 3.7.2.3.2.29-1. Rejection Action Indicators.....	3-351
8	Table 3.7.2.3.2.30-1. Value of Zone Timer.....	3-356
9	Table 3.7.2.3.2.31-1. Forward Common Control Channel Rate Words.....	3-379
10	Table 3.7.2.3.2.31-2. Broadcast Control Channel Data Rate.....	3-380
11	Table 3.7.2.3.2.31-3. Quick Paging Channel Transmit Power Level .....	3-382
12	Table 3.7.2.3.2.33-1. Enhanced Access Modes.....	3-408
13	Table 3.7.2.3.2.33-2. Applicable Modes.....	3-409
14	Table 3.7.2.3.2.33-3. EACH and RCCCH Data Rate and Frame Size.....	3-412
15	Table 3.7.2.3.2.33-4. CPCCH Power Control Rate .....	3-417
16	Table 3.7.2.3.2.34-1. Radio Interface Type .....	3-421
17	Table 3.7.2.3.2.34-2. Search Mode Field .....	3-423
18	Table 3.7.2.3.2.34-3. Neighbor Configuration Field.....	3-426
19	Table 3.7.2.3.2.34-4. Neighbor Pilot Record Types .....	3-430
20	Table 3.7.2.3.2.34-5. Search Priority Field .....	3-437
21	Table 3.7.2.3.2.38-1. Value of Frequency change registration timer .....	3-456
22	Table 3.7.2.3.2.38-2. Forward Supplemental Channel PLCM scheme used .....	3-458
23	Table 3.7.2.3.2.38-7. FRAMING_TYPE values.....	3-459
24	Table 3.7.2.3.2.38-8. FCS_LENGTH values .....	3-459
25	Table 3.7.2.3.2.38-3. Forward Supplemental Channel Outer Code Rate.....	3-461
26	Table 3.7.2.3.2.38-4. TDM_SLOT_LENGTH values .....	3-463
27	Table 3.7.2.3.2.38-5. TDM_SUPER PERIOD_MASK_LEN and	
28	TDM_MEGA_PERIOD_MASK_LEN values .....	3-463
29	Table 3.7.2.3.2.38-6. Length of TDM_MEGA_PERIOD_MASK .....	3-468
30	Table 3.7.2.3.2.38-6. Neighbor BCMC Configuration Field .....	3-469
31	Table 3.7.2.3.2.39-1. Association Type Field .....	3-478
32	Table 3.7.2.3.2.41-1. Access Point Association Type Field.....	3-487



**TABLES**

1	Table 3.7.2.3.2.42-1. General Overhead Information Record Type Field.....	3-492
2	Table 3.7.2.3.2.40-1. General Extension Record Type values.....	3-499
3	Table 3.5-1. Radio Interface Type .....	3-502
4	Table 3.7.3.3-1. f-dsch Messages.....	3-509
5	Table 3.7.3.3.2.17-1. Traffic Channel Preamble Length.....	3-547
6	Table 3.7.3.3.2.18-1. REQ_PURPOSE Codes .....	3-549
7	Table 3.7.3.3.2.19-1. RESP_PURPOSE Codes.....	3-551
8	Table 3.7.3.3.2.20-1. USE_OLD_SERV_CONFIG values .....	3-556
9	Table 3.7.3.3.2.20-2. SR_ID_RELEASE_BITMAP Subfields.....	3-561
10	Table 3.7.3.3.2.25-1. Closed Loop Power Control Step Size.....	3-578
11	Table 3.7.3.3.2.25-2. Target Frame Error Rate .....	3-579
12	Table 3.7.3.3.2.25-3. RPC_ADJ_REC_TYPE and RPC_ADJ_REC_LEN fields.....	3-582
13	Table 3.7.3.3.2.25-4. Type Specific Fields for RECORD_TYPE = '0000' .....	3-584
14	Table 3.7.3.3.2.25-5. Type Specific Fields for RECORD_TYPE = '0001' .....	3-587
15	Table 3.7.3.3.2.25-6. Type Specific Fields for RECORD_TYPE = '0010' .....	3-600
16	Table 3.7.3.3.2.25-7. Type Specific Fields for RECORD_TYPE = '0011' .....	3-615
17	Table 3.7.3.3.2.25-8. Type Specific Fields for RECORD_TYPE = '0100' .....	3-617
18	Table 3.7.3.3.2.26-1. NGHBR_SRCH_MODE Field .....	3-628
19	Table 3.7.3.3.2.26-2. SEARCH_PRIORITY Field.....	3-629
20	Table 3.7.3.3.2.27-1. SEARCH_TYPE Codes .....	3-641
21	Table 3.7.3.3.2.27-2. SEARCH_MODE Types .....	3-642
22	Table 3.7.3.3.2.27-3. CF_NGHBR_SRCH_MODE Field .....	3-647
23	Table 3.7.3.3.2.34-1. Channel Indicator .....	3-687
24	Table 3.7.3.3.2.34-2. Actual Reverse Pilot Gating rate .....	3-688
25	Table 3.7.3.3.2.34-3. Valid CH_IND, EXT_CH_IND, and PDCH_CONTROL_HOLD .....	3-689
26	Table 3.7.3.3.2.34-4 Release Type .....	3-693
27	Table 3.7.3.3.2.34-5 RER_TIME_UNIT values .....	3-697
28	Table 3.7.3.3.2.36-1. Channel Indicator .....	3-739
29	Table 3.7.3.3.2.37-1. REV_WALSH_ID Field .....	3-804
30	Table 3.7.3.3.2.37-2. R-SCH Number of Information Bits per Frame .....	3-804
31	Table 3.7.3.3.2.37-3. FOR_SCH_DURATION and REV_SCH_DURATION Fields .....	3-805
32	Table 3.7.3.3.2.37-4. F-SCH Number of Information Bits per Frame.....	3-808

**TABLES**

1	Table 3.7.3.3.2.47-1. Base Station Status Response Information Record Types .....	3-841
2	Table 3.7.3.3.2.49-1 R-CQICH Repetition Factor.....	3-848
3	Table 3.7.3.3.2.49-2 R-ACKCH Repetition Factor.....	3-852
4	Table 3.7.3.3.2.50-1. BCMC Flow Availability .....	3-857
5	Table 3.7.3.3.2.51-1. Ack Mask .....	3-860
6	Table 3.7.3.3.2.51-3. N <sub>2m</sub> value for Forward Link RC11 and RC12.....	3-862
7	Table 3.7.3.3.2.51-4. Closed Loop Power Control Step Size .....	3-863
8	Table 3.7.3.3.2.51-5. N (duty cycle) value for FL RC11, RC12 and RL RC08.....	3-863
9	Table 3.7.3.3.2.51-2. QOF Set in use .....	3-865
10	Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch	
11	(Part 1 of 5) .....	3-870
12	Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch	
13	(Part 2 of 5) .....	3-871
14	Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch	
15	(Part 3 of 5) .....	3-872
16	Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch	
17	(Part 4 of 5) .....	3-873
18	Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch	
19	(Part 5 of 5) .....	3-874
20	Table 3.7.4.4-1. Status Request ORDQ Values.....	3-878
21	Table 3.7.4.5-1. (Part 1 of 2) Signaling Message Encryption Modes .....	3-880
22	Table 3.7.4.5-1 (Part 2 of 2). Signaling Message Encryption Modes .....	3-881
23	Table 3.7.4.5-2. ENC_KEY_SIZE Values .....	3-881
24	Table 3.7.4.7-1 Retry Delay Type.....	3-886
25	Table 3.7.4.7-2 Retry Delay for RETRY_TYPE '001'.....	3-887
26	Table 3.7.4.9-1 Reject Reason Type.....	3-890
27	Table 3.7.4.10-1 BCMC Reason.....	3-893
28	Table 3.7.4.10-2 BCMC Retry Delay .....	3-894
29	Table 3.7.4.12-1. SR_ID_BITMAP Subfields.....	3-901
30	Table 3.7.4.12-2. Service Status Values .....	3-902
31	Table 3.7.5-1. Information Record Types (Part 1 of 3).....	3-905
32	Table 3.7.5-1. Information Record Types (Part 2 of 3).....	3-906
33	Table 3.7.5-1. Information Record Types (Part 3 of 3).....	3-907

**TABLES**

1	Table 3.7.5.5-1. Signal Type .....	3-914
2	Table 3.7.5.5-2. Alert Pitch .....	3-915
3	Table 3.7.5.5-3. Tone Signals (SIGNAL_TYPE = '00').....	3-916
4	Table 3.7.5.5-4. ISDN Alerting (SIGNAL_TYPE = '01') .....	3-917
5	Table 3.7.5.5-5. IS-54B Alerting (SIGNAL_TYPE = '10').....	3-918
6	Table 3.7.5.7-1. FOR_TRAFFIC Codes .....	3-930
7	Table 3.7.5.7-2. REV_TRAFFIC Codes .....	3-931
8	Table 3.7.5.7-3. User information Encryption Modes .....	3-932
9	Table 3.7.5.7-4. DCCH Frame Size .....	3-940
10	Table 3.7.5.7-5. SCH Identifier .....	3-943
11	Table 3.7.5.7-6. FCH_DCCH_MUX_OPTION_IND USAGE.....	3-946
12	Table 3.7.5.11-1. Redirection Reason .....	3-959
13	Table 3.7.5.16-1. Display Type .....	3-965
14	Table 3.7.5.16-2. Mandatory Control Tags and Display Text Tags .....	3-967
15	Table 3.7.5.20-1. Reverse Pilot Gating rate.....	3-985
16	Table 3.7.5.20-2. Logical to Physical Mapping indicator .....	3-987
17	Table 3.7.5.20-3. Logical Resource Identifier.....	3-988
18	Table 3.7.5.20-4. Physical Resource Identifier.....	3-988
19	Table 3.7.5.20-5. CRC_LEN_IDX.....	3-991
20	Table 3.7.5.20-6. NUM_LTUS.....	3-997
21	Table 3.7.5.20-5. FOR_TRAFFIC Codes .....	3-1048
22	Table 3.7.5.20-6. REV_TRAFFIC Codes .....	3-1049
23	Table 3.7.6.1-1. TD Transmit Power Level .....	3-1067
24	Table 3.7.6.1-2. TD Mode.....	3-1068
25	Table 3.7.6.1-3. Walsh Code Length .....	3-1069
26	Table 3.7.6.1-4. Auxiliary Transmit Diversity Pilot Transmit Power Level .....	3-1070
27	Table 3.7.6.1-5. The Position of the Primary SR3 Pilot .....	3-1071
28	Table 3.7.6.1-6. Pilot Transmission Power.....	3-1071
29	Table D-1. Time Limits (Part 1 of 5) .....	D-1
30	Table D-1. Time Limits (Part 2 of 5) .....	D-2
31	Table D-1. Time Limits (Part 3 of 5) .....	D-4
32	Table D-1. Time Limits (Part 4 of 5) .....	D-5

**TABLES**

1	Table D-1. Time Limits (Part 5 of 5) .....	D-6
2	Table D-2. Other Constants (Part 1 of 2) .....	D-8
3	Table D-2. Other Constants (Part 2 of 2) .....	D-9
4	Table E-1. Retrievable and Settable Parameters .....	E-2
5	Table E-1. Retrievable and Settable Parameters .....	E-3
6	Table E-1. Retrievable and Settable Parameters .....	E-4
7	Table E-1. Retrievable and Settable Parameters .....	E-5
8	Table E-1. Retrievable and Settable Parameters .....	E-6
9	Table E-1. Retrievable and Settable Parameters .....	E-7
10	Table E-1. Retrievable and Settable Parameters .....	E-8
11	Table E-1. Retrievable and Settable Parameters .....	E-9
12	Table E-1. Retrievable and Settable Parameters .....	E-10
13	Table E-1. Retrievable and Settable Parameters .....	E-11
14	Table E-1. Retrievable and Settable Parameters .....	E-12
15	Table E-1. Retrievable and Settable Parameters .....	E-13
16	Table E-1. Retrievable and Settable Parameters .....	E-14
17	Table E-1. Retrievable and Settable Parameters .....	E-15
18	Table E-1. Retrievable and Settable Parameters .....	E-16
19	Table E-1. Retrievable and Settable Parameters .....	E-17
20	Table E-1. Retrievable and Settable Parameters .....	E-18
21	Table E-1. Retrievable and Settable Parameters .....	E-19
22	Table E-1. Retrievable and Settable Parameters .....	E-20
23	Table E-1. Retrievable and Settable Parameters .....	E-21
24	Table E-1. Retrievable and Settable Parameters .....	E-22
25	Table E-1. Retrievable and Settable Parameters .....	E-23
26	Table E-1. Retrievable and Settable Parameters .....	E-24
27	Table F.2.1-1. Permanent Mobile Station Indicators .....	F-2
28	Table F.2.2-1. CDMA Semi-permanent Mobile Station Indicators .....	F-3
29	Table F.3-1. NAM Indicators (Part 1 of 2).....	F-4
30	Table F.3-1. NAM Indicators (Part 2 of 2).....	F-5

31

## FOREWORD AND SCOPE

**(This foreword and scope are not part of this specification)**

This Specification was prepared by Technical Specification Group C of the Third Generation Partnership Project 2 (3GPP2). This Specification contains the Layer 3 layer of the IMT-2000 CDMA Multi-Carrier Mode, IMT-2000 CDMA MC, also known as cdma2000<sup>®1</sup>. It provides a specification for land mobile wireless systems based upon cellular principles. This Specification includes the capabilities of Telecommunications Industry Association Standard TIA/EIA-95-B.

This Specification provides the Layer 3 Upper Layer signaling protocol architecture and functionality. Other specifications are required to complete the air interface and the rest of the system. Some of these specifications are listed in the References section.

**1. General.** This section defines the terms and numeric indications used in this document. This section also describes the general signaling architecture.

**2. Requirements for Mobile Station CDMA Operation.** This section describes the requirements for mobile stations operating in the CDMA mode. A mobile station complying with these requirements will be able to operate with CDMA base stations complying with this document.

**3. Requirements for Base Station CDMA Operation.** This section describes the requirements for CDMA base stations. A base station complying with these requirements will be able to operate in the CDMA mode with mobile stations complying with this document.

**Annex A. Reserved.**

**Annex B. CDMA Call Flow Examples.** This informative annex provides examples of simple call flows in the CDMA system.

**Annex C. Additional CDMA Call Flows.** This informative annex provides examples of additional simple call flows in the CDMA system.

**Annex D. CDMA Constants.** This normative annex contains tables that give specific values for the constant identifiers found in Section 2 and Section 3.

**Annex E. CDMA Retrievable and Settable Parameters.** This normative annex describes the mobile station parameters that the base station can set and retrieve.

---

<sup>1</sup>cdma2000<sup>®</sup> is the trademark for the technical nomenclature for certain specifications and standards of the Organizational Partners (OPs) of 3GPP2. Geographically (and as of the date of publication), cdma2000<sup>®</sup> is a registered trademark of the Telecommunications Industry Association (TIA-USA) in the United States.

- 1 **Annex F. Mobile Station Database.** This informative annex describes a database model
- 2 that can be used for mobile stations complying with this document.
- 3 **Annex G. Encryption Call Flows.** This informative annex provides examples of extended
- 4 encryption call flows in the CDMA system.

1

**NOTES**

- 2 1. Compatibility, as used in connection with cdma2000<sup>®2</sup>, is understood to mean:  
 3 any cdma2000 mobile station is able to place and receive calls in cdma2000 and  
 4 IS-95 systems. Conversely, any cdma2000 system is able to place and receive calls  
 5 for cdma2000 and IS-95 mobile stations.
- 6 2. Reserved.
- 7 3. This compatibility specification is based upon spectrum allocations that have been  
 8 defined by various governmental administrations.
- 9 4. Each mobile station is assigned either a single unique 32-bit binary serial number  
 10 (ESN) or a single unique 56-bit binary serial number (MEID) that cannot be  
 11 changed by the subscriber without rendering the mobile station inoperative (see  
 12 2.3.2).
- 13 5. “Base station” refers to the functions performed in the fixed network. These  
 14 functions typically distributed among cells, sectors, and mobile switching centers.
- 15 6. This standard uses the following verbal forms: “Shall” and “shall not” identify  
 16 requirements strictly to be followed in order to conform with the standard and from  
 17 which no deviation is permitted. “Should” and “should not” indicate that one of  
 18 several possibilities is recommended as particularly suitable, without mentioning  
 19 or excluding others; that a certain course of action is preferred but not necessarily  
 20 required; or that (in the negative form) a certain possibility or course of action is  
 21 discouraged but not prohibited. “May” and “need not” indicate a course of action  
 22 permissible within the limits of the standard. “Can” and “cannot” are used for  
 23 statements of possibility and capability, whether material, physical, or causal.
- 24 7. Footnotes appear at various points in this specification to elaborate and further  
 25 clarify items discussed in the body of the specification.
- 26 8. Unless indicated otherwise, this document presents numbers in decimal form.  
 27 Binary numbers are distinguished in the text by the use of single quotation marks.
- 28 9. The following operators define mathematical operations:
- 29  $\times$  indicates multiplication.
- 30  $\lfloor x \rfloor$  indicates the largest integer less than or equal to  $x$ :  $\lfloor 1.1 \rfloor = 1$ ,  $\lfloor 1.0 \rfloor = 1$ .
- 31  $\lceil x \rceil$  indicates the smallest integer greater or equal to  $x$ :  $\lceil 1.1 \rceil = 2$ ,  $\lceil 2.0 \rceil = 2$ .
- 32  $|x|$  indicates the absolute value of  $x$ :  $|-17| = 17$ ,  $|17| = 17$ .

---

<sup>2</sup> “cdma2000<sup>®</sup> is the trademark for the technical nomenclature for certain specifications and standards of the Organizational Partners (OPs) of 3GPP2. Geographically (and as of the date of publication), cdma2000<sup>®</sup> is a registered trademark of the Telecommunications Industry Association (TIA-USA) in the United States.”

- 1            $\oplus$  indicates exclusive OR (modulo-2 addition).
- 2            $\min(x, y)$  indicates the minimum of  $x$  and  $y$ .
- 3            $\max(x, y)$  indicates the maximum of  $x$  and  $y$ .
- 4            $x \bmod y$  indicates the remainder after dividing  $x$  by  $y$ :  $x \bmod y = x - (y \times \lfloor x/y \rfloor)$ .
- 5            $\text{weight}(x)$  indicates the number of '1's in the binary representation of  $x$ .
- 6            $\gg$  indicates binary right shift operation.
- 7            $\ll$  indicates binary left shift operation.

8       10. While communication between Layer 3 and Layer 2 is specified, there is no  
9       requirement to implement layering.

10      11. The following indentation is advised :

11      “No indentation

- 12          •   bullet 1
- 13              –   bullet 2
- 14                  +   bullet 3.
- 15                      □   bullet 4.
- 16                          ◇   bullet 5.
- 17                              –   bullet 6.
- 18                                  +   bullet 7.

19  
20  
21  
22



1

**REFERENCES**

2 The following standards contain provisions which, through reference in this text,  
 3 constitute provisions of this Standard. At the time of publication, the editions indicated  
 4 were valid. All standards are subject to revision, and parties to agreements based on this  
 5 Standard are encouraged to investigate the possibility of applying the most recent editions  
 6 of the standards indicated below.

7

1. C.S0001-E, *Introduction to cdma2000 Standards for Spread Spectrum Systems.*
2. C.S0002-E, *Physical Layer Standard for cdma2000 Spread Spectrum Systems.*
3. C.S0003-E, *Medium Access Control (MAC) Standard for cdma2000 Spread Spectrum Systems.*
4. C.S0004-E, *Signaling Link Access Control (LAC) Standard for cdma2000 Spread Spectrum Systems.*
5. Reserved.
6. Reserved.
7. ANSI T1.607-2000(R2009), Integrated Services Digital Network (ISDN)–Layer 3 Signaling Specification for Circuit Switched Bearer Service for Digital Subscriber Signaling System Number 1 (DSS1), 2009.
8. ANSI T1.610-1998, Generic Procedures for the Control of ISDN Supplementary Services, 1998.
9. ANSI X3.4-1986, Coded Character Set - 7-bit American National Standard Code for Information Interchange, 1992.
10. C.S0010-C, Recommended Minimum Performance Standards for Base Stations Supporting Dual-Mode Spread Spectrum Mobile Stations.
11. C.S0011-C, Recommended Minimum Performance Standards for Dual-Mode Spread Spectrum Mobile Stations.
12. Reserved.
13. TIA/EIA-41-D, Cellular Radiotelecommunications Intersystem Operations.
14. C.S0015-B, Short Message Services for Spread Spectrum Cellular Systems.
15. S.S0053, Common Cryptographic Algorithms.
16. ITU-T Recommendation E.163, Numbering Plan for the International Telephone Service, 1988. Note: merged with E.164.
17. ITU-T Recommendation E.164 (I.331), Numbering Plan for the ISDN Era, 1991.
18. ITU-T Recommendation E.212, Identification Plan for Land Mobile Stations, 1988.
19. ITU-T Recommendation F.69, The International Telex Service–Service and Operational Provisions of Telex Destination Codes and Telex Network Identifications Codes, 1994.

20. ITU-T Recommendation X.121, International Numbering Plan for Public Data Networks, 1992.
21. EIA/TIA/IS-54-B, Cellular System Dual-Mode Mobile Station - Base Station Compatibility Standard, April 1992.
22. Reserved.
23. Interface Specification for Common Cryptographic Algorithms, Rev C, 1997. Contact the Telecommunications Industry Association, Arlington, VA.
24. TIA/EIA-95-B, Mobile Station-Base Station Compatibility Standard for Dual-Mode Spread Spectrum Cellular System, 1999.
25. TIA/EIA/IS-136, 800 MHz TDMA Cellular-Radio Interface-Mobile Station-Base Station Compatibility, December 1994.
26. C.S0016-C, Over-the-Air Service Provisioning of Mobile Stations in Spread Spectrum Systems.
27. TIA/IS-735, Enhancements to TIA/EIA-41-D & TIA/EIA-664 for Advanced Features in Wideband Spread Spectrum Systems, (R2002).
28. TSB16-A, Assignment of Access Overload Classes in the Cellular Telecommunications Services (2001), June 2001. (*Informative reference*)
29. TSB50, User Interface for Authentication Key Entry, March 1993. (*Informative reference*)
30. C.R1001-G, Administration of Parameter Value Assignments for cdma2000 Spread Spectrum Standards, June 2009. (*Informative reference*)
31. C.S0008-0, *Multi-Carrier Specification for Spread Spectrum System on GSM MAP (MC-MAP) – Lower Layers Air Interface.*
32. C.S0007-0, *Direct Spread Specification for Spread Spectrum System on ANSI-41 (DS-41) – Upper Layers Air Interface.*
33. Reserved.
34. ANSI T1.625, Integrated Services Digital Network (ISDN) – Calling Line Identification Presentation and Restriction Supplementary Services.
35. ITU-T X.213, Information Technology – Open Systems Interconnection – Network Service Definition, November 1995.
36. ITU-T X.25, Interface between Data Terminal Equipment (DTE) and Data Circuit-Terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit, October 1996.
37. Reserved.
38. Federal Information Processing Standards Publication (FIPS PUB) 180-1.
39. N.S0027, Enhanced International Dialing, Calling Number Identification & Callback, Calling Party Category Identification, May 2001
40. C.S0023-C, Removable User Identity Module (R-UIM) for cdma2000 Spread

## Spectrum Systems.

- 41. National Institute of Standards and Technology, FIPS 180-1, "Secure Hash Standard," April 17, 1995
- 42. C.S0017-A, Data Service Options for Spread Spectrum Systems
- 43. C.S0022-B, Position Determination Service Standard for Dual Mode Spread Spectrum Systems
- 44. S.S0078-B Common Security Algorithms.
- 45. C.S0057-C Band Class Specification for cdma2000 Spread Spectrum Systems.
- 46. S.S0055-A Enhanced Cryptographic Algorithms.
- 47. C.S0072-0, Mobile Station Equipment Identifier (MEID) Support for cdma2000 Spread Spectrum Systems.
- 48. A.S0011-D to A.S0017-D, Interoperability Specification (IOS) for cdma2000 Access Network Interfaces.
- 49. C.S0087, E-UTRAN – cdma2000 Connectivity and Interworking: Air Interface Specification

Editor's Note: The above document is a work in progress and should not be referenced unless and until it is approved and published. Until such time as this Editor's Note is removed, the inclusion of the above document is for informational purposes only.

- 50. C.S0086, WiMAX™ – HRPD Interworking: Air Interface Specification.

Editor's Note: The above document is a work in progress and should not be referenced unless and until it is approved and published. Until such time as this Editor's Note is removed, the inclusion of the above document is for informational purposes only.

1 This page intentionally left blank.

2

## 1 1. GENERAL

2 This section defines the terms and numeric indications used in this document. This  
3 section also describes the general signaling architecture.

### 4 1.1 Terms and Numeric Information

#### 5 1.1.1 Terms

6 **Abbreviated Alert.** An abbreviated alert is used to remind the mobile station user that  
7 previously selected alternative routing features are still active.

8 **AC.** See Authentication Center.

9 **Access Attempt.** The entire process of sending one message and receiving (or failing to  
10 receive) an acknowledgment for that message, consisting of one or more access sub-  
11 attempts. See also Access Probe, Access Probe Sequence, and Access Sub-attempt.

12 **Access Channel.** A Reverse CDMA Channel used by mobile stations for communicating  
13 to the base station. The Access Channel is used for short signaling message exchanges  
14 such as call originations, responses to pages, and registrations. The Access Channel is a  
15 slotted random access channel.

16 **Access Channel Message.** The information part of an access probe consisting of the  
17 message body, length field, and CRC.

18 **Access Channel Message Capsule.** An Access Channel message plus the padding.

19 **Access Channel Preamble.** The preamble of an access probe consisting of a sequence of  
20 all-zero frames that are sent at the 4800 bps rate.

21 **Access Channel Request Message.** An Access Channel message that is autonomously  
22 generated by the mobile station. See also Access Channel Response Message.

23 **Access Channel Response Message.** A message on the Access Channel generated to  
24 reply to a message received from the base station.

25 **Access Channel Slot.** The assigned time interval for an access probe. An Access Channel  
26 slot consists of an integer number of frames. The transmission of an access probe is  
27 performed within the boundaries of an Access Channel slot.

28 **Access Entry Handoff.** The act of transferring reception of the Paging Channel from one  
29 base station to another, when the mobile station is transitioning from the *Mobile Station*  
30 *Idle State* to the *System Access State*.

31 **Access Handoff.** The act of transferring reception of the Paging Channel from one base  
32 station to another, when the mobile station is in the *System Access State* after an Access  
33 Attempt.

34 **Access Overload Class.** See Overload Class.

35 **Access Probe.** One Access Channel transmission consisting of a preamble and a  
36 message. The transmission is an integer number of frames in length and transmits one

1 Access Channel message. See also Access Probe Sequence, Access Sub-attempt, and  
2 Access Attempt.

3 **Access Probe Handoff.** A handoff that occurs while the mobile station is performing an  
4 Access Attempt in the *System Access State*.

5 **Access Probe Sequence.** A sequence of one or more access probes on the Access  
6 Channel. Other than the reported pilot information, the same Access Channel message  
7 content is transmitted in every access probe of an access sub-attempt. See also Access  
8 Probe, Access Sub-attempt, and Access Attempt.

9 **Access Sub-attempt.** A sequence of one or more access probe sequences on the Access  
10 Channel transmitted to one pilot, containing the same message content other than the  
11 reported pilot information. See also Access Probe, Access Probe Sequence, and Access  
12 Attempt.

13 **Acknowledgment.** A Layer 2 response by the mobile station or the base station  
14 confirming that a signaling message was received correctly.

15 **Action Time.** The time at which the action implied by a message should take effect.

16 **Active Set.** The set of pilots associated with the CDMA Channels containing Forward  
17 Traffic Channels assigned to a particular mobile station.

18 **Active User Zone.** A user zone in which the mobile station makes its presence known via  
19 an explicit registration in order to activate tiered service features. See also CDMA Tiered  
20 Services, User Zone, and Passive User Zone.

21 **Aging.** A mechanism through which the mobile station maintains in its Neighbor Set the  
22 pilots that have been recently sent to it from the base station and the pilots whose handoff  
23 drop timers have recently expired.

24 **AKA.** Authentication and Key Agreement. An authentication procedure that allows  
25 mutual authentication of the mobile station and base station.

26 **A-key.** A secret, 64-bit pattern stored in the mobile station and HLR/AC. It is used to  
27 generate/update the mobile station's Shared Secret Data.

28 **Alternate Interleaver Pattern.** An interleaver pattern used for convolutional coded frames  
29 for code combining soft handoff for Radio Configuration 12. The alternate interleaver  
30 pattern is used by some base stations in the mobile station active set to increase the  
31 probability of frame early termination.

32 **ARQ.** Automatic Repeat Request. The ARQ is an automatic retransmission protocol that  
33 ensures the delivery of encoder packets from the sender to the receiver by retransmission  
34 of portions of a turbo encoded packet based on the feedback from the receiver that  
35 indicates if the encoder packets have been received and decoded successfully (ACK) or not  
36 (NAK).

37 **Assured Mode.** Mode of delivery that guarantees that a PDU will be delivered to the peer.  
38 A PDU sent in assured mode is retransmitted by the LAC sublayer, up to a maximum  
39 number of retransmissions, until the LAC entity at the sender receives an  
40 acknowledgment for the PDU. See also Confirmation of Delivery.

- 1 **Authentication.** A procedure used by a base station to validate a mobile station's  
2 identity.
- 3 **Authentication Center (AC).** An entity that manages the authentication information  
4 related to the mobile station.
- 5 **Authentication Response (AUTHR).** An 18-bit output of the authentication algorithm. It  
6 is used, for example, to validate mobile station registrations, originations and  
7 terminations.
- 8 **Autonomous Registration.** A method of registration in which the mobile station registers  
9 without an explicit command from the base station.
- 10 **Auxiliary Pilot Channel.** A non-data-bearing, direct-sequence spread spectrum signal  
11 optionally transmitted by a CDMA base station.
- 12 **Auxiliary Transmit Diversity Pilot Channel.** A pilot channel, counterpart to an Auxiliary  
13 Pilot Channel, that is transmitted by a CDMA base station from the non-primary antenna  
14 when orthogonal transmit diversity is employed.
- 15 **AV.** Authentication Vector used by AKA.
- 16 **Bad Frames.** Frames classified as insufficient frame quality or as 9600 bps primary traffic  
17 only, with bit errors. See also Good Frames.
- 18 **Band Class.** A set of CDMA frequency assignments and a numbering scheme for these  
19 channels. See also CDMA Frequency Assignment.
- 20 **Base Station.** A fixed station used for communicating with mobile stations. Depending  
21 upon the context, the term base station may refer to a cell, a sector within a cell, an MSC,  
22 or other part of the wireless system. See also MSC.
- 23 **Base Station Authentication Response (AUTHBS).** An 18-bit pattern generated by the  
24 authentication algorithm. AUTHBS is used to confirm the validity of base station orders to  
25 update the Shared Secret Data.
- 26 **Base Station Random Variable (RANDBS).** A 32-bit random number generated by the  
27 mobile station for authenticating base station orders to update the Shared Secret Data.
- 28 **BCMC Service Layer.** The functional components residing above the signaling layer  
29 (Layer 3) that provide BCMC services.
- 30 **BCMC TDM Mode.** A mode of operation where a time-division multiplexing (TDM)  
31 structure is used on a Forward Supplemental Channel (F-SCH) for BCMC content  
32 transmission to mobile stations in *Mobile Station Idle State*.
- 33 **Blank-and-Burst.** The preemption of an entire Traffic Channel frame's primary traffic by  
34 signaling traffic or secondary traffic. Blank-and-burst is performed on a frame-by-frame  
35 basis.
- 36 **BLOB.** Block of Bits.
- 37 **bps.** Bits per second.

1 **Boosted Mode.** Mode of operation of Reverse Packet Data Channel where selected data  
2 packets are transmitted by the mobile station at a higher power to increase the probability  
3 of being received by the base station.

4 **Broadcast Control Channel.** A code channel in a Forward CDMA Channel used for  
5 transmission of control information or broadcast messages from a base station to a mobile  
6 station.

7 **Broadcast Control Channel Number (BCN).** A number that identifies the Broadcast  
8 Control Channel. BCN number 1 corresponds to the Primary Broadcast Control Channel.  
9 BCN numbers 2 through 7 correspond to other Broadcast Control Channels (if any).

10 **Broadcast User Zone.** A user zone that is identified to the mobile station by means of  
11 broadcast messages. It corresponds to the RF coverage area of a particular set of cells and  
12 sectors. See also CDMA Tiered Services and Mobile-Specific User Zone.

13 **Call Disconnect.** The process that releases the resources handling a particular call. The  
14 disconnect process begins either when the mobile station user indicates the end of the  
15 call by generating an on-hook condition or other call-release mechanism, or when the  
16 base station initiates a release.

17 **Call History Parameter (COUNT).** A modulo-64 event counter maintained by the mobile  
18 station and Authentication Center that is used for clone detection.

19 **Call Rescue Soft Handoff.** The ability for a mobile station to autonomously add one or  
20 more strong pilots to its Active Set in order to minimize the probability of dropped calls.

21 **Candidate Frequency.** The frequency, for which the base station specifies a search set,  
22 using a *Candidate Frequency Search Request Message*.

23 **Candidate Set.** The set of pilots that have been received with sufficient strength by the  
24 mobile station to be successfully demodulated, but have not been placed in the Active Set  
25 by the base station. See also Active Set, Neighbor Set, and Remaining Set.

26 **CCK.** An encryption key derived from the CMEA key. A 128-bit pattern that is the 64-bit  
27 CMEA key concatenated with a copy of itself.

28 **CCSH.** See Code Combining Soft Handoff.

29 **CDMA.** See Code Division Multiple Access.

30 **CDMA Candidate Frequency.** The Candidate Frequency specified for a search of CDMA  
31 pilots.

32 **CDMA Channel.** The set of channels transmitted between the base station and the  
33 mobile stations within a given CDMA Frequency Assignment. See also Forward CDMA  
34 Channel and Reverse CDMA Channel.

35 **CDMA Channel Number.** An 11-bit number that identifies a CDMA Frequency  
36 Assignment.

37 **CDMA Frequency Assignment.** A 1.23 or 3.69 MHz segment of spectrum. The center of a  
38 CDMA frequency assignment is given by a CDMA Channel Number.



**CDMA Preferred Set.** The set of CDMA channel numbers in a CDMA system corresponding to Frequency Assignments that a mobile station will normally search to acquire a CDMA Pilot Channel. For CDMA cellular systems, the primary and secondary channels comprise the CDMA Preferred Set.

**CDMA Tiered Services.** System features and services that are based on location, potentially including private networks. User zones establish the availability of services. See also User Zone, Broadcast User Zone, Mobile-Specific User Zone, Active User Zone, and Passive User Zone.

**Center SR3 Frequency.** The Spreading Rate 3 frequency that has the center frequency assignment.

**Chip.** See PN Chip.

**CIK.** An integrity key derived from the CMEA key. A 128-bit pattern that is the 64-bit CMEA key concatenated with a copy of itself.

**CK.** Cipher Key. A 128-bit pattern produced by AKA that is used for encryption.

**CMEA.** Cellular Message Encryption Algorithm.

**Code Channel.** A subchannel of a Forward CDMA Channel or Reverse CDMA Channel. Each subchannel uses an orthogonal Walsh function or quasi-orthogonal function.

**Code Combining Soft Handoff (CCSH).** A Soft Handoff method for Fundamental Channels on the forward link in Radio Configuration 12 and Supplemental Channels on the forward link in Radio Configurations 4, 5, and 12. For Supplemental Channels using Turbo codes in this mode, certain base stations encode and transmit the data with the default Turbo Encoder, whereas others use the complementary Turbo Encoder. Mobile stations in soft handoff can then combine both codes to achieve lower code rate. For Fundamental Channels and Supplemental Channels using Convolutional codes in this mode certain base stations transmit using the default interleaver pattern, whereas others use an alternate interleaver pattern. Mobile stations in handoff combine transmissions from both base stations to decode the frames earlier.

**Code Division Multiple Access (CDMA).** A technique for spread-spectrum multiple-access digital communications that creates channels through the use of unique code sequences.

**Code Symbol.** The output of an error-correcting encoder. Information bits are input to the encoder and code symbols are output from the encoder. See Convolutional Code.

**Configuration Change Indicator.** A one-bit datum, sent on the Quick Paging Channel. Appearance of the Configuration Change Indicator in the Quick Paging Channel serves to alert a slotted mode mobile station, operating in the idle state, that, after performing an idle handoff, it should monitor the Paging Channel, the Forward Common Control Channel, or the Primary Broadcast Control Channel in order to determine if it should update its stored parameters.

**Confirmation of Delivery.** A notification sent by the LAC sublayer to Layer 3 at the sender, when the LAC entity at the sender receives the acknowledgment for a specific PDU sent in assured mode.

- 1 **Convolutional Code.** A type of error-correcting code. A code symbol can be considered  
2 as modulo 2 the convolution of the input data sequence with the impulse response of a  
3 generator function.
- 4 **CRC.** See Cyclic Redundancy Code.
- 5 **Cyclic Redundancy Code (CRC).** A class of linear error detecting codes that generate  
6 parity check bits by finding the remainder of a polynomial division. See also Frame  
7 Quality Indicator.
- 8 **dBm.** A measure of power expressed in terms of its ratio (in dB) to one milliwatt.
- 9 **dBm/Hz.** A measure of power spectral density. The ratio, dBm/Hz, is the power in one  
10 Hertz of bandwidth, where power is expressed in units of dBm.
- 11 **dBW.** A measure of power expressed in terms of its ratio (in dB) to one Watt.
- 12 **Dedicated Control Channel.** A portion of a Traffic Channel (Forward or Reverse) that  
13 carries a combination of user data, signaling, and power control information.
- 14 **Deinterleaving.** The process of unpermuting the symbols that were permuted by the  
15 interleaver. Deinterleaving is performed on received symbols prior to decoding.
- 16 **Direct Channel Assignment.** A MS-terminated call set-up procedure where the channel  
17 assignment can be sent directly to a mobile station without receiving a page response  
18 message from the mobile station.
- 19 **Discontinuous Transmission (DTX).** A mode of operation in which a base station or a  
20 mobile station switches its transmitter on and off on a particular code channel  
21 autonomously. For the case of DTX operation on the Forward Dedicated Control Channel,  
22 the Forward Power Control Subchannel is still transmitted.
- 23 **Distance-Based Registration.** An autonomous registration method in which the mobile  
24 station registers whenever it enters a cell whose distance from the cell in which the mobile  
25 station last registered exceeds a given threshold.
- 26 **DTMF.** See Dual-Tone Multifrequency.
- 27 **Dual-Tone Multifrequency (DTMF).** Signaling by the simultaneous transmission of two  
28 tones, one from a group of low frequencies and another from a group of high frequencies.  
29 Each group of frequencies consists of four frequencies.
- 30  **$E_b$ .** A measure of the energy in a signal, at some point in a communication system, per  
31 information bit conveyed by that signal, or an average value of such energies. Its  
32 relevance to system performance is most often expressed by its ratio to additive noise and  
33 interference, such as in  $E_b/N_0$  or  $E_b/I_0$ . Such ratios are dimensionless, and are usually  
34 expressed in dB units.
- 35  **$E_c/I_0$ .** A notation used to represent a dimensionless ratio of the average power of some  
36 code-distinguished CDMA signal channel, typically a pilot, to the total power comprised of  
37 signal plus interference, within the signal bandwidth. It is usually expressed in dB units.
- 38 **Effective Radiated Power (ERP).** The product of the power supplied to the antenna and  
39 its gain relative to a half-wave dipole in a given direction.

- 1 **EIRP.** See Equivalent Isotropic Radiated Power.
- 2 **Electronic Serial Number (ESN).** A 32-bit number assigned by the mobile station  
3 manufacturer, uniquely identifying the mobile station equipment.
- 4 **Encoder Tail Bits.** A fixed sequence of bits added to the end of a block of data to reset  
5 the convolutional encoder to a known state.
- 6 **Enhanced Access Channel.** A reverse channel used by mobile station for communicating  
7 to the base station. The Enhanced Access Channel operates in the Basic Access Mode,  
8 and Reservation Access Mode. It is used for transmission of short messages, such as  
9 signaling, MAC messages, response to pages, and call originations. It can also be used to  
10 transmit moderate-sized data packets.
- 11 **Enhanced Access Channel Preamble.** A non-data bearing portion of the Enhanced  
12 Access probe sent by the mobile station to assist the base station in initial acquisition and  
13 channel estimation.
- 14 **Enhanced Access Channel Slot.** The assigned time interval for an enhanced access  
15 probe. The transmission of an enhanced access probe is performed within the boundaries  
16 of an Enhanced Access Channel slot.
- 17 **Enhanced Access Data.** The data transmitted while in the Basic Access Mode on the  
18 Enhanced Access Channel or while in the Reservation Access Mode on a Reverse Common  
19 Control Channel.
- 20 **Enhanced Access Header.** A frame containing access origination information transmitted  
21 immediately after the Enhanced Access Channel Preamble while in the Reservation Access  
22 Mode.
- 23 **Enhanced Access Probe.** One Enhanced Access Channel transmission consisting of an  
24 Enhanced Access Channel preamble, optionally an Enhanced Access header, and  
25 optionally Enhanced Access data. See also Enhanced Access Probe Sequence.
- 26 **Enhanced Access Probe Sequence.** A sequence of one or more Enhanced Access probes  
27 on the Enhanced Access Channel. See also Enhanced Access Probe.
- 28 **Enhanced Rate Adaptation Mode (ERAM).** A flexible and variable data rate mode for the  
29 Supplemental Channel operation with turbo codes. ERAM is defined on forward link for  
30 Radio Configurations 4 and 5, and on the reverse link for Radio Configuration 4. In this  
31 mode, lower rate turbo codes are used to match the desired channel interleaver block size  
32 instead of pure code symbol repetitions.
- 33 **Equivalent Isotropically Radiated Power (EIRP).** The product of the power supplied to  
34 the antenna and the antenna gain in a direction relative to an isotropic antenna.
- 35 **ERAM.** See Enhanced Rate Adaptation Mode.
- 36 **Erase Indicator Bit.** See [2].
- 37 **ERP.** See Effective Radiated Power.
- 38 **ESN.** See Electronic Serial Number.
- 39 **ESN\_ME.** ESN associated with the mobile equipment. See Electronic Serial Number (ESN)

and ME.

**EXT\_SSEQ.** Security sequence number. A 32-bit crypto-sync that is used for encryption, message integrity, or both.

**EXT\_UIM\_ID.** An extended (length more than 32-bits) electronic identification (ID) number that is unique to the R-UIM. See [40]. EXT\_UIM\_ID can be either SF\_EUIMID or LF\_EUIMID. The mobile station uses SF\_EUIMID in place of MEID, with the exception of the MEID\_ME information record, when configured with a R-UIM which indicates that SF\_EUIMID is to be used in place of MEID (see [40]).

**F-ACKCH.** Forward Acknowledgment Channel. A channel used by the base station to acknowledge the successful receipt and decoding of the encoder packets (ACK) sent by the mobile station on Reverse Packet Data Channel or the failure to do so (NAK).

**f-csch.** Forward common signaling logical channel.

**f-dsch.** Forward dedicated signaling logical channel.

**F-GCH.** Forward Grant Channel. A channel used by the base station to assign or “grant” the mobile station a certain data rate on the Reverse Packet Data Channel.

**F-RCCH.** Forward Rate Control Channel. A channel used by the base station to modify the transmission data rate used on the Reverse Packet Data Channel by the mobile station. The data rates possible are allocated in advance.

**Fade Timer.** A timer kept by the mobile station as a measure of Forward Traffic Channel continuity. If the fade timer expires, the mobile station drops the call.

**Fast Call Setup Mode.** Any operational mode of a mobile station in the *Mobile Station Idle State* that can improve setup time for call originations or terminations. See Radio Environment Reporting Mode, Reduced Slot Cycle Mode, and Tracking Zone Mode.

**Flash.** An indication sent on the Reverse CDMA Channel indicating that the user directed the mobile station to invoke special processing.

**Foreign NID Roamer.** A mobile station operating in the same system (SID) but in a different network (NID) from the one in which service was subscribed. See also Foreign SID Roamer and Roamer.

**Foreign SID Roamer.** A mobile station operating in a system (SID) other than the one from which service was subscribed. See also Foreign NID Roamer and Roamer.

**Forward CDMA Channel.** A CDMA Channel from a base station to mobile stations. The Forward CDMA Channel contains one or more code channels that are transmitted on a CDMA Frequency Assignment using a particular pilot PN offset. The code channels are associated with the Pilot Channel, Sync Channel, Paging Channels, Broadcast Control Channel, Forward Common Control Channels, and Traffic Channels. The Forward CDMA Channel always carries a Pilot Channel and may also carry up to one Sync Channel, up to seven Paging Channels, up to seven Broadcast Control Channels, up to seven Forward Common Control Channels and up to the maximum number of channels allowed for the assigned Radio Configuration minus one Traffic Channels, as long as the total number of channels, including the Pilot Channel, is no greater than the maximum number of channels allowed for the assigned Radio Configuration (see [2] section 3.1.3.1.13).

**Forward Acknowledgment Channel.** A portion of a Forward CDMA Channel used for the transmission of acknowledgments from a base station to multiple mobile stations in response to the data received on the Reverse Packet Data Channel or the Reverse Fundamental Channel.

**Forward Common Acknowledgment Channel.** A portion of the Forward CDMA Channel used for the transmission of Acknowledgments from a base station to multiple mobile stations in response to the Reverse Supplemental Channel from mobile stations operating with reverse link Radio Configuration 8. The Forward Common Acknowledgment Channel is used by the base station to early terminate Reverse Supplemental Channel frames.

**Forward Common Acknowledgment Subchannel.** A subchannel on the Forward Common Acknowledgment Channel used by the base station to early terminate the Reverse Supplemental Channel from a mobile station operating with Radio Configuration 8.

**Forward Common Control Channel.** A control channel used for the transmission of digital control information from a base station to one or more mobile stations.

**Forward Dedicated Control Channel.** A Dedicated Control Channel that is transmitted on the Forward CDMA Channel.

**Forward Fundamental Channel.** A Fundamental Channel that is transmitted on the Forward CDMA Channel.

**Forward Packet Data Channel.** A portion of a Forward Link channel with Spreading Rate 1 used for the transmission of higher-level data from a base station to a mobile station.

**Forward Packet Data Control Channel.** A portion of a Forward Link channel with Spreading Rate 1 used for the transmission of the control information for the subpacket being transmitted on the Forward Packet Data Channel.

**Forward Pilot Channel.** A non-data-bearing direct-sequence spread spectrum signal transmitted continuously by each CDMA base station. The Forward Pilot Channel allows a mobile station to acquire the timing of the Forward CDMA Channel, provides a phase reference for coherent demodulation, and provides a means for signal strength comparisons between base stations for determining when to handoff. Different base stations are identified by different pilot PN sequence time phases. See also Pilot PN Sequence, Pilot PN Sequence Offset.

**Forward Supplemental Channel.** A Supplemental Channel that is transmitted on the Forward CDMA Channel.

**Forward Supplemental Code Channel.** A Supplemental Code Channel that is transmitted on the Forward CDMA Channel.

**Forward Traffic Channel.** One or more code channels used to transport user and signaling traffic from the base station to the mobile station. See Forward Fundamental

Channel, Forward Dedicated Control Channel, Forward Packet Data Channel, Forward Supplemental Channel, and Forward Supplemental Code Channel.<sup>3</sup>

**Forward Transmit Diversity Pilot Channel.** A pilot channel transmitted by a CDMA base station from the non-primary antenna when orthogonal transmit diversity is employed.

**Frame.** A basic timing interval in the system. For the Sync Channel, a frame is 26.666... ms long. For the Access Channel, the Paging Channel, the Forward Supplemental Code Channel, and the Reverse Supplemental Code Channel, a frame is 20 ms long. For the Forward Supplemental Channel and the Reverse Supplemental Channel, a frame is 20, 40, or 80 ms long. For the Enhanced Access Channel, the Forward Common Control Channel, and the Reverse Common Control Channel, a frame is 5, 10, or 20 ms long. For the Forward Fundamental Channel, Forward Dedicated Control Channel, Reverse Fundamental Channel, and Reverse Dedicated Control Channel, a frame is 5 or 20 ms long. For the Common Assignment Channel, a frame is 5 ms long. For the Broadcast Control Channel, a frame is 40 ms long; the frame may be transmitted once, twice, or four times. For the Forward Packet Data Control Channel and the Forward Packet Data Channel, a frame could be 1.25, 2.5, or 5 ms long. For the Reverse Acknowledgment Channel and the Reverse Channel Quality Indicator Channel, a frame is 1.25 ms long. For the Reverse Packet Data Channel, the Reverse Packet Data Control Channel, the Reverse Request Channel, the Forward Indicator Control Channel, the Forward Grant Channel, and the Forward Acknowledgment Channel, a frame is 10 ms long.

**Frame Category.** A classification of a received Traffic Channel frame based upon transmission data rate, the frame contents (primary traffic, secondary traffic, or signaling traffic), and whether there are detected errors in the frame.

**Frame Early Termination.** A method used to terminate transmission of a frame earlier than the nominal length of the frame (20 ms) if the receiver has successfully received the frame. The receiver transmits an acknowledgment to the transmitter following successful reception of the frame.

**Frame Number.** CDMA System Time, in integer multiples of 20 ms.

**Frame Offset.** A time skewing of Traffic Channel frames from System Time in integer multiples of 1.25 ms. The maximum frame offset is 18.75 ms.

**Frame Quality Indicator.** See [2].

**Full TMSI.** The combination of TMSI\_ZONE and TMSI\_CODE. The full TMSI is a globally unique address for the mobile station.

**Fundamental Channel.** A portion of a Traffic Channel that can carry a combination of primary data, secondary data, signaling, and power control information.

**Fundicated Channel.** Fundamental Channel, Dedicated Control Channel, or both.

---

<sup>3</sup> The Forward Traffic Channel does not include F-PDCCH, F-CPCCH.

- 1 **Gating Rate Set.** This specifies the set of supported reverse pilot gating rates. The base  
2 station and the mobile station may support one or more gating rates.
- 3 **GHz.** Gigahertz ( $10^9$  Hertz).
- 4 **Global Positioning System (GPS).** A US government satellite system that provides  
5 location and time information to users. See Navstar GPS Space Segment / Navigation  
6 User Interfaces ICD-GPS-200 for specifications.
- 7 **Good Frames.** Frames not classified as bad frames. See also Bad Frames.
- 8 **GPS.** See Global Positioning System.
- 9 **Handoff.** The act of transferring communication with a mobile station from one base  
10 station to another.
- 11 **Hard Handoff.** A handoff characterized by a temporary disconnection of the Traffic  
12 Channel. Hard handoffs occur when the mobile station is transferred between disjoint  
13 Active Sets, when the CDMA Frequency Assignment changes, or when the frame offset  
14 changes. See also Soft Handoff.
- 15 **Hash Function.** A function used by the mobile station to select one out of N available  
16 resources. The hash function distributes the available resources uniformly among a  
17 random sample of mobile stations.
- 18 **HARQ.** Hybrid ARQ (Automatic Repeat Request). A “hybrid ARQ” is a combination of an  
19 ARQ with an error correction mechanism to repair some errors in the encoder packet.
- 20 **Highest SR3 Frequency.** The SR3 frequency that has the highest frequency assignment.
- 21 **HLR.** See Home Location Register.
- 22 **Home Location Register (HLR).** The location register to which a MIN/IMSI is assigned  
23 for record purposes such as subscriber information.
- 24 **Home System.** The wireless system in which the mobile station subscribes for service.
- 25 **Hopping Pilot Beacon.** A pilot beacon that changes CDMA Frequency periodically to  
26 simulate multiple base stations operating on different frequencies. The transmission of  
27 the hopping pilot beacon is discontinuous on any CDMA Channel.
- 28 **Idle Handoff.** The act of transferring reception of the Paging Channel, Broadcast Control  
29 Channel or the Forward Common Control Channel from one base station to another, when  
30 the mobile station is in the *Mobile Station Idle State*.
- 31 **IK.** Integrity Key. A 128-bit pattern produced by AKA that is used for integrity protection.
- 32 **Implicit Registration.** A registration achieved by a successful transmission of an  
33 origination or page response on the r-csch.
- 34 **IMSI.** See International Mobile Subscriber Identity.
- 35 **IMSI\_M.** MIN-based IMSI using the lower 10 digits to store the MIN.
- 36 **IMSI\_O.** Operational value of IMSI used by the mobile station for operation with the base  
37 station.

- 1 **IMSI\_T.** True IMSI not associated with MIN. This could be 15 digits or fewer.
- 2 **Interleaving.** The process of permuting a sequence of symbols.
- 3 **International Mobile Subscriber Identity (IMSI).** A method of identifying stations in the  
4 land mobile service as specified in [18].
- 5 **kHz.** Kilohertz ( $10^3$  Hertz).
- 6 **ksps.** Kilo-symbols per second ( $10^3$  symbols per second).
- 7 **LAC.** See Link Access Control.
- 8 **Layering.** A method of organization for communication protocols in which the transmitted  
9 or received information is transferred in pipeline fashion, within each station, in well-  
10 defined encapsulated data units between otherwise decoupled processing entities  
11 ("layers"). A layer is defined in terms of its communication protocol to a peer layer in  
12 another entity and the services it offers to the next higher layer in its own entity.
- 13 **Layer 1.** Layer 1 provides for the transmission and reception of radio signals between the  
14 base station and the mobile station. Also see Physical Layer.
- 15 **Layer 2.** Layer 2 provides for the correct transmission and reception of signaling  
16 messages, including partial duplicate detection. Layer 2 makes use of the services  
17 provided by Layer 1. See also Layering and Layer 3.
- 18 **Layer 3.** Layer 3 provides the control messaging for the wireless telephone system. Layer  
19 3 originates and terminates signaling messages according to the semantics and timing of  
20 the communication protocol between the base station and the mobile station. Layer 3  
21 makes use of the services provided by Layer 2. See also Layering and Layer 2.
- 22 **Link Access Control.** See LAC. The LAC Sublayer is the upper sublayer of Layer 2. It  
23 implements a data link protocol that provides for the correct transport and delivery of  
24 signaling messages generated by Layer 3. The LAC Sublayer makes use of the services  
25 provided by the Lower Layers (Layer 1 and the MAC Sublayer).
- 26 **Local Control.** An optional mobile station feature used to perform manufacturer-specific  
27 functions.
- 28 **Logical Channel.** A communication path between the mobile station and the base  
29 station, described in terms of the intended use of, and access to, the transferred data, and  
30 direction of transfer. A logical channel can be "mapped" to and from one or more physical  
31 channels.
- 32 **Logical-to-physical Mapping.** The technique for forming associations between logical and  
33 physical channels.
- 34 **Long Code.** A PN sequence with period  $2^{42} - 1$  that is used for scrambling on the Forward  
35 CDMA Channel and spreading on the Reverse CDMA Channel. The long code uniquely  
36 identifies a mobile station on both the Reverse Traffic Channel and the Forward Traffic  
37 Channel. The long code provides limited privacy. The long code also separates multiple  
38 Access Channels and Enhanced Access Channels on the same CDMA Channel. See also  
39 Public Long Code and Private Long Code.



- 1 **Long Code Mask.** A 42-bit binary number that creates the unique identity of the long  
2 code. See also Public Long Code, Private Long Code, Public Long Code Mask, and Private  
3 Long Code Mask.
- 4 **Lowest SR3 Frequency.** The SR3 frequency that has the lowest frequency assignment.
- 5 **LSB.** Least significant bit.
- 6 **LTU.** Logical Transmission Unit. One of more Type 3 MuxPDUs with a 16-bit CRC.
- 7 **MAC.** See Medium Access Control.
- 8 **MAC-I.** Message Authentication Code for message integrity. The 32-bit output of the  
9 message integrity algorithm that allows the receiver to authenticate the message.
- 10 **MACI.** A 32-bit LAC Layer field that carries either the MAC-I or the UMAC of a signaling  
11 message.
- 12 **Maximal Length Sequence (m-Sequence).** A binary sequence of period  $2^n - 1$ ,  $n$  being a  
13 positive integer, with no internal periodicities. A maximal length sequence can be  
14 generated by a tapped  $n$ -bit shift register with linear feedback.
- 15 **MC System.** Multi Carrier CDMA System (1x and 3x).
- 16 **MCC.** See Mobile Country Code.
- 17 **Mcps.** Megachips per second ( $10^6$  chips per second).
- 18 **MCSB.** See Message Control and Status Block.
- 19 **ME.** Mobile Equipment. The part of a mobile station that does not include the UIM.
- 20 **Mean Input Power.** The total received calorimetric power measured in a specified  
21 bandwidth at the antenna connector, including all internal and external signal and noise  
22 sources.
- 23 **Mean Output Power.** The total transmitted calorimetric power measured in a specified  
24 bandwidth at the antenna connector when the transmitter is active.
- 25 **Medium Access Control.** See MAC. The MAC Sublayer is the lower sublayer of Layer 2.  
26 It implements the medium access protocol and is responsible for transport of LAC protocol  
27 data units using the services provided by Layer 1.
- 28 **MEID.** See Mobile Equipment Identifier.
- 29 **MEID\_ME.** MEID associated with the mobile equipment. See Mobile Equipment Identifier  
30 (MEID) and ME.
- 31 **Message.** A data structure that conveys control information or application information. A  
32 message consists of a length field (MSG\_LENGTH), a message body (the part conveying the  
33 information), and a CRC.
- 34 **Message Body.** The part of the message contained between the length field  
35 (MSG\_LENGTH) and the CRC field.
- 36 **Message Capsule.** A sequence of bits comprising a single message and padding. The  
37 padding always follows the message and may be of zero length.

- 1 **Message Control and Status Block.** In this document, a parameter block representing  
2 the PCI being transferred between Layer 3 and Layer 2.
- 3 **Message CRC.** The CRC check associated with a message. See also Cyclic Redundancy  
4 Code.
- 5 **Message Field.** A basic named element in a message. A message field may consist of zero  
6 or more bits.
- 7 **Message Record.** An entry in a message consisting of one or more fields that repeats in  
8 the message.
- 9 **MHz.** Megahertz ( $10^6$  Hertz).
- 10 **MIN.** See Mobile Identification Number.
- 11 **MNC.** See Mobile Network Code.
- 12 **Mobile Country Code (MCC).** A part of the E.212 IMSI identifying the home country. See  
13 [18].
- 14 **Mobile Directory Number.** A dialable directory number that is not necessarily the same  
15 as the mobile station's air interface identification, i.e., MIN, IMSI\_M or IMSI\_T.
- 16 **Mobile Equipment Identifier (MEID).** A 56-bit number assigned by the mobile station  
17 manufacturer, uniquely identifying the mobile station equipment.
- 18 **Mobile Identification Number (MIN).** The 34-bit number that is a digital representation  
19 of the 10-digit number assigned to a mobile station.
- 20 **Mobile Network Code (MNC).** A part of the E.212 IMSI identifying the home network  
21 within the home country. See [18].
- 22 **Mobile Protocol Capability Indicator (MPCI).** A 2-bit field used to indicate the mobile  
23 station's capabilities.
- 24 **Mobile-Specific User Zone.** A user zone that is identified by the mobile station. The  
25 mobile station may consider parameters such as the identity of the serving system, cell,  
26 and sector, and the geographic location of that station in making the determination. See  
27 also CDMA Tiered Services, User Zone, Broadcast User Zone, Active User Zone, and  
28 Passive User Zone.
- 29 **Mobile Station.** A station in the Public Wireless Radio Telecommunications Service  
30 intended to be used while in motion or during halts at unspecified points. Mobile stations  
31 include portable units (e.g., hand-held personal units) and units installed in vehicles. A  
32 mobile station consists of two parts – ME and UIM.
- 33 **Mobile Station Class.** A classification of mobile stations based on characteristics such as  
34 slotted operation and transmission power. See [12] and Table 2.3.3-1 of this document.
- 35 **Mobile Station Identification Number (MSIN).** A part of the E.212 IMSI identifying the  
36 mobile station within its home network. See [18].
- 37 **Mobile Station Originated Call.** A call originating from a mobile station.

- 1 **Mobile Station Terminated Call.** A call received by a mobile station (not to be confused  
2 with a disconnect or call release).
- 3 **ms.** Millisecond ( $10^{-3}$  second).
- 4 **MSB.** Most significant bit.
- 5 **MSC.** See Mobile Switching Center.
- 6 **MSIN.** See Mobile Subscriber Identification Number.
- 7 **Multiplex Option.** The ability of the multiplex sublayer and lower layers to be tailored to  
8 provide special capabilities. A multiplex option defines such characteristics as the frame  
9 format, the maximum number of Supplemental Code Channels supported, and the rate  
10 decision rules. See also Multiplex Sublayer.
- 11 **Multiplex Sublayer.** One of the conceptual layers of the system that multiplexes and  
12 demultiplexes primary traffic, secondary traffic, and signaling traffic.
- 13 **NAM.** See Number Assignment Module.
- 14 **National Mobile Subscriber Identity (NMSI).** A part of the E.212 IMSI identifying the  
15 mobile station within its home country. The NMSI consists of the MNC and the MSIN.  
16 See [18].
- 17 **NDSS.** See Network Directed System Selection.
- 18 **Neighbor Set.** The set of pilots associated with the CDMA Channels that are probable  
19 candidates for handoff. Normally, the Neighbor Set consists of the pilots associated with  
20 CDMA Channels that cover geographical areas near the mobile station. See also Active  
21 Set, Candidate Set, Remaining Set, and Private Neighbor Set.
- 22 **Network.** A network is a subset of a wireless system, such as an area-wide cellular  
23 network, a private group of base stations, or a group of base stations set up to handle a  
24 special requirement. A network can be as small or as large as needed, as long as it is fully  
25 contained within a system. See also System.
- 26 **Network Directed System Selection (NDSS).** A feature that allows the mobile station to  
27 automatically register with a preferred system while roaming, or to be automatically  
28 directed by a service provider, typically the home service provider, to a suggested system,  
29 regardless of the frequency band class, cellular band, or PCS frequency block.
- 30 **Network Identification (NID).** A number that uniquely identifies a network within a  
31 wireless system. See also System Identification.
- 32 **NEW\_KEY\_ID.** In *ROP*, this is the index of the pending (CIK, CCK) and NEW\_SSEQ\_H  
33 associated with AUTHR. In *Authentication Response Message*, this is the index of the  
34 pending (IK, CK) and NEW\_SSEQ\_H associated with the (RANDA, AUTHN).
- 35 **NEW\_SSEQ\_H.** The pending 24-bit security sequence number used for encryption and/or  
36 integrity protection.
- 37 **NEW\_SSEQ\_H\_SIG.** An 8-bit digital signature of NEW\_SSEQ\_H computed by  $RAND_S$ ,  
38  $SSD_A$ , and NEW\_SSEQ\_H.
- 39 **NID.** See Network Identification.

- 1   **NMSI.** See National Mobile Subscriber Identity.
- 2   **Non-Autonomous Registration.** A registration method in which the base station initiates  
3 registration. See also Autonomous Registration.
- 4   **Non-Slotted Mode.** An operation mode of the mobile station in which the mobile station  
5 continuously monitors the Paging Channel, or the Forward Common Control Channel/  
6 Broadcast Control Channel.
- 7   **ns.** Nanosecond ( $10^{-9}$  second).
- 8   **NULL.** Any value that is not in the specified range of a field.
- 9   **Null Traffic Channel Data.** One or more frames of a specified data sequence sent at the  
10 lowest agreed-upon rate of the negotiated radio configuration. Null Traffic Channel data  
11 may be sent when there is no primary, secondary, or signaling traffic available. Null  
12 Traffic Channel data serves to maintain the connectivity between the mobile station and  
13 the base station.
- 14   **Number Assignment Module (NAM).** A set of MIN/IMSI-related parameters stored in the  
15 mobile station.
- 16   **Numeric Information.** Numeric information consists of parameters that appear as  
17 numeric fields in messages exchanged by the base station and the mobile station and  
18 information used to describe the operation of the mobile station.
- 19   **Optional Field.** A field defined within a message structure that is optionally transmitted  
20 to the message recipient.
- 21   **Order.** A type of message that contains control codes for either the mobile station or the  
22 base station.
- 23   **Ordered Registration.** A registration method in which the base station orders the mobile  
24 station to send registration related parameters.
- 25   **Orthogonal Transmit Diversity (OTD).** An optional method of transmission of the  
26 Forward CDMA Channel that uses two antennas, each transmitting a fraction of the code  
27 symbols. It can be used to enhance performance in the presence of multipath fading radio  
28 propagation.
- 29   **OTD.** See Orthogonal Transmit Diversity
- 30   **Overhead Message.** A message sent by the base station on the Paging Channel or the  
31 Primary Broadcast Control Channel to communicate base-station-specific and system-  
32 wide information to mobile stations.
- 33   **Overload Class (OLC).** The means used to control system access by mobile stations,  
34 typically in emergency or other overloaded conditions. Mobile stations are assigned one  
35 (or more) of sixteen overload classes. Access to the CDMA system can then be controlled  
36 on a per class basis by persistence values transmitted by the base station.
- 37   **PACA.** Priority Access and Channel Assignment. See PACA Call.

- 1 **PACA Call.** A priority mobile station originated call for which no traffic channel or voice  
2 channel was immediately available, and which has been queued for a priority access  
3 channel assignment.
- 4 **Packet.** The unit of information exchanged between the service option applications of the  
5 base station and the mobile station.
- 6 **Padding.** A sequence of bits used to fill from the end of a message to the end of a message  
7 capsule, typically to the end of the frame or half frame. All bits in the padding are '0'.
- 8 **Paging.** The act of seeking a mobile station when a call has been placed to that mobile  
9 station.
- 10 **Paging Channel.** A code channel in a Forward CDMA Channel used for transmission of  
11 control information and pages from a base station to a mobile station.
- 12 **Paging Channel Slot.** An 80 ms interval on the Paging Channel. Mobile stations  
13 operating in the slotted mode are assigned specific slots in which they monitor messages  
14 from the base station.
- 15 **Paging Indicator.** A one-bit datum, sent on the Quick Paging Channel. Quick paging  
16 indicators are associated with mobile stations, in pairs, via a hashing algorithm.  
17 Appearance of both of its indicators in its assigned Quick Paging Channel slot serves to  
18 alert a slotted mode mobile station, operating in the idle state, that it should monitor the  
19 Paging Channel or the Forward Common Control Channel starting in the next slot. See  
20 also Quick Paging Channel.
- 21 **Parameter-Change Registration.** A registration method in which the mobile station  
22 registers when certain of its stored parameters change.
- 23 **Parity Check Bits.** Bits added to a sequence of information bits to provide error  
24 detection, correction, or both.
- 25 **Passive User Zone.** A user zone in which the implicit registration that takes place at call  
26 set-up is sufficient to trigger a change in tiered service features. See also CDMA Tiered  
27 Services, User Zone, and Active User Zone.
- 28 **PCI.** See Protocol Control Information.
- 29 **PCS.** See Personal Communications Services.
- 30 **PCSC.** See Personal Communications Switching Center.
- 31 **PCS System.** See Personal Communications Services System.
- 32 **PDU.** See Protocol Data Unit.
- 33 **Personal Communications Services System.** A configuration of equipment that provides  
34 PCS radiotelephone services.
- 35 **Personal Communications Services (PCS).** A family of mobile and portable radio  
36 communications services for individuals and businesses that may be integrated with a  
37 variety of competing networks. Broadcasting is prohibited and fixed operations are to be  
38 ancillary to mobile operations.

- 1 **Personal Communications Switching Center (PCSC).** See Mobile Switching Center
- 2 (MSC).
- 3 **Physical Channel.** A communication path between stations, described in terms of the RF
- 4 characteristics such as coding, power control policies, etc.
- 5 **Physical Layer.** The part of the communication protocol between the mobile station and
- 6 the base station that is responsible for the transmission and reception of data. The
- 7 physical layer in the transmitting station is presented a frame by the multiplex sublayer
- 8 and transforms it into an over-the-air waveform. The physical layer in the receiving
- 9 station transforms the waveform back into a frame and presents it to the multiplex
- 10 sublayer above it.
- 11 **Pilot Beacon.** A transmit-only base station that broadcasts a Pilot Channel, a Sync
- 12 Channel, optionally a Paging Channel or a Primary Broadcast Control Channel, but no
- 13 Forward Common Control Channels and Forward Traffic Channels. The mobile station
- 14 measures the pilot beacon to assist in CDMA hard handoffs and inter-frequency idle-mode
- 15 handoffs.
- 16 **Pilot Channel.** A non-data-bearing signal transmitted by a CDMA station. See Forward
- 17 Pilot Channel, Transmit Diversity Pilot Channel, Auxiliary Pilot Channel, Auxiliary
- 18 Transmit Diversity Pilot Channel, and Reverse Pilot Channel.
- 19 **Pilot PN Chip.** One bit, or bit pair, of a pilot PN sequence, or the time interval
- 20 corresponding thereto.
- 21 **Pilot PN Sequence.** A pair of modified maximal length PN sequences used to spread the
- 22 quadrature components of a CDMA Channel.
- 23 **Pilot PN Sequence Offset.** The time offset of a Forward Pilot Channel from CDMA System
- 24 time, as transmitted by the base station, expressed modulo the pilot period.
- 25 **Pilot PN Sequence Offset Index.** The pilot PN sequence offset in units of 64 PN chips of a
- 26 Forward Pilot Channel, relative to the zero offset pilot PN sequence.
- 27 **Pilot Strength.** The ratio of pilot power to total power in the signal bandwidth of a CDMA
- 28 Forward or Reverse Channel. See also  $E_c/I_o$ .
- 29 **Plus Code Dialing.** Plus code dialing relieves the user of the need to dial an international
- 30 access prefix, which may vary between countries and carriers. This capability allows
- 31 telephony addresses to be entered, received, displayed, stored and transmitted in an
- 32 international format (full ITU-T E.164 number, including country code). When addresses
- 33 are entered by a user, the MS user interface can provide an input aid, such as a key
- 34 marked with a “+” sign, to indicate that the address is international. When displayed by
- 35 the MS, they can be identified by a visual device, such as a “+” prefix. When received,
- 36 transmitted, or stored, an international indicator can be included with the address digits.
- 37 It will be the responsibility of the network to ignore the international indicator when
- 38 attached to a national number. This allows users to store and dial all phone numbers in a
- 39 consistent format, which is particularly useful for international travelers. See [39].
- 40 **PN.** Pseudonoise.

- 1 **PN Chip.** One bit in a PN sequence, or the time duration of such a bit. It corresponds to  
2 the smallest modulation interval in a CDMA system.
- 3 **PN Sequence.** Pseudonoise sequence. A deterministic, periodic binary sequence having  
4 limited statistical similarity to a Bernoulli (coin-tossing).
- 5 **Power Control Bit.** A bit sent on the Forward Power Control Subchannel or Reverse  
6 Power Control Subchannel to signal the mobile station or base station to increase or  
7 decrease its transmit power.
- 8 **Power Control Group.** A 1.25 ms interval on the Forward Traffic Channel and the  
9 Reverse Traffic Channel. See also Power Control Bit.
- 10 **Power-Down Registration.** An autonomous registration method in which the mobile  
11 station registers on power-down.
- 12 **Power Up Function.** A method by which the mobile station increases its output power to  
13 support location services.
- 14 **Power-Up Registration.** An autonomous registration method in which the mobile station  
15 registers on power-up.
- 16 **PPM.** Parts per million.
- 17 **Preamble.** See Access Channel Preamble and Traffic Channel Preamble.
- 18 **Primary CDMA Channel.** A pre-assigned channel in a CDMA Cellular System used by  
19 the mobile station for initial acquisition. See also Secondary CDMA Channel.
- 20 **Primary Paging Channel (CDMA).** The default code channel (code channel 1) assigned for  
21 paging on a CDMA Channel.
- 22 **Primary Pilot.** One of the three pilots on the Spreading Rate 3 Forward Channels. The  
23 primary pilot may be on any one of the SR3 frequencies and may have a higher  
24 transmission power comparing to the pilots on the other two SR3 frequencies.
- 25 **Primary Traffic.** The main traffic stream carried between the mobile station and the base  
26 station on the Traffic Channel. See also Secondary Traffic and Signaling Traffic.
- 27 **Primitive.** An atomic, well-defined method of transferring data and control information  
28 between two adjacent layers and sublayers. Conventionally represented as a function  
29 invocation with the data and/or control information as parameters.
- 30 **Private Long Code.** The long code characterized by the private long code mask. See also  
31 Long Code.
- 32 **Private Long Code Mask.** The long code mask used to form the private long code. See  
33 also Public Long Code Mask and Long Code.
- 34 **Private Neighbor Set.** The set of pilots associated with the private system base stations  
35 that are probable candidates for idle handoff. See also Active Set, Neighbor Set,  
36 Remaining Set, and CDMA Tiered Services.
- 37 **Protocol Control Information (PCI).** Data passed between adjacent layers in the protocol  
38 stack, together with the SDU, to assist a layer to properly encapsulate/decapsulate the  
39 SDU. Examples of PCI in this document are the MCSB and the PCSB.

**Protocol Data Unit.** Encapsulated data communicated between peer layers on the mobile station and base station. Unless specified otherwise, in this document PDU refers to the Layer 3 protocol data unit transferred at the interface between Layer 3 and Layer 2.

**Protocol Stack.** Conceptual model of the layered architecture for communication protocols (see Layering) in which layers within a station are represented in the order of their numeric designation and requiring that transferred data be processed sequentially by each layer, in the order of their representation. Graphically, the “stack” is drawn vertically, with the layer having the lowest numeric designation at the base.

**Pseudo-ESN.** A 32 bit number derived from MEID and used in place of ESN.

**Public Long Code.** The long code characterized by the public long code mask.

**Public Long Code Mask.** The long code mask used to form the public long code. The mask can contain a permutation of the mobile station’s ESN, or the particular mask specified by the base station. The mask also includes the channel number when used for a Supplemental Code Channel. See also Private Long Code Mask and Long Code.

**PUF.** See Power Up Function.

**PUF Attempt.** A sequence of PUF probes sent by the mobile station in response to a *Power Up Function Message*.

**PUF Probe.** One or more consecutive frames on the Reverse Traffic Channel within which the mobile station transmits the PUF pulse.

**PUF Pulse.** Portion of PUF probe that may be transmitted at elevated output power.

**PUF Target Frequency.** The CDMA frequency assignment to which the base station directs a mobile station for transmitting the PUF probe.

**Punctured Code.** An error-correcting code generated from another error-correcting code by deleting (i.e., puncturing) code symbols from the coder output.

**QoS.** See Quality of Service.

**Quality of Service.** Set of parameters and procedures associated with a service and/or user, indicating some of the capabilities and constraints related to the delivery of the service to the user.

**Quick Paging.** A feature that permits mobile stations to further conserve battery power beyond the savings achieved by slotted mode operation. See also Paging Indicator and Configuration Change Indicator.

**Quick Paging Channel.** An uncoded, on-off-keyed (OOK) spread spectrum signal sent by base stations to inform slotted mode mobile stations, operating in the idle state, whether to monitor the Paging Channel or the Forward Common Control Channel. See also Quick Paging, Paging Indicator, and Configuration Change Indicator.

**Quick Paging Channel Slot.** An 80 ms interval on the Quick Paging Channel. See also Paging Indicator and Configuration Change Indicator.

**Quick Repeats.** Additional transmissions of identical copies of a message within a short interval to increase the probability that the message is received correctly.



- 1   **r-csch.** Reverse common signaling logical channel.
- 2   **r-dsch.** Reverse dedicated signaling logical channel.
- 3   **R-PDCCH.** Reverse Packet Data Control Channel. A control channel used for the  
4   transmission of control information for the subpacket being transmitted on the Reverse  
5   Packet Data Channel and the Mobile Status Indicator Bit.
- 6   **R-PDCH.** Reverse Packet Data Channel. A portion of a Radio Configuration 7 Reverse  
7   Traffic Channel which carries higher-level data and control information from a mobile  
8   station to a base station.
- 9   **R-REQCH.** Reverse Request Channel. A control channel used by the mobile station to  
10   report available power headroom and buffer status.
- 11   **R-SPICH.** Reverse Secondary Pilot Channel. An unmodulated, direct-sequence spread  
12   spectrum signal transmitted by a CDMA mobile station in conjunction with certain  
13   transmissions on the Reverse Packet Data Channel. The secondary pilot channel provides  
14   additional phase reference for the Reverse Packet Data Channel for coherent  
15   demodulation and may provide a means for signal strength measurement.
- 16   **Radio Configuration.** A set of Forward Traffic Channel and Reverse Traffic Channel  
17   transmission formats that are characterized by physical layer parameters such as  
18   transmission rates, modulation characteristics and spreading rate. See [2].
- 19   **Radio Configuration Class.** A group of Radio Configurations. All Radio Configurations,  
20   for the Forward Traffic Channel and the Reverse Traffic Channel, are divided into three  
21   classes by the types of pre-spreading symbols (BPSK and QPSK) and spreading rates. RC  
22   Class 1 consists of RC 1 and RC 2 for the Forward Traffic Channel and the Reverse Traffic  
23   Channel. RC Class 2 consists of RC 3, RC 4, and RC 8 of the Reverse Traffic Channel, and  
24   RC 3, RC 4, RC 5, RC 11, and RC12 of the Forward Traffic Channel. RC Class 3 consists of  
25   RC 5 and RC 6 of the Reverse Traffic Channel, and RC 6, RC 7, RC 8, and RC 9 of the  
26   Forward Traffic Channel.
- 27   **Radio Environment Reporting Mode.** A fast call setup mode of the mobile station in the  
28   *Mobile Station Idle State*, in which *Radio Environment Messages* are triggered based on a  
29   radio environment report pilot list (RER\_PILOT\_LIST). This mode may be used to assist  
30   the base station with direct channel assignment. See also Direct Channel Assignment.
- 31   **RANDA.** The random challenge number contained in an AV.
- 32   **RC.** See Radio Configuration.
- 33   **Reduced Slot Cycle Mode.** A fast call setup mode of the mobile station in which the  
34   mobile station operates in the slotted mode with a shorter slot cycle than the registered  
35   slot cycle or in the non-slotted mode for the negotiated duration of time. See also Slotted  
36   Mode and Non-Slotted Mode.
- 37   **RES.** A *Registration Accepted Order*, *Extended Channel Assignment Message*, or *Security*

1 *Mode Command Message.*

2 **Registration.** The process by which a mobile station identifies its location and  
3 parameters to a base station.

4 **Registration Zone.** A collection of one or more base stations treated as a unit when  
5 determining whether a mobile station should perform zone-based registration. See also  
6 User Zone, with which it should not be confused.

7 **Release.** A process that the mobile station and base station use to inform each other of  
8 call disconnect.

9 **Remaining Set.** The set of all allowable pilot offsets as determined by PILOT\_INC,  
10 excluding the pilot offsets of the pilots in the Active Set, Candidate Set, and Neighbor Set.  
11 See also Active Set, Candidate Set, and Neighbor Set.

12 **Replay Attack.** An attempt by a third party to record an over-the-air message and send it  
13 later in time so as to mislead the receiver.

14 **Request.** A Layer 3 message generated by either the mobile station or the base station to  
15 retrieve information, ask for service, or command an action.

16 **Rescue Channel.** A Fundamental Channel used for call rescue soft handoff. The Walsh  
17 Code is pre-allocated and advertised to the mobile station. In the event that the mobile  
18 station loses the Forward Traffic Channel or declares an acknowledgment failure,  
19 communication with a new base station can be established on the Rescue Channel.

20 **Response.** A Layer 3 message generated as a result of another message, typically a  
21 request.

22 **Reverse Acknowledgment Channel.** A portion of Reverse CDMA Channel used for the  
23 transmission of acknowledgments from the mobile station to the base station in response  
24 to the data transmitted on the Forward Packet Data Channel, the Forward Packet Data  
25 Control Channel, the Forward Fundamental Channel and the Forward Supplemental  
26 Channel.

27 **Reverse Channel Quality Indicator Channel.** A portion of Reverse CDMA Channel used  
28 by the mobile station to indicate to the base station the quality of the Forward Link Pilot  
29 Channel received at the mobile station.

30 **Reverse CDMA Channel.** The CDMA Channel from the mobile station to the base station.  
31 From the base station's perspective, the Reverse CDMA Channel is the sum of all mobile  
32 station transmissions on a CDMA Frequency Assignment.

33 **Reverse Dedicated Control Channel.** A Dedicated Control Channel that is transmitted  
34 on the Reverse CDMA Channel.

35 **Reverse Fundamental Channel.** A Fundamental Channel that is transmitted on the  
36 Reverse CDMA Channel.

37 **Reverse Pilot Channel.** A non-data-bearing direct-sequence spread spectrum signal  
38 transmitted by each CDMA mobile station whenever the Enhanced Access Channel,  
39 Reverse Common Control Channel, or Reverse Traffic Channel is enabled. The Reverse  
40 Pilot Channel allows a base station to acquire the timing of the Reverse CDMA Channel

1 and provides a phase reference for coherent demodulation. The Reverse Pilot Channel  
2 may be transmitted either continuously or in gated mode.

3 **Reverse Supplemental Channel.** A Supplemental Channel that is transmitted on the  
4 Reverse CDMA Channel.

5 **Reverse Supplemental Code Channel.** A Supplemental Code Channel that is  
6 transmitted on the Reverse CDMA Channel.

7 **Reverse Traffic Channel.** A Traffic Channel on which data and signaling are transmitted  
8 from a mobile station to a base station. The Reverse Traffic Channel is composed of zero  
9 or one Reverse Fundamental Channel, zero to seven Reverse Supplemental Code  
10 Channels, zero to two Reverse Supplemental Channels, and zero or one Reverse Dedicated  
11 Control Channel.<sup>4</sup>

12 **ROP.** A *Registration Message*, *Origination Message*, or *Page Response Message*.

13 **Roamer.** A mobile station operating in a wireless system (or network) other than the one  
14 from which service was subscribed. See also Foreign NID Roamer and Foreign SID  
15 Roamer.

16 **R-UIM.** Removable UIM.

17 **SAP.** See Service Access Point.

18 **SCI.** See Synchronized Capsule Indicator Bit.

19 **SDU.** See Service Data Unit.

20 **Search Window.** The range of PN sequence offsets that a mobile station searches for a  
21 pilot.

22 **Search Window Offset.** PN sequence offset used by the mobile station to position the  
23 search window when searching for a pilot.

24 **Secondary CDMA Channel.** A pre-assigned channel in a CDMA Cellular System used by  
25 the mobile station for initial acquisition. See also Primary CDMA Channel.

26 **Secondary Traffic.** An additional traffic stream that can be carried between the mobile  
27 station and the base station on the Traffic Channel. See also Primary Traffic and Signaling  
28 Traffic.

29 **Service Access Point.** Conceptual point at the interface between two adjacent layers  
30 where services are provided to the upper layer and data and protocol information is  
31 exchanged between layers.

32 **Service Configuration.** The common attributes used by the mobile station and the base  
33 station to build and interpret Traffic Channel frames. Service configuration corresponds  
34 to the parameters contained in the Service Configuration information record and the Non-  
35 negotiable Service Configuration information record. Examples of such parameters

---

<sup>4</sup> The Reverse Traffic Channel does not include R-CQICH, R-ACKCH.

1 include Forward and Reverse Traffic Channel multiplex options, Forward and Reverse  
2 Traffic Channel transmission rates, service option connections, and reverse pilot gating  
3 rate.

4 **Service Configuration Synchronization Identifier (SYNC\_ID).** An identifier assigned by  
5 the base station that identifies a specific Service Configuration information record and  
6 Non-negotiable Service Configuration information record.

7 **Service Data Unit.** Data transferred between adjacent layers in the protocol stack.  
8 Unless specified otherwise in this document SDU refers to the Layer 3 service data unit  
9 being transferred to/from Layer 2.

10 **Service Negotiation.** The procedures used by the mobile station and base station to  
11 establish a service configuration. See also Service Option Negotiation.

12 **Service Option.** A service capability of the system. Service options may be applications  
13 such as voice, data, or facsimile. See [30].

14 **Service Option Connection.** A particular instance or session in which the service  
15 defined by a service option is used. Associated with a service option connection are a  
16 reference, which is used for uniquely identifying the service option connection, a service  
17 option, which specifies the particular type of service in use, a Forward Traffic Channel  
18 traffic type, which specifies what type of Forward Traffic Channel traffic is used to support  
19 the service option connection, and a Reverse Traffic Channel traffic type, which specifies  
20 what type of Reverse Traffic Channel traffic is used by the service option connection.

21 **Service Option Connection Reference.** A designator used by the base station and  
22 mobile station to uniquely identify a particular service option connection.

23 **Service Option Negotiation.** The procedures used by the mobile station and base station  
24 to establish a service configuration. Service option negotiation is similar to service  
25 negotiation, but allows less flexibility for specifying the attributes of the service  
26 configuration. See also Service Negotiation.

27 **Service Redirection.** The process by which the base station alters the system selection  
28 made by a mobile station. It can be used temporarily during maintenance and testing to  
29 divert subscribers to an alternate system.

30 **Serving Frequency.** The CDMA frequency on which a mobile station is currently  
31 communicating with one or more base stations.

32 **Shared Secret Data (SSD).** A 128-bit pattern stored in the mobile station (in semi-  
33 permanent memory) and known by the base station. SSD is a concatenation of two 64-bit  
34 subsets: SSD\_A, which is used to support the authentication procedures, and SSD\_B,  
35 which serves as one of the inputs to the process generating the encryption mask and  
36 private long code.

37 **Short Message Services (SMS).** A suite of services such as SMS Text Delivery, Digital  
38 Paging (i.e., Call Back Number - CBN), and Voice Mail Notification (VMN).

39 **SID.** See System Identification.

**1 Signaling Traffic.** Control messages that are carried between the mobile station and the  
**2** base station on the Traffic Channel. See also Primary Traffic and Secondary Traffic.

**3 Silent Re-origination.** An autonomous attempt to re-originate a call after the mobile  
**4** station Layer 3 receives an access attempt failure indication from Layer 2 following a user-  
**5** initiated origination or a re-origination. Silent re-origination does not apply to any user-  
**6** programmable capabilities or services, e.g. user-programmable automatic redial.

**7 Slotted Mode.** An operation mode of the mobile station in which the mobile station  
**8** monitors only selected slots on the Paging Channel or the Forward Common Control  
**9** Channel when in the *Mobile Station Idle State*.

**10 Soft Handoff.** A handoff occurring while the mobile station is in the *Mobile Station Control*  
**11** *on the Traffic Channel State*. This handoff is characterized by commencing  
**12** communications with a new base station on the same CDMA Frequency Assignment  
**13** before terminating communications with an old base station. See also Hard Handoff.

**14 SOM.** Start-of-Message bit.

**15 Space Time Spreading (STS).** A forward link transmission method which transmits all  
**16** forward link channel symbols on multiple antennas and spreads the symbols with  
**17** complementary Walsh or quasi-orthogonal functions.

**18 Spreading Rate.** The PN chip rate of the system, defined as a multiple of 1.2288 Mcps.

**19 Spreading Rate 1.** A 1.2288 Mcps chip rate-based system using a direct-spread single  
**20** carrier.

**21 Spreading Rate 3.** A 3.6864 Mcps chip rate-based system using three 1.2288 Mcps  
**22** carriers on the Forward CDMA Channel. The Reverse CDMA Channel uses a 3.6864 Mcps  
**23** direct-spread carrier.

**24 sps.** Symbols per second.

**25 SR.** See Spreading Rate.

**26 SR1.** See Spreading Rate 1.

**27 SR3.** See Spreading Rate 3.

**28 SR3 Frequencies.** CDMA frequencies for the three 1.2288 Mcps carriers on the Forward  
**29** CDMA Channel. SR3 frequencies include the lowest SR3 frequency, the center SR3  
**30** frequency, and the highest SR3 frequency.

**31 SR3 Primary Pilot.** See Primary Pilot.

**32 SSD.** See Shared Secret Data.

**33 SSEQ.** Security sequence number. The 8 LSB of the EXT\_SSEQ used for an input to  
**34** encryption functions and as an input to MACI calculations.

**35 Station Class Mark (SCM).** An identification of certain characteristics of a mobile station.  
**36** Classes are defined in [12] and Table 6.3.3-1 of this document.

**Subscriber Authentication Key.** A secret, 128-bit pattern stored in the mobile station and AC. It is used to generate/update the mobile station's IK, CK and UAK during AKA procedure.

**Supplemental Channel.** An optional portion of a Traffic Channel (Forward or Reverse Radio Configurations 3 and above) that operates in conjunction with a Fundamental Channel in that Traffic Channel, and (optionally) with other Supplemental Channels to provide higher data rate services.

**Supplemental Code Channel.** An optional portion of a Traffic Channel (Forward or Reverse Radio Configurations 1 and 2) that operates in conjunction with a Fundamental Channel in that Traffic Channel, and (optionally) with other Supplemental Code Channels to provide higher data rate services. On this channel a combination of primary data, secondary data, or both (but never signaling information) are transmitted.

**Symbol.** See Code Symbol and Modulation Symbol.

**Sync Channel.** Code channel 32 in the Forward CDMA Channel which transports the synchronization message to the mobile station.

**Sync Channel Superframe.** An 80 ms interval consisting of three Sync Channel frames (each 26.666... ms in length).

**System.** A system is a wireless communications service that covers a geographic area such as a city, metropolitan region, county, or group of counties. See also Network.

**System Identification (SID).** A number uniquely identifying a wireless system.

**System Time.** The time reference used by the system. System Time is synchronous to UTC time (except for leap seconds) and uses the same time origin as GPS time. All base stations use the same System Time (within a small error). Mobile stations use the same System Time, offset by the propagation delay from the base station to the mobile station. See also Universal Coordinated Time.

**Target Frequency.** The CDMA frequency assignment to which the base station directs a mobile station in a handoff using an *Extended Handoff Direction Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*.

**TD.** See Transmit Diversity.

**Temporary Mobile Subscriber Identity (TMSI).** A temporary mobile station identification assigned by the base station.

**Tracking Zone Mode.** A fast call setup mode of the mobile station in the *Mobile Station Idle State*, in which *Radio Environment Messages* are triggered based on the tracking zone identifier (TKZ\_ID) broadcast by the base station and hysteresis criteria. This mode may be used to assist the base station with direct channel assignment. See also Direct Channel Assignment.

**Timer-Based Registration.** A registration method in which the mobile station registers whenever a counter reaches a predetermined value. The counter is incremented an average of once per 80 ms period.

**Time Reference.** A reference established by the mobile station that is synchronous with the earliest arriving multipath component used for demodulation.

**TMSI.** See Temporary Mobile Subscriber Identity.

**TMSI Zone.** The administrative zone that allows the TMSI to be reused. The TMSI\_CODE has to be unique within a TMSI zone but may be reused in a different TMSI zone. The TMSI zone is identified by the field TMSI\_ZONE.

**Traffic Channel.** A communication path between a mobile station and a base station used for user and signaling traffic. The term Traffic Channel implies a Forward Traffic Channel and Reverse Traffic Channel pair. See also Forward Traffic Channel and Reverse Traffic Channel.

**Traffic Channel Preamble.** For RC1 and RC2, a sequence of all-zero frames that is sent by the mobile station on the Reverse Traffic Channel as an aid to Traffic Channel acquisition. For RC3 to RC6 inclusive, the traffic preamble is the ungated transmission of the Reverse Pilot.

**Transmit Diversity.** See Orthogonal Transmit Diversity and Space Time Spreading.

**UAK.** UIM Authentication Key. A 128-bit pattern produced by AKA that is used for authentication of the R-UIM.

**UIM.** User Identity Module.

**UIM\_ID.** A 32-bit electronic identification (ID) number that is unique to the R-UIM. The mobile station uses UIM\_ID in place of ESN, with the exception of the ESN\_ME information record, when configured with a R-UIM which indicates that UIM ID is to be used (see [40]).

**UMAC.** A 32-bit output of the UMAC algorithm computed by UIM based on MAC-I.

**Unassured Mode.** Mode of delivery that does not guarantee that a PDU will be delivered to the peer. The LAC entity at the receiver does not acknowledge a PDU sent in unassured mode.

**Unique Challenge-Response Procedure.** An exchange of information between a mobile station and a base station for the purpose of confirming the mobile station's identity. The procedure is initiated by the base station and is characterized by the use of a challenge-specific random number (i.e., RANDU) instead of the random variable broadcast globally (RAND).

**Unique Random Variable (RANDU).** A 24-bit random number generated by the base station in support of the Unique Challenge-Response procedure.

**Universal Coordinated Time (UTC).** An internationally agreed-upon time scale maintained by the Bureau International de l'Heure (BIH) used as the time reference by nearly all commonly available time and frequency distribution systems i.e., WWV, WWVH, LORAN-C, Transit, Omega, and GPS.

**User Zone.** An area within which CDMA Tiered Services may be provided. It may correspond to an RF coverage area, or it may be established independent of RF topology. User Zones are classified as broadcast versus mobile-specific, and as active versus

passive. See Broadcast User Zone, Mobile-Specific User Zone, Active User Zone, and Passive User Zone. See also Registration Zone, with which it should not be confused.

**User Zone Registration.** An autonomous registration method in which the mobile station registers when it selects an active user zone while in the Idle State. See also Zone-Based Registration, with which it should not be confused.

**Upper Layers.** General reference to Layer 3 and the layers above it.

**User Zone Exit parameter.** A parameter used by the mobile station to determine if it should exit a User Zone.

**UTC.** Universal Temps Coordoné. See Universal Coordinated Time.

**Voice Privacy.** The process by which user voice transmitted over a CDMA Traffic Channel is afforded a modest degree of protection against eavesdropping over the air.

**Walsh Chip.** See [2].

**Walsh Function.** One of  $2^N$  time orthogonal binary functions (note that the functions are orthogonal after mapping '0' to 1 and '1' to -1).

**Wireless Local Loop.** Wireless alternative access mechanism to provide standard telecommunication services using standard wireline terminal via a radio link between the network and customer premises equipment.

**WLL.** See Wireless Local Loop.

**Zone-Based Registration.** An autonomous registration method in which the mobile station registers whenever it enters a zone that is not in the mobile station's zone list. See also User Zone Registration, with which it should not be confused.

**Zone Timer.** A timer used by the mobile station to remove outdated entries from its list of zones in which it has previously registered.

**μs.** Microsecond ( $10^{-6}$  second).

#### 1.1.2 Numeric Information

Numeric information is used to describe the operation of the mobile station. The following subscripts are used to clarify the use of the numeric information:

- "s" indicates a value stored in a mobile station's temporary memory.
- "sv" indicates a stored value that varies as a mobile station processes various tasks.
- "sl" indicates the stored limits on values that vary.
- "r" indicates a value received by a mobile station over a CDMA Forward Channel.
- "p" indicates a value set in a mobile station's permanent security and identification memory.
- "s-p" indicates a value stored in a mobile station's semi-permanent security and identification memory.



1 1.1.2.1 Reserved

2 1.1.2.2 CDMA Numeric Information

3 The following are internal values that are stored by the mobile station in temporary  
4 memory that are not sent over the air. See Annex F for values stored by the mobile station  
5 in permanent and semi-permanent memory.

6 **1XRL\_FREQ\_OFFSET<sub>s</sub>** – Frequency offset of the 1X reverse link.

7 **A41\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>** – *ANSI-41 System Parameters Message* sequence number.

8 **ACC\_CHAN<sub>s</sub>** – Number of Access Channels supported by the current Paging Channel.

9 **ACC\_ENT\_HO\_ORDER<sub>s</sub>** – Access entry handoff permitted from the *Mobile Station Order*  
10 *and Message Processing Operation* of the *Mobile Station Idle State*.

11 **ACCESS\_ENTRY\_HO<sub>s</sub>** – Idle handoff permitted when entering the *System Access State*.

12 **ACCESS\_HO<sub>s</sub>** – Handoff permitted after performing an access attempt while the mobile  
13 station is in the *System Access State*.

14 **ACCESS\_HO\_ALLOWED<sub>s</sub>** – Handoff permitted to the corresponding neighbor base station  
15 while in the *System Access State*.

16 **ACCESS\_HO\_LIST** – List of pilots to which access handoff or access probe handoff is  
17 permitted.

18 **ACC\_HO\_LIST\_UPD<sub>s</sub>** – Access handoff list update permitted indicator.

19 **ACCESS\_HO\_MSG\_RSP<sub>s</sub>** – Access handoff permitted in the *System Access State* between  
20 the time that the mobile station receives a message and responds to that message.

21 **ACCESS\_PROBE\_HO<sub>s</sub>** – Access probe handoff permitted during an access attempt in the  
22 *Mobile Station Origination Attempt Substate* or the *Page Response Substate*.

23 **ACC\_MSG\_SEQ<sub>s</sub>** – Last received *Access Parameters Message* or *Enhanced Access*  
24 *Parameters Message* sequence number.

25 **ACC\_PROBE\_HO\_OTHER\_MSG<sub>s</sub>** – Access probe handoff permitted for Access Channel  
26 messages other than the *Origination Message*, *Reconnect Message*, and the *Page Response*  
27 *Message*.

28 **ACCT\_INCL\_EMG<sub>s</sub>** – Access Control based on Call Type (ACCT) applies to emergency calls  
29 indicator.

30 **ACCT\_SO\_GRP\_LIST** – List of service option groups that have Access Control based on  
31 Call Type (ACCT) enabled.

32 **ACCT\_SO\_LIST** – List of individual service options that have Access Control based on Call  
33 Type (ACCT) enabled.

34 **ACH\_ACC\_TMO<sub>s</sub>** – Access Channel acknowledgment timeout, in units of 80 ms.

35 **ACK\_WAITING<sub>s[i]</sub>** – Acknowledgment status indicator for message sequence number i.  
36 Set to YES if an acknowledgment is pending for the message; otherwise, set to NO.

- 1    **ADD\_INTERCEPT<sub>s</sub>** – The intercept in the inequality criterion for adding a pilot to the
- 2    Active Set.
- 3    **ADD\_PLCM\_FOR\_FCH\_39<sub>s</sub>** –    The 39 least significant bits of the additional Public Long
- 4    Code Mask for the forward Fundamental Channel.
- 5    **ADD\_PLCM\_FOR\_FCH\_TYPE<sub>s</sub>** – Additional Public Long Code Mask for forward
- 6    Fundamental Channel type indicator.
- 7    **AGE<sub>s</sub>** – Neighbor list age. For each pilot in the Neighbor Set, the mobile station
- 8    increments this counter each time a *Neighbor List Update Message* or an *Extended*
- 9    *Neighbor List Update Message* is received. When AGE<sub>s</sub> exceeds NGBHR\_MAX\_AGE, the
- 10   pilot is deleted from the Neighbor Set.
- 11   **ALIGN\_TIMING\_USED<sub>s</sub>** – Indicates whether the mobile station aligns the times of visits
- 12   away from the Serving Frequency, as requested by the base station, in the periodic search
- 13   procedures.
- 14   **ASSIGNED\_QPAGECH<sub>s</sub>** – Assigned Quick Paging Channel number.
- 15   **AUTH<sub>s</sub>** – Current authentication mode.
- 16   **AUTO\_FCSO\_ALLOWED<sub>s</sub>** – Base station support of autonomous *Fast Call Setup Order*
- 17   indicator.
- 18   **AUTO\_MSG\_INTERVAL** – Autonomous message interval.
- 19   **AUTO\_MSG\_SUPPORTED** – Autonomous message supported indicator.
- 20   **BAD\_FRAMES<sub>s</sub>** – Forward Fundamental Channel bad frames count. The number of
- 21   received bad Forward Fundamental Channel frames.
- 22   **BAND\_SUBCLASS\_IND\_REC** – Band subclass indicator record. This record specifies the
- 23   band subclasses that the base station requires the mobile station to report whether it
- 24   supports.
- 25   **BASE\_CLASS<sub>s</sub>** – Base station class of the current base station.
- 26   **BASE\_ID<sub>s</sub>** – Base station identification of the current base station.
- 27   **BASE\_LAT<sub>s</sub>** – Latitude of the current base station, in units of 0.25 seconds.
- 28   **BASE\_LONG<sub>s</sub>** – Longitude of the current base station, in units of 0.25 seconds.
- 29   **BCMC\_FLOW\_LIST<sub>s</sub>[i]** – BCMC Flow Information. This is an array that contains
- 30   information corresponding to each BCMC flow being transmitted by the base station in
- 31   this sector:
- 32      •   BCMC\_FLOW\_ID - BCMC flow identifier.
- 33      •   REGISTRATION\_REQ\_FLAG – Registration required flag.
- 34      •   AUTH\_SIGNATURE\_REQ\_IND – Authorization signature required indication.
- 35      •   BCMC\_FLOW\_ON\_TRAFFIC\_IND – BCMC flow on traffic channel supported
- 36      indicator.

- 1       • BCMC\_FLOW\_ON\_IND – BCMC flow On indicator.
- 2       • LPM\_INFO[j] - For each BCMC\_FLOW\_ID, one or more Logical-to-Physical Mapping
- 3       entries:
- 4           ○ FSCH\_ID - Forward Broadcast Supplemental Channel identifier.
- 5           ○ TDM\_USED\_IND - TDM used indicator.
- 6           ○ TDM\_MASK - TDM mask.
- 7           ○ TDM\_SUPER\_PERIOD\_MASK - TDM super period mask.
- 8           ○ TDM\_MEGA\_PERIOD\_MASK - TDM mega period mask.
- 9           ○ BSR\_ID - BCMC Service Reference identifier.
- 10          ○ NGHBR\_INFO[k] - For each Logical-to-Physical Mapping entries, information on
- 11          one or more neighbor base stations:
- 12              ▪ NGHBR\_PN - Neighbor pilot PN sequence offset index.
- 13              ▪ NGHBR\_BCMC\_CONFIG - Neighbor BCMC Configuration.
- 14              ▪ NGHBR\_FSCH\_BAND\_CLASS - Neighbor band class of the Forward
- 15              Broadcast Supplemental Channel.
- 16              ▪ NGHBR\_FSCH\_CDMA\_FREQ - Neighbor Frequency assignment of the
- 17              Forward Broadcast Supplemental Channel.
- 18              ▪ NGHBR\_FSCH\_CODE\_CHAN - Neighbor Forward Broadcast
- 19              Supplemental Channel Code Channel Index.
- 20              ▪ NGHBR\_FSCH\_PLCM - Neighbor Public Long Code Mask of the Forward
- 21              Broadcast Supplemental Channel.
- 22              ▪ NGHBR\_FSCH\_MUX\_OPTION - Neighbor Multiplex Option of the
- 23              Forward Broadcast Supplemental Channel.
- 24              ▪ NGHBR\_FSCH\_RC - Neighbor Radio configuration of the Forward
- 25              Broadcast Supplemental Channel.
- 26              ▪ NGHBR\_FSCH\_CODING - Neighbor Coding Type of the Forward
- 27              Broadcast Supplemental Channel.
- 28              ▪ NGHBR\_FSCH\_OUTERCODE\_RATE - Neighbor outer code rate of the
- 29              Forward Broadcast Supplemental Channel.

- 1                   ▪ NGHBR\_FSCH\_OUTERCODE\_OFFSET - Neighbor outer coding buffer
- 2                   offset of the Forward Broadcast Supplemental Channel.
- 3                   ▪ NGHBR\_FSCH\_NUM\_BITS\_IDX - Neighbor number of information bits
- 4                   index of the Forward Broadcast Supplemental Channel.
- 5                   ▪ NGHBR\_FSCH\_FRAME\_40\_USED - Neighbor Forward Broadcast
- 6                   Supplemental Channel 40ms frame used indicator.
- 7                   ▪ NGHBR\_FSCH\_FRAME\_80\_USED - Neighbor Forward Broadcast
- 8                   Supplemental Channel 80ms frame used indicator.
- 9   **BCMC\_RETRY\_DELAY\_LISTs[i]** - BCMC Retry Delay List. This is an array that contains
- 10 retry time corresponding to each BCMC flow rejected with BCMC Reason indicating
- 11 RETRY\_LATER:
- 12   • BCMC\_FLOW\_ID - BCMC flow identifier.
- 13   • RETRY\_DELAY - Retry time for this BCMC flow.
- 14 **BEGIN\_PREAMBLE<sub>s</sub>** - A stored variable in the mobile station that contains the size of the
- 15 preamble that shall be transmitted on a Reverse Supplemental Code Channel at the
- 16 beginning of a Reverse Supplemental Code Channel transmission.
- 17 **BKOFF<sub>s</sub>** - Access Channel probe sequence backoff range.
- 18 **BRAT<sub>s</sub>** - Data rate of the Primary Broadcast Control Channel.
- 19 **BSPM\_MSG\_SEQ<sub>s</sub>** - *BCMC Service Parameters Message* sequence number.
- 20 **BSPM\_WAIT\_TIME** - The maximum duration the mobile station waits to receive a BCMC
- 21 Service Parameters Message after sending a Registration Message requesting a BCMC
- 22 flow.
- 23 **BYPASS\_ALERT\_ANSWER<sub>s</sub>** - Mobile station termination bypass indicator. This is set to
- 24 '1' if the mobile station is to bypass the *Waiting for Order Substate* and the *Waiting for*
- 25 *Mobile Station Answer Substate*, and proceed directly to the *Conversation Substate* when
- 26 Layer 3 receives a *forward dedicated channel-acquired* indication from Layer 2.
- 27 **CAND\_BAND\_CLASS\_REC** - Candidate band class record. This record specifies the band
- 28 classes that the base station requires the mobile station to report whether it supports.
- 29 **CCSH\_ENCODER\_ACTION\_TIME<sub>s</sub>** - Specifies the time at which Code Combining Soft
- 30 Handoff Turbo Encoder swapping takes effect.
- 31 **CDMABAND<sub>s</sub>**. CDMA band class. The CDMA band class currently used by the mobile
- 32 station.
- 33 **CDMACH<sub>s</sub>** - CDMA Channel number. The CDMA Channel number currently used by the
- 34 mobile station.
- 35 **CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>s</sub>** - CDMA off time report supported indicator.
- 36 **CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>s</sub>** - CDMA off time report threshold.

- 1 **CF\_CDMABAND<sub>s</sub>** – Candidate Frequency CDMA band class. The CDMA band class  
2 specified in the *Candidate Frequency Search Request Message*.
- 3 **CF\_CDMACH<sub>s</sub>** – Candidate Frequency CDMA Channel number. The CDMA Channel  
4 number specified in the *Candidate Frequency Search Request Message*.
- 5 **CF\_PILOT\_INC<sub>s</sub>** – PILOT\_INC to be used by the mobile station after an inter-frequency  
6 hard handoff to the CDMA Candidate Frequency is successfully completed.
- 7 **CF\_SEARCH\_PRIORITY\_INCL<sub>s</sub>** – Candidate Frequency neighbor pilots' search priority  
8 included indicator.
- 9 **CF\_SRCH\_OFFSET\_INCL<sub>s</sub>** – Candidate Frequency neighbor pilot search window offset  
10 included indicator.
- 11 **CF\_SRCH\_WIN\_NGHR\_INCL<sub>s</sub>** – Candidate Frequency neighbor pilots' search window  
12 included indicator.
- 13 **CF\_SRCH\_WIN\_N<sub>s</sub>** – Search window size for the Candidate Frequency Search Set.
- 14 **CF\_SRCH\_WIN\_R<sub>s</sub>** – Search window size to be used for the Remaining Set after an inter-  
15 frequency hard handoff to the CDMA Candidate Frequency is successfully completed.
- 16 **CF\_T\_ADD<sub>s</sub>** – Pilot detection threshold to be used on the CDMA Candidate Frequency.  
17 The stored value is a positive value in units of 0.5 dB.
- 18 **CH\_IND<sub>s</sub>** – A two-bit physical channel indicator, based on the currently established  
19 physical channels. The least significant bit denotes the Fundamental Channel, and the  
20 most significant bit denotes the Dedicated Control Channel.
- 21 **CHAN\_LST\_MSG\_SEQ<sub>s</sub>** – *CDMA Channel List Message* sequence number.
- 22 **CHM\_SUPPORTED<sub>s</sub>** – Indicates whether the base station supports Control Hold Mode  
23 operation.
- 24 **CODE\_CHAN\_LIST** – Code Channel List. A descriptive structure used to manage the  
25 Forward Fundamental Channel, and Forward Supplemental Code Channels, if any,  
26 associated with the mobile station's Active Set.
- 27 **COMPLETE\_PUF\_FRAME<sub>s</sub>** – Number of power control groups required to make the PUF  
28 probe an integer number of frames.
- 29 **COMPLETE\_SEARCH<sub>s</sub>** – Flag to indicate if the mobile station is to complete the search of  
30 the Candidate Frequency Search Set after it has determined that the inter-frequency  
31 handoff attempt to the CDMA Candidate Frequency is unsuccessful.
- 32 **CONFIG\_MSG\_SEQ<sub>s</sub>** – Current message sequence number for the *System Parameters*  
33 *Message*, *Neighbor List Message*, *Extended Neighbor List Message*, *General Neighbor List*  
34 *Message*, *CDMA Channel List Message*, *Extended System Parameters Message*, *Global*  
35 *Service Redirection Message*, *Private Neighbor List Message*, *User Zone Identification*  
36 *Message*, *Extended CDMA Channel List Message*, *Extended Global Service Redirection*  
37 *Message*, *MC-RR Parameters Message*, *ANSI-41 System Parameters Message*.
- 38 **COUNTER\_ENABLED<sub>s</sub>** – Timer-based registration indicator. Set to YES if timer-based  
39 registration is enabled; otherwise, set to NO.

- 1 **C\_SIG\_ENCRYPT\_MODE<sub>s</sub>** – Common Channel signaling message encryption mode.
- 2 **CS\_SUPPORTED<sub>s</sub>** – Base station Concurrent Services supported indicator. This 1-bit field
- 3 is set to '1' if the base station supports concurrent connection of at least two services that
- 4 use either Primary or Secondary traffic type.
- 5 **CURR\_ACC\_MSG\_SEQ** – Current *Access Parameters Message* or *Enhanced Access*
- 6 *Parameters Message* sequence number.
- 7 **CURRENT\_ACTIVE\_PILOT<sub>s</sub>** – Identifies the current pilot in the Active Set during an
- 8 access attempt.
- 9 **CURRENT\_PUF\_PROBE<sub>s</sub>** – Number of the next PUF probe to be transmitted within the
- 10 PUF attempt.
- 11 **DAYLT<sub>s</sub>** – Daylight Savings Time indicator.
- 12 **DCCH\_BAD\_FRAMES<sub>s</sub>** – Forward Dedicated Control Channel bad frames count. The
- 13 number of received bad Forward Dedicated Control Channel frames.
- 14 **DCCH\_TOT\_FRAMES<sub>s</sub>** – Total Forward Dedicated Control Channel frames received. The
- 15 total number of received Forward Dedicated Control Channel frames, counted for Forward
- 16 Traffic Channel power control.
- 17 **DECORR** – Hashing function input used to decorrelate hashing function applications for
- 18 the same mobile station.
- 19 **DEFAULT\_CONFIG<sub>s</sub>** – Mobile station current default configuration.
- 20 **DELETE\_FOR\_TMSI<sub>s</sub>** – A storage variable in the mobile station that indicates whether the
- 21 mobile station should delete its current TMSI if the TMSI was assigned in a different TMSI
- 22 zone.
- 23 **DIFF\_RX\_PWR\_THRESH<sub>s</sub>** – Threshold for the difference between the received power on
- 24 the Serving Frequency and the received power on the CDMA Candidate Frequency for the
- 25 mobile station to search for pilots on the CDMA Candidate Frequency.
- 26 **DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>s</sub>** – Direct Channel Assignment Recover Indicator.
- 27 **DISTANCE** – Distance from registered base station to current base station, used for
- 28 distance-based registration.
- 29 **DROP\_INTERCEPT<sub>s</sub>** – The intercept in the inequality criterion for dropping a pilot from
- 30 the Active Set.
- 31 **D\_SIG\_ENCRYPT\_MODE<sub>s</sub>** – Dedicated Channel signaling message encryption mode.
- 32 **EACH\_ACC\_TMO<sub>s</sub>** – Enhanced Access Channel acknowledgment timeout, in units of 20
- 33 ms.
- 34 **EACH\_SLOT<sub>s</sub>** – See [2].
- 35 **EACH\_SLOT\_OFFSET1<sub>s</sub>** – See [2].
- 36 **EACH\_SLOT\_OFFSET2<sub>s</sub>** – See [2].
- 37 **EARLY\_RL\_TRANSMIT\_IND<sub>s</sub>** – The early reverse link transmission flag indicates whether,

- 1 upon channel assignment, the mobile station is allowed to enable its transmitter and  
 2 transmit the preamble prior to receiving sufficient energy on the forward link.
- 3 **EC\_I0\_THRESH<sub>s</sub>** – Pilot  $E_c/I_0$  threshold used for system reselection.
- 4 **EC\_THRESH<sub>s</sub>** – Pilot power threshold used for system reselection.
- 5 **ENC\_KEY\_SIZE<sub>s</sub>** – The key size used for signaling and user information encryption on  
 6 common channel and dedicated channel.
- 7 **ENC\_KEY[*j*]** – An array of encryption keys for signaling and user information encryption  
 8 on common channel and dedicated channel, where *j* is the key identifier that ranges from  
 9 ‘00’ to ‘11’.
- 10 **SSEQ<sup>5</sup>** – An 8-bit temporary variable for encryption/decryption and message integrity.
- 11 **ENCRYPT\_MODE<sub>s</sub>** – Current message encryption mode.
- 12 **EXCL\_P\_REV\_MS** – Exclude from redirection by MOB\_P\_REV indicator.
- 13 **EXT\_CHAN\_LST<sub>s</sub>** – *Extended CDMA Channel List Message* sent indicator.
- 14 **EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>** – *Extended CDMA Channel List Message* sequence number.
- 15 **EXT\_NGHR\_LST\_MSG\_SEQ<sub>s</sub>** – *Extended Neighbor List Message* sequence number.
- 16 **EXT\_PREF\_MSID\_TYPE<sub>s</sub>** – Extended preferred mobile station identifier field type.
- 17 **RX\_EXT\_SSEQ[*i*][*j*]<sup>6</sup>** – An array of 32-bit crypto-sync counters used for encryption and  
 18 message integrity, where *i* = 0 is for unassured messages and *i* = 1 is for assured  
 19 messages, where *j* is the key identifier that ranges from ‘00’ to ‘11’.
- 20 **TX\_EXT\_SSEQ[*i*][*j*]<sup>7</sup>** – An array of 32-bit crypto-sync counters used for encryption and  
 21 message integrity, where *i* = 0 is for unassured messages and *i* = 1 is for assured  
 22 messages, where *j* is the key identifier that ranges from ‘00’ to ‘11’.
- 23 **EXT\_SSEQ<sup>8</sup>** – A 32-bit temporary variable for encryption and message integrity.
- 24 **INT\_KEY[*j*]** – An array of 128-bit integrity keys for message integrity, where *j* is the key  
 25 identifier that ranges from ‘00’ to ‘11’.
- 26 **KEY\_ID** – A 2-bit index of INT\_KEY[.], ENC\_KEY[.], TX\_EXT\_SSEQ[.][.], and  
 27 RX\_EXT\_SSEQ[.][.] that are “in use”. The values ‘00’ to ‘01’ are used to index 2G keys and  
 28 security sequence numbers. The values ‘10’ to ‘11’ are used to index 3G keys and security  
 29 sequence numbers.
- 30 **EXT\_GLOBAL\_REDIRECT<sub>s</sub>** – *Extended Global Service Redirection Message* sent indicator.

---

<sup>5</sup> Formerly called ENC\_SEQ.

<sup>6</sup> Formerly called EXT\_DECRYPT\_SEQ[*i*].

<sup>7</sup> Formerly called EXT\_ENCRYPT\_SEQ[*i*].

<sup>8</sup> Formerly called EXT\_ENC\_SEQ[*i*].

- 1    **EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>** - *Extended Global Service Redirection Message*  
2    sequence number.
- 3    **EXT\_SYS\_PARAMETER<sub>s</sub>** - *Extended System Parameters Message* sent indicator.
- 4    **EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>** - *Extended System Parameters Message* sequence number.
- 5    **FBSCH\_LIST<sub>s[i]</sub>** - Forward Broadcast Supplemental Channel information. This is an array  
6    that contains information corresponding to each Forward Supplemental Channel  
7    transmitted by the base station:
- 8        • FSCH\_ID - Forward Broadcast Supplemental Channel identifier.
- 9        • FSCH\_BAND\_CLASS - Band class of the Forward Broadcast Supplemental  
10       Channel.
- 11       • FSCH\_FREQ - Frequency assignment of the Forward Broadcast Supplemental  
12       Channel.
- 13       • FSCH\_CODE\_CHAN - Code Channel index of the Forward Broadcast Supplemental  
14       Channel.
- 15       • FSCH\_PLCM - Public Long Code Mask of the Forward Broadcast Supplemental  
16       Channel
- 17       • FSCH\_MUX\_OPTION - Multiplex Option of the Forward Broadcast Supplemental  
18       Channel
- 19       • FSCH\_RC - Radio configuration of the Forward Broadcast Supplemental Channel.
- 20       • FSCH\_CODING - Coding Type of the Forward Broadcast Supplemental Channel.
- 21       • FSCH\_OUTERCODE\_RATE - Outer code rate of the Forward Broadcast  
22       Supplemental Channel.
- 23       • FSCH\_OUTERCODE\_OFFSET - Outer coding buffer offset of the Forward Broadcast  
24       Supplemental Channel.
- 25       • FSCH\_NUM\_BITS\_IDX - Number of information bits index of the Forward  
26       Broadcast Supplemental Channel.
- 27       • FSCH\_FRAME\_40\_USED - Forward Broadcast Supplemental Channel 40ms frame  
28       used indicator.
- 29       • FSCH\_FRAME\_80\_USED - Forward Broadcast Supplemental Channel 80ms frame  
30       used indicator.
- 31       • TDM\_STRUCTURE\_IND - Forward Broadcast Supplemental Channel TDM structure  
32       used indicator.



- 1       • TDM\_SLOT\_LENGTH - Forward Broadcast Supplemental Channel TDM slot length
- 2       • TDM\_SUPER\_PERIOD\_MASK\_LEN - TDM super period mask length indicator.
- 3       • TDM\_MEGA\_PERIOD\_MASK\_LEN - TDM mega period mask length indicator.
- 4       **FCCCH<sub>s</sub>** - Current Forward Common Control Channel number.
- 5       **FIRST\_ACTIVE\_PILOT<sub>s</sub>** - While the mobile station is in the *System Access State*, identifies
- 6       the pilot to which the first access probe was transmitted, upon entering the *System Access*
- 7       *State*.
- 8       **FIXED\_NUM\_PREAMBLE<sub>s</sub>** - Traffic Channel preamble length for fixed preamble
- 9       transmission.
- 10      **FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>s</sub>** - The fixed preamble transmission flag indicates
- 11      whether the mobile station is allowed to enter the *Traffic Channel Substate* of the *Mobile*
- 12      *Station Control on the Traffic Channel State*, after sending the number of preambles
- 13      specified in *Extended Channel Assignment Message*.
- 14      **FOR\_ACKCH\_ASSIGNED<sub>s</sub>** - Forward Acknowledgment Channel assignment
- 15      indicator.
- 16      **FOR\_ACKCH\_COMB\_SEL<sub>s</sub>** - Forward Acknowledgment Channel combining method
- 17      selector.
- 18      **FOR\_ACKCH\_MODE<sub>s</sub>** - Forward Acknowledgment Channel Mode.
- 19      **FOR\_ACKCH\_WALSH\_INDEX<sub>s</sub>** - Forward Acknowledgment Channel Walsh Code index.
- 20      **FOR\_ACKSCH\_INDEX<sub>s</sub>** - Forward Acknowledgment Channel subchannel index.
- 21      **FOR\_CPCCH\_RATE<sub>s</sub>** - Forward Common Power Control Channel Rate.
- 22      **FOR\_DCCH\_MUX\_OPTION<sub>s</sub>** - Forward Dedicated Control Channel Multiplex Option.
- 23      **FOR\_DURATION<sub>s</sub>** - A stored variable in the mobile station that contains the duration (in
- 24      units of 80 ms) of a forward Supplemental Code Channel transmission that begins at time
- 25      FOR\_START\_TIME<sub>s</sub>.
- 26      **FOR\_FCH\_MUX\_OPTION<sub>s</sub>** - Forward Fundamental Channel Multiplex Option.
- 27      **FOR\_FCH\_RC<sub>s</sub>** - Forward Fundamental Channel Radio Configuration.
- 28      **FOR\_FRAME\_40\_MAX\_RATE<sub>s</sub>** - The maximum data rate for the mobile station's
- 29      transmission at 40 ms frame length on the Forward Supplemental Channel.
- 30      **FOR\_FRAME\_80\_MAX\_RATE<sub>s</sub>** - The maximum data rate for the mobile station's
- 31      transmission at 80 ms frame length on the Forward Supplemental Channel.
- 32      **FOR\_GCH\_ASSIGNED<sub>s</sub>** - Forward Grant Channel assigned indicator.
- 33      **FOR\_GCH\_WALSH\_INDEX<sub>s</sub>** - Forward Grant Channel Walsh Index. The Walsh index of
- 34      the Forward Grant Channel assigned to a mobile station.
- 35      **FOR\_LINKED\_HDM\_SEQ<sub>s</sub>** - Storage variable containing the most recent forward sequence
- 36      number of the *General Handoff Direction Message* to which a *Supplemental Channel*

- 1 *Assignment Message* forward assignment was linked.
- 2 **FOR\_NID\_REG<sub>s</sub>** – Foreign NID roamer autonomous registration enable.
- 3 **FOR\_RCCH\_ASSIGNED<sub>s</sub>** – Assigned Forward Rate Control Channel. An on or off indicator
- 4 used to determine if Forward Rate Control Channel is assigned or not.
- 5 **FOR\_RCCH\_MODE<sub>s</sub>** – Forward Rate Control Channel mode.
- 6 **FOR\_RCCH\_REPETITION<sub>s</sub>** – Forward Rate Control Channel Subchannel repetition factor.
- 7 **FOR\_RCCH\_WALSH\_INDEX<sub>s</sub>** – Forward Rate Control Channel Walsh code.
- 8 **FOR\_RCSCH\_INDEX<sub>s</sub>** – Forward Rate Control Channel subchannel index.
- 9 **FOR\_PDCH\_SUPPORTED<sub>s</sub>** – Forward Packet Data Channel supported indicator.
- 10 **FOR\_PDCH\_INCL<sub>s</sub>** – Forward Packet Data Channel assigned indicator for each pilot in the
- 11 active set.
- 12 **FOR\_RC<sub>s</sub>** – Forward Channel Radio Configuration.
- 13 **FOR\_SCH\_CC\_INDEX<sub>s</sub>** – Supplemental code channel index used on the Supplemental
- 14 Channel.
- 15 **FOR\_SCH\_DURATION<sub>s</sub>** – A stored variable in the mobile station, which contains the
- 16 duration of a forward Supplemental Channel transmission, which begins at time
- 17 FOR\_SCH\_START\_TIME<sub>s</sub>.
- 18 **FOR\_SCH\_FRAME\_LENGTH<sub>s</sub>** – The Forward Supplemental Channel frame length.
- 19 **FOR\_SCH\_RATE<sub>s</sub>** – The rate of the Forward Supplemental Channel.
- 20 **FOR\_SCH\_START\_TIME<sub>s</sub>** – A stored variable in the mobile station which contains the
- 21 System Time, in units of time specified by START\_TIME\_UNIT<sub>s</sub>, (modulo 32) at which the
- 22 mobile station shall start (or resume) processing Forward Supplemental Channels.
- 23 **FOR\_SID\_REG<sub>s</sub>** – Foreign SID roamer autonomous registration enable.
- 24 **FOR\_START\_TIME<sub>s</sub>** – A stored variable in the mobile station that contains the System
- 25 Time, in units of 80 ms, (modulo 64) at which the mobile station shall start (or resume)
- 26 processing Forward Supplemental Code Channels.
- 27 **FPC\_DCCH\_CURR\_SETPT<sub>s</sub>** – Current power control subchannel outer loop setpoint for
- 28 the Forward Dedicated Control Channel.
- 29 **FPC\_DCCH\_FER<sub>s</sub>** – Target frame error rate for the Forward Dedicated Control Channel.
- 30 **FPC\_DCCH\_MAX\_SETPT<sub>s</sub>** – Maximum value of the power control subchannel outer loop
- 31 setpoint for the Forward Dedicated Control Channel.
- 32 **FPC\_DCCH\_MIN\_SETPT<sub>s</sub>** – Minimum value of the power control subchannel outer loop
- 33 setpoint for the Forward Dedicated Control Channel.
- 34 **FPC\_DELTA\_SCH\_SETPT<sub>s</sub>** – The difference between the Fundamental Channel current
- 35 power control subchannel outer loop setpoint and the Supplemental Channel current
- 36 power control subchannel outer loop setpoint.

- 1 **FPC\_DELTA\_SETPT<sub>s</sub>** – The difference between the Fundamental Channel current power  
2 control subchannel outer loop setpoint and the Dedicated Control Channel current power  
3 control subchannel outer loop setpoint.
- 4 **FPC\_FCH\_CURR\_SETPT<sub>s</sub>** – Current power control subchannel outer loop setpoint for the  
5 Forward Fundamental Channel.
- 6 **FPC\_FCH\_FER<sub>s</sub>** – Target frame error rate for the Forward Fundamental Channel.
- 7 **FPC\_FCH\_MAX\_SETPT<sub>s</sub>** – Maximum value of the power control subchannel outer loop  
8 setpoint for the Forward Fundamental Channel.
- 9 **FPC\_FCH\_MIN\_SETPT<sub>s</sub>** – Minimum value of the power control subchannel outer loop  
10 setpoint for the Forward Fundamental Channel.
- 11 **FPC\_MODE<sub>s</sub>** – Forward power control operating mode.
- 12 **FPC\_MODE\_NO\_SCH<sub>s</sub>** – Forward power control operating mode except during the forward  
13 Supplemental Channel assignment interval.
- 14 **FPC\_MODE\_SCH<sub>s</sub>** – Forward power control operating mode during the forward  
15 Supplemental Channel assignment interval.
- 16 **FPC\_PRI\_CHAN<sub>s</sub>** – Primary power control subchannel measured channel.
- 17 **FPC\_SEC\_CHAN<sub>s</sub>** – Index of Forward Supplemental Channel to be measured by the  
18 secondary power control subchannel.
- 19 **FPC\_SCH\_CURR\_SETPT<sub>s</sub>[i]** – Current power control subchannel outer loop setpoint for  
20 Forward Supplemental Channel i.
- 21 **FPC\_SCH\_FER<sub>s</sub>[i]** – Target frame error rate for Forward Supplemental Channel i.
- 22 **FPC\_SCH\_MAX\_SETPT<sub>s</sub>[i]** – Maximum value of the power control subchannel outer loop  
23 setpoint for Forward Supplemental Channel i.
- 24 **FPC\_SCH\_MIN\_SETPT<sub>s</sub>[i]** – Minimum value of the power control subchannel outer loop  
25 setpoint for Forward Supplemental Channel i.
- 26 **FPC\_SETPT\_THRESH<sub>s</sub>** – Power control subchannel outer loop setpoint report threshold  
27 for the Dedicated Control Channel.
- 28 **FPC\_SETPT\_THRESH\_SCH<sub>s</sub>** – Power control subchannel outer loop setpoint report  
29 threshold for the Supplemental Channel.
- 30 **FRAME\_OFFSET<sub>s</sub>** – Current Traffic Channel frame offset, in units of 1.25 ms.
- 31 **FULL\_BSPM\_IND** – Indicates whether mobile station had the complete BSPM information  
32 at the time it received the last Full or Differential *BCMC Service Parameters Message*.
- 33 **FUNDICATED\_BCMC\_IND<sub>s</sub>** – Broadcast-Multicast services on Fundicated Channel  
34 Indicator.
- 35 **GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>** – General Neighbor List Message sequence number.
- 36 **GLOBAL\_REDIRECT<sub>s</sub>** – *Global Service Redirection Message* sent indicator.
- 37 **GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>** – Global Service Redirection Message sequence number.

- 1    **GRANTED\_MODE<sub>s</sub>** – Mobile station current granted mode.
- 2    **HASH\_KEY** – Hashing function input that determines the return value. Derived from
- 3    IMSI\_O.
- 4    **HDM\_SEQ<sub>s</sub>** – Last received *Extended Handoff Direction Message, General Handoff Direction*
- 5    *Message, or Universal Handoff Direction Message* sequence number.
- 6    **HOME\_REG<sub>s</sub>** – Home (non-roaming) autonomous registration enable.
- 7    **IGNORE\_ESCAM<sub>s</sub>** – Identifies whether a mobile station will process the reverse
- 8    supplemental channel assignment portion of the subsequent *Supplemental Channel*
- 9    *Assignment Message* or *Reverse Supplemental Channel Assignment Mini Message*.
- 10   **IGNORE\_QPCH<sub>s</sub>** – Ignore QPCH indicators flag. Indicates whether the mobile station is to
- 11   ignore its assigned paging indicators on the QPCH while operating in the reduced slot
- 12   cycle mode if the reduced slot cycle index is -3 or -4.
- 13   **IGNORE\_SCAM<sub>s</sub>** – Identifies whether a mobile station will process the reverse
- 14   supplemental code channel assignment portion of the subsequent *Supplemental Channel*
- 15   *Assignment Message*.
- 16   **IMSI\_10<sub>s</sub>** – The least significant digit of MNC when the MNC is 3-digit.
- 17   **IMSI\_11\_12<sub>s</sub>** – The 11th and 12th digits of the IMSI used for address matching.
- 18   **IMSI\_O\_ADDR\_NUM<sub>s</sub>**– The number of digits in the NMSI of the Operational IMSI (IMSI\_O)
- 19   minus four.
- 20   **IMSI\_O\_S<sub>s</sub>** – The last 10-digits of Operational IMSI (IMSI\_O).
- 21   **IMSI\_O\_11\_12<sub>s</sub>** – The 11th and 12th digits of the Operational IMSI (IMSI\_O).
- 22   **INIT\_PWR<sub>s</sub>** – Initial power offset for Access Channel probes.
- 23   **LC\_STATE<sub>s</sub>** – Long code state obtained from the *Sync Channel Message*.
- 24   **LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE** – This table contains the logical to physical
- 25   mapping for signaling and user traffic.
- 26   **LP\_SEC<sub>s</sub>** – Leap seconds count (offset of CDMA system time from UTC).
- 27   **LTM\_OFF<sub>s</sub>** – Local time offset from UTC, in units of 30 minutes.
- 28   **MAX\_ADD\_SERV\_INSTANCE<sub>s</sub>** – Maximum number of additional service reference
- 29   identifiers allowed in origination.
- 30   **MAX\_CAP\_SZ<sub>s</sub>** – Maximum number of Access Channel frames in an Access Channel
- 31   message capsule, less 3.
- 32   **MAX\_NUM\_ALT\_SO<sub>s</sub>** – The maximum number of alternative service option numbers that
- 33   the mobile station is allowed to include in the *Origination Message* or in the *Page Response*
- 34   *Message*.
- 35   **MAX\_NUM\_PROBE\_HO<sub>s</sub>** – The maximum number of times that a mobile station is
- 36   permitted to perform an access probe handoff.

- 1    **MAX\_PWR\_PUF<sub>s</sub>** – Maximum number of PUF probes to be transmitted at maximum  
2    mobile station output power during a PUF attempt.
- 3    **MAX\_REQ\_SEQ<sub>s</sub>** – Maximum number of access probe sequences for an Access Channel or  
4    Enhanced Access Channel request.
- 5    **MAX\_RER\_PILOT\_LIST\_SIZE<sub>s</sub>** – Maximum number of pilots to be maintained in the radio  
6    environment report pilot list while in the radio environment reporting mode.
- 7    **MAX\_RSP\_SEQ<sub>s</sub>** – Maximum number of access probe sequences for an Access Channel or  
8    Enhanced Access Channel response.
- 9    **MAX\_SLOT\_CYCLE\_INDEX<sub>s</sub>** – Maximum value of the slot cycle index allowed by the  
10    current base station. This parameter can take values between 0 and 7, inclusive.
- 11    **MCC<sub>s</sub>** – The Mobile Country Code used for address matching.
- 12    **MCC\_O<sub>s</sub>** – The Mobile Country Code of IMSI\_O.
- 13    **MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>** – *MC-RR Parameters Message* sequence number.
- 14    **MIN\_PILOT\_EC\_I0\_THRESH<sub>s</sub>** – Threshold for total  $E_c/I_0$  of pilots in the Serving  
15    Frequency Active Set used in the Periodic Serving Frequency Pilot Report Procedure.
- 16    **MIN\_PILOT\_PWR\_THRESH<sub>s</sub>** – Threshold for total  $E_c$  of pilots in the Serving Frequency  
17    Active Set used in the Periodic Serving Frequency Pilot Report Procedure.
- 18    **MIN\_P\_REV<sub>s</sub>** – Minimum mobile station protocol revision level required for access to the  
19    CDMA system.
- 20    **MIN\_SLOT\_CYCLE\_INDEX** – Minimum value of the slot cycle index allowed by the current  
21    base station. This parameter can take the values -4 or 0.
- 22    **MIN\_TOTAL\_PILOT\_EC\_I0<sub>s</sub>** – Total pilot strength threshold for the mobile station to  
23    attempt to demodulate the Forward Traffic Channel on the CDMA Candidate Frequency.
- 24    **MOB\_QOS<sub>s</sub>** – Indicator of whether the mobile station is allowed to request QoS settings in  
25    the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination*  
26    *Message*.
- 27    **MOB\_TERM<sub>s</sub>** – Mobile station termination indicator. Set to '1' if the mobile station will  
28    accept mobile station terminated calls in its current roaming status.
- 29    **MSG\_PERSIST<sub>s</sub>** – Persistence modifier for Access Channel message and Enhanced Access  
30    data transmissions.
- 31    **MS\_LAT<sub>s</sub>** – The latitude of the mobile station as estimated by the base station.
- 32    **MS\_LOC\_TSTAMP<sub>s</sub>** – The time corresponding to the estimate of mobile station's latitude  
33    and longitude.
- 34    **MS\_LONG<sub>s</sub>** – The longitude of the mobile station as estimated by the base station.
- 35    **MS\_INIT\_POS\_LOC\_SUP\_IND<sub>s</sub>** – Mobile station initiated position location determination  
36    supported indicator.

- 1    **MULT\_NIDS<sub>s</sub>** – Multiple NID storage indicator. Set to ‘1’ if the mobile station may store
- 2    more than one entry in SID\_NID\_LIST<sub>s</sub> for each SID.
- 3    **MULT\_SIDS<sub>s</sub>** – Multiple SID storage indicator. Set to ‘1’ if the mobile station may store
- 4    entries in SID\_NID\_LIST<sub>s</sub> having different SIDs.
- 5    **NDSS\_ORIG<sub>s</sub>** – NDSS Origination Indicator. Indicator used when the mobile station is
- 6    NDSS-redirected while originating a call.
- 7    **NEW\_BAND\_RECORD** – Record carrying information pertaining to a channel on a new
- 8    band to which the mobile station has hashed. The record includes the following fields:
- 9        • NEW\_BAND\_CLASS – The new band class.
- 10       • NEW\_FREQ – The new frequency in the new band class.
- 11   **NGHBR\_BAND<sub>s</sub>** – Neighbor band class.
- 12   **NGHBR\_CONFIG<sub>s</sub>** – Neighbor base station channel allocation configuration.
- 13   **NGHBR\_FREQ<sub>s</sub>** – Neighbor CDMA channel number.
- 14   **NGHBR\_LST\_MSG\_SEQ<sub>s</sub>** – *Neighbor List Message* sequence number.
- 15   **NGHBR\_MAX\_AGE<sub>s</sub>** – Neighbor set maximum age for retention in the set.
- 16   **NGHBR\_PN<sub>s</sub>** – Neighbor base station Pilot Channel PN sequence offset in units of 64 PN
- 17   chips.
- 18   **NGHBR\_REC** – Record containing information about a neighbor base station (see also
- 19   NGHBR\_REC\_LIST).
- 20   **NGHBR\_REC\_LIST** – Neighbor base station record list. A descriptive structure used to
- 21   manage the base station’s information records about neighbor base stations (see also
- 22   NGHBR\_REC).
- 23   **NGHBR\_SET\_ACCESS\_INFO<sub>s</sub>** – Neighbor Set access handoff or access probe handoff
- 24   information included indicator.
- 25   **NGHBR\_SET\_ENTRY\_INFO<sub>s</sub>** – Neighbor Set access entry handoff information included
- 26   indicator.
- 27   **NGHBR\_SET\_SIZE<sub>s</sub>** – Size of the Neighbor Set.
- 28   **NGHBR\_TIMING\_INCL<sub>s</sub>** – Indicates that hopping pilot beacon timing information is
- 29   included.
- 30   **NGHBR\_TX\_DURATION<sub>s</sub>** – Hopping pilot beacon transmit time duration.
- 31   **NGHBR\_TX\_OFFSET<sub>s</sub>** – Hopping pilot beacon transmit time offset.
- 32   **NGHBR\_TX\_PERIOD<sub>s</sub>** – Hopping pilot beacon transmit time period.
- 33   **NID<sub>s</sub>** – Network identification. A network is a subset of the base stations within a wireless
- 34   system.
- 35   **NOM\_PWR<sub>s</sub>** – Nominal transmit power offset. A correction factor to be used by mobile
- 36   stations in the open loop power estimate.

- 1 **NUM\_FCCCH<sub>s</sub>** – Number of Forward Common Control Channels supported on the current  
2 CDMA channel.
- 3 **NUM\_PREAMBLE<sub>s</sub>** –Traffic Channel preamble length for hard handoff.
- 4 **NUM\_QPCH<sub>s</sub>** – Number of Quick Paging Channels supported on the current CDMA  
5 channel.
- 6 **NUM\_REV\_CODES<sub>s</sub>** – A storage variable in the mobile station that contains the number of  
7 Reverse Supplemental Code Channels that will be utilized in the next Reverse  
8 Supplemental Code Channel transmission beginning at time REV\_START\_TIME<sub>s</sub>. A value  
9 of 0 indicates no Reverse Supplemental Code Channel transmission will be permitted (i.e.,  
10 there is no pending Reverse Supplemental Code Channel transmission).
- 11 **NUM\_SOFT\_SWITCHING\_FRAMES<sub>s</sub>** – Number of frames for R-CQICH soft switching. The  
12 duration of the cell switching period, during which the mobile station is to transmit the  
13 cell switch sequence on the R-CQICH channel when it switches between two pilots which  
14 are in different groups.
- 15 **NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub>** – Number of frames for R-CQICH soft switching  
16 while in Control Hold. The duration of the cell switching period, during which the mobile  
17 station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH  
18 channel when it switches between two pilots which are in different groups.
- 19 **NUM\_SOFT\_SWITCHING\_SLOTS<sub>s</sub>** – Number of slots per frame for R-CQICH soft  
20 switching. The duration of the cell switching slots within a switching frame, during which  
21 the mobile station is to transmit the cell switch indication by using Walsh cover of target  
22 on the R-CQICH channel when it switches between two pilots which are in different  
23 groups.
- 24 **NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub>** – Number of slots per frame for R-CQICH soft  
25 switching while in Control Hold. The duration of the cell switching slots within a switching  
26 frame, during which the mobile station, while in Control Hold, is to transmit the cell  
27 switch indication by using Walsh cover of target on the R-CQICH channel when it  
28 switches between two pilots which are in different groups.
- 29 **NUM\_SOFTER\_SWITCHING\_FRAMES<sub>s</sub>** – Number of frames for R-CQICH softer switching.  
30 The duration of the cell switching period, during which the mobile station is to transmit  
31 the cell switch sequence on the R-CQICH channel when it switches between two pilots  
32 which are in the same group.
- 33 **NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM<sub>s</sub>** – Number of frames for R-CQICH softer  
34 switching while in Control Hold. The duration of the cell switching period, during which  
35 the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-  
36 CQICH channel when it switches between two pilots which are in the same group.
- 37 **NUM\_SOFTER\_SWITCHING\_SLOTS<sub>s</sub>** – Number of slots per frame for R-CQICH softer  
38 switching. The duration of the cell switching slots within a switching frame. During this  
39 time the mobile station is to transmit the cell switch indication by using the Walsh cover  
40 of the target sector in the cell switch sequence on the R-CQICH channel when it switches  
41 between two pilots which are in the same group.

- 1 **NUM\_SOFTEN\_SWITCHING\_SLOTS\_CHM<sub>s</sub>** - Number of slots per frame for R-CQICH  
2 softer switching while in Control Hold. The duration of the cell switching slots within a  
3 switching frame. During this time the mobile station, while in Control Hold, is to transmit  
4 the cell switch indication by using the Walsh cover of the target sector in the cell switch  
5 sequence on the R-CQICH channel when it switches between two pilots which are in the  
6 same group.
- 7 **NUM\_STEP<sub>s</sub>** - Number of access probes or enhanced access probes in a single access  
8 probe sequence or enhanced access probe sequence.
- 9 **NUM\_SYNC\_ID\_SUPPORTED** - Number of SYNC\_IDs supported by the mobile station.
- 10 **OTHER\_REPORTED\_LIST** - List of other pilots that have pilot strengths exceeding T\_ADD  
11 and that are not included in ACCESS\_HO\_LIST.
- 12 **PACA<sub>s</sub>** - PACA call indicator. Set to enabled to indicate that the mobile station is waiting  
13 for a priority access channel assignment; otherwise, set to disabled. In Sections 2 and 3,  
14 PACA<sub>s</sub> = 0 is equivalent to setting PACA<sub>s</sub> to disabled and PACA<sub>s</sub> = 1 is equivalent to  
15 setting PACA<sub>s</sub> to enabled.
- 16 **PACA\_CANCEL** - PACA call cancel indicator. Set to '1' when the mobile station is directed  
17 by the user to cancel the PACA call; otherwise, set to '0'.
- 18 **PACA\_SID<sub>s</sub>** - PACA system identifier. Equal to the SID of the system on which the mobile  
19 station originated a PACA call.
- 20 **PACA\_TIMEOUT<sub>s</sub>** - PACA state timer duration. Specifies how long the mobile station  
21 should wait for a *PACA Message* from the base station.
- 22 **PACKET\_ZONE\_ID<sub>s</sub>** - Packet data services zone identifier of the base station.
- 23 **PAGECH<sub>s</sub>** - Current CDMA Paging Channel number.
- 24 **PAGED** - Indicator for a page match detected while the mobile station is in the *System*  
25 *Access State*.
- 26 **PAGE\_CHAN<sub>s</sub>** - Number of Paging Channels supported on the current CDMA channel.
- 27 **PAM\_SZ<sub>s</sub>** - Number of frames in the Access Channel or Enhanced Access Channel  
28 preamble, less 1.
- 29 **PARAMETER\_REG<sub>s</sub>** - Parameter-change registration enable.
- 30 **PDCH\_CHM\_SUPPORTED<sub>s</sub>** - Indicates whether the base station supports PDCH Control  
31 Hold Mode operation. **PDCH\_GROUP\_IDENTIFIER<sub>s</sub>** - A three-bit Packet Data Channel  
32 group identifier. It is used to determine whether the mobile station should use the softer  
33 or soft reselection parameters when repointing between pilots in its Active Set (See [3]).
- 34 **PDCH\_SOFT\_SWITCHING\_DELAY<sub>s</sub>** - PDCH soft switching delay. The minimum  
35 interruption seen by the mobile station when the mobile station is to transmit the cell  
36 switch sequence on the R-CQICH channel when it switches between two pilots which are  
37 in different groups.
- 38 **PDCH\_SOFTEN\_SWITCHING\_DELAY<sub>s</sub>** - PDCH softer switching delay. The minimum  
39 interruption seen by the mobile station when the mobile station is to transmit the cell



- 1 switch sequence on the R-CQICH channel when it switches between two pilots which are  
2 in the same group.
- 3 **PERIODIC\_SEARCH<sub>s</sub>** – Flag to indicate if the mobile station is to perform a periodic  
4 search on the Candidate Frequency.
- 5 **PGSLOT** – Value obtained from the hashing function, used to determine the mobile  
6 station's assigned Paging Channel slots.
- 7 **PILOT\_ARRIVAL** – Time of occurrence, as measured at the mobile station antenna  
8 connector, of the earliest arriving usable multipath component of the pilot. The arrival  
9 time is measured relative to the mobile station's time reference.
- 10 **PILOT\_INFO\_REQ\_SUPPORTED<sub>s</sub>** – Pilot information request supported indicator.
- 11 **PILOT\_GATING\_RATE<sub>s</sub>** – Reverse pilot gating rate on the Reverse Pilot Channel.
- 12 **PILOT\_GATING\_USE\_RATE** – Reverse pilot gating rate enable indicator. It indicates  
13 whether or not the Reverse Pilot Channel is gated.
- 14 **PILOT\_INC<sub>s</sub>** – Pilot PN sequence offset index increment. The interval between pilots, in  
15 units of 64 PN chips, for base stations in a system.
- 16 **PILOT\_PN<sub>s</sub>** – Pilot Channel PN sequence offset, in units of 64 PN chips, for a base station.
- 17 **PILOT\_PN\_PHASE** – Calculated Pilot Channel PN phase, in chips, including the PN  
18 sequence offset and the arrival time relative to the mobile station's time reference.
- 19 **PILOT\_REPORT<sub>s</sub>** – Pilot reporting indicator.
- 20 **PLCM\_TYPE<sub>s</sub>** – Public long code mask type. Indicates the long code mask generation  
21 algorithm when Public Long Code Mask is in use. See 2.3.6.
- 22 **POTENTIAL\_CDMACH<sub>s</sub>** – The CDMA Channel number that could potentially be used by  
23 the mobile station.
- 24 **POWER\_DOWN\_REG<sub>s</sub>** – Power down registration enable indicator.
- 25 **POWER\_UP\_REG<sub>s</sub>** – Power up registration enable indicator.
- 26 **PPSMM\_PERIOD<sub>s</sub>** – The period used in the Periodic Serving Frequency Pilot Report  
27 Procedure.
- 28 **PRAT<sub>s</sub>** – Data rate of the Paging Channels.
- 29 **P\_REV<sub>s</sub>** – Protocol revision level supported by a base station.
- 30 **P\_REV\_IN\_USE<sub>s</sub>** – Protocol revision level currently in use by a mobile station.
- 31 **PREF\_MSID\_TYPE<sub>s</sub>** – Preferred mobile station identifier field type.
- 32 **PREVIOUS\_ACTIVE\_PILOT<sub>s</sub>** – Identifies the pilot, if any, which was in the Active Set  
33 immediately prior to the current pilot in the Active Set, during the current access attempt.
- 34 **PRI\_NGHBR\_LST<sub>s</sub>** – *Private Neighbor List Message* sent indicator.
- 35 **PRI\_NGHBR\_PN** – Private Neighbor base station Pilot Channel PN sequence offset in units  
36 of 64 PN chips.

- 1 **PRI\_NGHBR\_REC** – Record containing information about a private neighbor base station
- 2 (see also PRI\_NGHBR\_REC\_LIST).
- 3 **PRI\_NGHBR\_REC\_LIST** – Private neighbor base station record list. A descriptive
- 4 structure used to manage the base station's information records about private neighbor
- 5 base stations (see also PRI\_NGHBR\_REC).
- 6 **PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>** – Private Neighbor List Message sequence number.
- 7 **PROBE\_BKOFF<sub>s</sub>** – Access Channel probe backoff range, in slots.
- 8 **PROBE\_PN\_RAN<sub>s</sub>** – Range for hashing function selection of the delay prior to transmission
- 9 of Access Channel probes. Value is  $\log_2(\text{range} + 1)$ .
- 10 **PSIST<sub>s</sub>** – Persistence value for the mobile station's overload class.
- 11 **PUF\_FREQ\_INCL<sub>s</sub>** – Flag to indicate whether the mobile station is to transmit a PUF probe
- 12 on the serving frequency or on a target frequency.
- 13 **PUF\_INIT\_PWR<sub>s</sub>** – Power increase (in dB) of the first PUF pulse in a PUF attempt.
- 14 **PUF\_INTERVAL<sub>s</sub>** – Number of frames between the start of each PUF probe.
- 15 **PUF\_PULSE\_SIZE<sub>s</sub>** – Duration of a PUF pulse in power control groups.
- 16 **PUF\_PWR\_STEP<sub>s</sub>** – Amount (in dB) by which the mobile station is to increment the power
- 17 of a PUF pulse above nominal power from one PUF pulse to the next.
- 18 **PUF\_SETUP\_SIZE<sub>s</sub>** – Number of power control groups within a PUF probe before the
- 19 transmission of the PUF pulse.
- 20 **PUF\_SF\_CDMABAND<sub>s</sub>** – Serving Frequency CDMA band class.
- 21 **PUF\_SF\_CDMACH<sub>s</sub>** – Serving Frequency CDMA Channel number.
- 22 **PUF\_TF\_CDMABAND<sub>s</sub>** – Target Frequency CDMA band class.
- 23 **PUF\_TF\_CDMACH<sub>s</sub>** – Target Frequency CDMA Channel number.
- 24 **PUF\_TX\_PWR<sub>s</sub>** – Mobile station's output power for the PUF pulse.
- 25 **PWR\_CNTL\_STEP<sub>s</sub>** – Power control step size assigned by the base station that the mobile
- 26 station is to use for closed loop power control.
- 27 **PWR\_PERIOD\_ENABLE<sub>s</sub>** – Forward power control periodic reporting enabled indicator.
- 28 **PWR\_REP\_DELAY<sub>s</sub>** – Power report delay. The period that the mobile station waits
- 29 following an autonomous *Power Measurement Report* before restarting frame counting for
- 30 power control purposes.
- 31 **PWR\_REP\_FRAMES<sub>s</sub>** – Power control reporting frame count. The number of frames over
- 32 which the mobile station is to count frame errors. Value is  $2 \times \log_2(\text{frames} / 5)$ .
- 33 **PWR\_REP\_THRESH<sub>s</sub>** – Power control reporting threshold. The number of bad frames to
- 34 be received in a measurement period before the mobile station is to generate a *Power*
- 35 *Measurement Report Message*.
- 36 **PWR\_STEP<sub>s</sub>** – Power increment for successive access probes, in units of 1.0 dB.

- 1 **PWR\_THRESH\_ENABLE<sub>s</sub>** – Forward power control threshold reporting enabled indicator.
- 2 **QOF\_ID<sub>s</sub>** – Quasi-orthogonal function index on the Supplemental Channel.
- 3 **QPAGECH<sub>s</sub>** – Current Quick Paging Channel number.
- 4 **QPCH\_CCI\_SUPPORTED<sub>s</sub>** – Flag to indicate if configuration change indicators are  
5 supported on the Quick Paging Channel.
- 6 **QPCH\_POWER\_LEVEL\_PAGE<sub>s</sub>** – Relative power level of the transmitted Quick Paging  
7 Channel Paging Indicator modulation symbols, relative to the Forward Pilot Channel.
- 8 **QPCH\_POWER\_LEVEL\_CONFIG<sub>s</sub>** – Relative power level of the transmitted Quick Paging  
9 Channel Configuration Change Indicator modulation symbols, relative to the Forward Pilot  
10 Channel.
- 11 **QPCH\_RATE<sub>s</sub>** – Indicator rate of the current Quick Paging Channel(s).
- 12 **QPCH\_SUPPORTED<sub>s</sub>** – Flag to indicate if the Quick Paging Channel is supported by the  
13 base station.
- 14 **RA** – Random access channel number. The Access Channel number generated (pseudo-  
15 randomly) by the mobile station.
- 16 **RAND<sub>s</sub>** – Authentication random challenge value.
- 17 **RANDC** – The eight most-significant bits of the random challenge value used by the  
18 mobile station.
- 19 **RANDOM\_TIME** – Random time. A portion of SYS\_TIME used to seed the random number  
20 generator.
- 21 **RC\_CAP\_REQUESTED<sub>s</sub>** – Radio Configuration Capability indicator. When set to “1” the  
22 mobile station shall include the Radio Configuration capabilities that it supports in the  
23 *Origination Message and Page Response Message*.
- 24 **RCCCH\_SLOT<sub>s</sub>** – See [2].
- 25 **RCCCH\_SLOT\_OFFSET1<sub>s</sub>** – See [2].
- 26 **RCCCH\_SLOT\_OFFSET2<sub>s</sub>** – See [2].
- 27 **REDIRECTION<sub>s</sub>** – Service redirection indicator. Set to enabled to indicate that service  
28 redirection is currently in effect; otherwise, set to disabled.
- 29 **REDIRECT\_REC<sub>s</sub>** – Holds the service redirection criteria specified in the redirection  
30 record of the most recently received *Extended Global Service Redirection Message, Global*  
31 *Service Redirection Message* or *Service Redirection Message*.
- 32 **REDIRECT\_REC\_LIST** – An array of redirection records selected from the most recently  
33 received *Extended Global Service Redirection Message*. Each redirection record in this  
34 array specifies a redirection criteria. See REDIRECT\_REC<sub>s</sub>.
- 35 **REG\_COUNT<sub>s</sub>** – The timer-based registration counter.
- 36 **REG\_COUNT\_MAX<sub>s</sub>** – Timer-based registration count limit. The timer-based registration  
37 counter expiration value computed from REG\_PRD<sub>r</sub>.

- 1    **REG\_DIST<sub>s</sub>** – Registration distance. Distance from last registration that causes a  
2    distance-based registration to occur.
- 3    **REG\_ENABLED<sub>s</sub>** – Autonomous registrations enabled indicator.
- 4    **REG\_NID<sub>s</sub>** – Network identification corresponding to the base station where the mobile  
5    station is considered registered upon receiving confirmation of delivery of *Registration*  
6    *Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 7    **REG\_REG\_ZONE<sub>s</sub>** – Registration zone number corresponding to the base station where  
8    the mobile station is considered registered upon receiving confirmation of delivery of  
9    *Registration Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 10   **REG\_SECURITY\_RESYNC** – Security re-sync required registration indicator.
- 11   **REG\_SID<sub>s</sub>** – System identification corresponding to the base station where the mobile  
12   station is considered registered upon receiving confirmation of delivery of *Registration*  
13   *Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 14   **REGISTERED<sub>s</sub>** – Mobile station registered indicator.
- 15   **REG\_PRD<sub>s</sub>** – Registration period. The time interval between timer-based registrations.  
16   Value is  $4 \times \log_2(\text{time} / 0.08 \text{ s})$ .
- 17   **REG\_PERSIST<sub>s</sub>** – Persistence modifier for registration accesses (except ordered registrations).
- 18   **REG\_ZONE<sub>s</sub>** – Registration zone number of the base station.
- 19   **REG\_ZONE\_TIMER<sub>s</sub>** – Zone timer length corresponding to the base station where the  
20   mobile station is considered registered upon receiving confirmation of delivery of  
21   *Registration Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 22   **REJECT\_UZID<sub>s</sub>** – User Zone identifier of the User Zone rejected by the base station.
- 23   **RELEASE\_TO\_IDLE\_IND<sub>s</sub>** – Indicator of whether the mobile station is allowed to  
24   transition directly to the *Mobile Station Idle State* upon releasing all the dedicated  
25   channels.
- 26   **RER\_MAX\_NUM\_MSG<sub>s</sub>** – The maximum number of Radio Environment Messages that the  
27   mobile station is permitted to transmit while in the radio environment reporting mode.
- 28   **RER\_MODE\_ENABLED** – Flag that indicates whether the radio environment reporting  
29   mode is currently enabled at the mobile station.
- 30   **RER\_PILOT\_LIST** – Radio environment report pilot list used while in the radio  
31   environment reporting mode.
- 32   **RER\_MODE\_SUPPORTED<sub>s</sub>** – Base station support of radio environment reporting mode  
33   indicator.
- 34   **RESELECT\_INCLUDED<sub>s</sub>** – System reselection information included indicator. When this  
35   is set to '1', the system reselection procedure is enabled.
- 36   **RESPOND\_IND<sub>s</sub>** – Respond Requested Indicator. Indicates if the mobile station is to  
37   acknowledge direct channel assignment by sending a page response message or a  
38   reconnect message in unassured mode.

- 1 **RESQ\_ENABLED<sub>s</sub>** – Call rescue feature enabled indicator. Flag to indicate if the call  
2 rescue feature is enabled in the network.
- 3 **RESQ\_ALLOWED\_TIME<sub>s</sub>** – Call rescue allowed timer. Specifies the maximum interval  
4 that the mobile station has to begin a call rescue soft handoff attempt, after the call rescue  
5 delay timer expires.
- 6 **RESQ\_ATTEMPT\_TIME<sub>s</sub>** – Call rescue attempt timer. Specifies the maximum time a  
7 mobile station is allowed to keep its transmitter re-enabled while waiting to receive N<sub>3m</sub>  
8 consecutive good frames during a call rescue soft handoff attempt.
- 9 **RESQ\_CODE\_CHAN<sub>s</sub>** – The code channel index of the Rescue Channel for neighbor base  
10 stations that are configured with a Rescue Channel.
- 11 **RESQ\_DELAY\_TIME<sub>s</sub>** – Call rescue delay timer. Specifies the minimum delay before the  
12 mobile station can attempt call rescue soft handoff, after the mobile station disables its  
13 transmitter due to receiving N<sub>2m</sub> consecutive bad frames or declaring an acknowledgment  
14 failure.
- 15 **RESQ\_MIN\_PERIOD<sub>s</sub>** – Minimum time between consecutive call rescues. Specifies the  
16 minimum time after a successful call rescue (i.e. receipt of N<sub>3m</sub> consecutive good frames  
17 by the mobile station after the rescue attempt timer is enabled) before any subsequent call  
18 rescue attempts can be initiated.
- 19 **RESQ\_NUM\_PREAMBLE\_RC1\_RC2<sub>s</sub>** – The Traffic Channel preamble length for Call  
20 Rescue Soft Handoff when operating in Radio Configuration 1 or 2.
- 21 **RESQ\_NUM\_PREAMBLE<sub>s</sub>** – The Traffic Channel preamble length for Call Rescue Soft  
22 Handoff when operating in Radio Configuration greater than 2.
- 23 **RESQ\_NUM\_TOT\_TRANS\_20MS<sub>s</sub>** – The required number of transmissions of a regular  
24 PDU before declaring a L2 Acknowledgment Failure when Call Rescue is enabled.
- 25 **RESQ\_NUM\_TOT\_TRANS\_5MS<sub>s</sub>** – The required number of transmissions of a mini PDU  
26 before declaring a L2 Acknowledgment Failure when Call Rescue is enabled.
- 27 **RESQ\_POWER\_DELTA<sub>s</sub>** – The power level adjustment to be applied to the last closed-loop  
28 power level when re-enabling the transmitter for call rescue soft handoff.
- 29 **RESQ\_QOF<sub>s</sub>** – The Quasi-Orthogonal Function mask identifier of the Rescue Channel for  
30 neighbor base stations that are configured with a Rescue Channel.
- 31 **RESUME\_PREAMBLE<sub>s</sub>** – A storage variable in the mobile station that contains the size of  
32 the preamble that shall be transmitted on a Reverse Supplemental Code Channel at the  
33 beginning of transmission on a Reverse Supplemental Code Channel when resuming  
34 transmission following an interruption when discontinuous transmission is occurring.
- 35 **RETRY\_DELAY<sub>s</sub>[i]** – A storage variable in the mobile station that contains the system time  
36 before which the mobile station may not transmit a specific message. The type of message  
37 that cannot be transmitted is specified by RETRY\_TYPE, represented here by i. A  
38 RETRY\_DELAY<sub>s</sub>[i] value of 0 indicates no retry delay is in effect, and a value of '1111111'  
39 indicates an infinite retry delay.
- 40 **RETRY\_DELAY\_UNIT<sub>s</sub>** – The units for the value of RETRY\_DELAY<sub>s</sub>. Possible values are

- 1 1000ms and 60000ms.
- 2 **RETRY\_DELAY\_VALUE<sub>s</sub>** – The unitless value of the retry delay.
- 3 **RETRY\_TYPE<sub>s</sub>** – The retry delay type. It specifies the type of message to which the retry
- 4 delay value applies. If set to a value of 0, it indicates that all retry delay values should be
- 5 cleared.
- 6 **RETURN\_CAUSE<sub>s</sub>** – Reason for the mobile station registering or accessing the system.
- 7 **RETURN\_IF\_FAIL<sub>s</sub>** – Return if fail indicator. Set to '1' to indicate that mobile station is to
- 8 return to the system from which it was redirected if it fails to acquire service on a system
- 9 using specified redirection criteria. Otherwise, set to '0'.
- 10 **RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub>** – Return if handoff fail indicator. Indicates if the mobile
- 11 station is to resume using the Active Set on the Serving Frequency following an
- 12 unsuccessful hard handoff attempt.
- 13 **REV\_DCCH\_MUX\_OPTION<sub>s</sub>** – Reverse Dedicated Control Channel Multiplex Option.
- 14 **REV\_DTX\_DURATION<sub>s</sub>** – Maximum duration of time in units of 20 ms that the mobile
- 15 station is allowed to stop transmitting on a Reverse Supplemental Code Channel within
- 16 the reverse assignment duration.
- 17 **REV\_DURATION<sub>s</sub>** – A stored variable in the mobile station that contains the duration (in
- 18 units of 80 ms) of the Reverse Supplemental Code Channel transmission that will begin at
- 19 time REV\_START\_TIME<sub>s</sub>.
- 20 **REV\_FCH\_GATING\_MODE<sub>s</sub>** – The reverse Fundamental Traffic Channel gating mode in
- 21 Radio Configurations 3, 4, 5, and 6 where 50% of the PCGs in the 1500 bps and 1800 bps
- 22 frames are gated off (see [2]). Set to '1' if the mobile station is operating in the reverse
- 23 fundamental channel gating mode.
- 24 **REV\_FCH\_MUX\_OPTION<sub>s</sub>** – Reverse Fundamental Channel Multiplex Option.
- 25 **REV\_FCH\_RC<sub>s</sub>** – Reverse Fundamental Channel Radio Configuration.
- 26 **REV\_FRAME\_40\_MAX\_RATE<sub>s</sub>** – The maximum data rate for the mobile station's
- 27 transmission at 40 ms frame length on the Reverse Supplemental Channel.
- 28 **REV\_FRAME\_80\_MAX\_RATE<sub>s</sub>** – The maximum data rate for the mobile station's
- 29 transmission at 80 ms frame length on the Reverse Supplemental Channel.
- 30 **REV\_LINKED\_HDM\_SEQ<sub>s</sub>** – Storage variable containing the most recent reverse sequence
- 31 number of the *General Handoff Direction Message* to which a *Supplemental Channel*
- 32 *Assignment Message* reverse assignment was linked.
- 33 **REV\_PDCH\_AUTO\_ALLOWED<sub>s</sub>[i]** – Reverse Packet Data Channel Autonomous
- 34 Transmission allowed indicator. An on or off indicator used to identify whether
- 35 autonomous transmission is allowed or not allowed for each SR\_ID.
- 36 **REV\_PDCH\_BOOST\_ALLOWED<sub>s</sub>[i]** – Reverse Packet Data Channel boost allowed
- 37 indicator. An on or off indicator that identifies whether traffic to pilot ratio boosting is
- 38 allowed or not allowed for each SR\_ID.
- 39 **REV\_PDCH\_BOOST\_OVERSHOOT<sub>s</sub>** – Reverse Packet Data Channel Boost Overshoot.

1 **REV\_PDCH\_BUFFER\_SIZE<sub>s</sub>[i]** – Reverse Packet Data Buffer size. An array of buffer sizes  
2 that correspond to the buffer status.

3 **REV\_PDCH\_DEFAULT\_PERSISTENCE<sub>s</sub>** – Reverse Packet Data Default Persistence. The  
4 initial default persistence value.

5 **REV\_PDCH\_GRANT\_PRECEDENCE<sub>s</sub>** – Reverse Packet Data Channel Grant  
6 Precedence Indicator.

7 **REV\_PDCH\_INIT\_TARGET\_TPR<sub>s</sub>** – Reverse Packet Data Channel Initial Target for Traffic  
8 to pilot ratio. The initial target traffic to pilot ratio.

9 **REV\_PDCH\_MAX\_AUTO\_TPR<sub>s</sub>** – The maximum traffic to pilot ratio for autonomous  
10 transmission.

11 **REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>s</sub>**– Maximum Allowed Reverse  
12 Packet Data Channel encoder packet size.

13 **REV\_PDCH\_MAX\_SIZE\_SUPPORTED\_ENCODER\_PACKET** – Maximum supported  
14 Reverse Packet Data Channel encoder packet size by the mobile station.

15 **REV\_PDCH\_MAX\_TARGET\_TPR<sub>s</sub>** – Reverse Packet Data Maximum Target Traffic to Pilot  
16 Ratio. The maximum target traffic to pilot ratio that is allowed.

17 **REV\_PDCH\_MSIB\_SUPPORTED<sub>s</sub>** – Reverse Packet Data Channel Mobile Station Indicator  
18 Supported Bit.

19 **REV\_PDCH\_MUX\_OPTION\_HIGH\_RATE<sub>s</sub>** – Reverse Packet Data Channel Multiplex  
20 Option for higher data rates indicator.

21 **REV\_PDCH\_MUX\_OPTION\_LOW\_RATE<sub>s</sub>** – Reverse Packet Data Channel Multiplex  
22 Option for lower data rates indicator.

23 **REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST<sub>s</sub>** – The maximum number of ARQ rounds for  
24 boosted transmission that can be performed on the Reverse Packet Data Channel.

25 **REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>s</sub>** – The maximum number of ARQ rounds for  
26 non-boosted transmission that can be performed on the Reverse Packet Data Channel.

27 **REV\_PDCH\_QUICK\_START\_THRESH<sub>s</sub>** – Reverse Packet Data Quick Start Threshold. The  
28 Quick start threshold for the Reverse Packet Data Control Channel.

29 **REV\_PDCH\_RC** – Reverse Packet Data Channel radio configuration.

30 **REV\_PDCH\_RESET\_PERSISTENCE<sub>s</sub>** – Reverse Packet Data Channel Reset Persistence.  
31 Determines the value of current persistence [3] at the end of a non-persistent grant for the  
32 Reverse Packet Data Channel.

33 **REV\_PDCH\_REQCH\_TRIGGER<sub>s</sub>[i]** – Reverse Packet Data Request Channel Trigger. The  
34 following parameters are contained in this array and will be triggered for the REQCH.

- 35 • **REV\_REQCH\_MIN\_DURATION** – Minimum duration between REQCH messages for  
36 this SR\_ID.
- 37 • **REV\_REQCH\_USE\_BUFFER\_REPORTS** – An on or off indicator used to allow buffer  
38 reports.

- 1       • REV\_REQCH\_USE\_POWER\_REPORTS – An on or off indicator used to allow power  
2       status reports.
- 3       • REV\_REQCH\_USE\_WATERMARKS – An on or off indicator used to allow watermark  
4       reports.
- 5       • REV\_REQCH\_HIGH\_WATERMARK – The high watermark level, in octets.
- 6       • REV\_REQCH\_LOW\_WATERMARK – The low watermark level, in octets.
- 7       • REV\_REQCH\_CEILING – The high ceiling level, in octets, used for high priority  
8       reporting.
- 9       • REV\_REQCH\_FLOOR – The low floor level, in octets, used for high priority  
10      reporting.
- 11      **REV\_PDCH\_SOFT\_HANDOFF\_RESET\_IND<sub>s</sub>** – Reverse Packet Data Channel Soft Handoff  
12      Reset Indicator. An indicator used to determine whether the Reverse Packet Data  
13      Channel control function must be initialized when soft selection is to occur or not.
- 14      **REV\_PDCH\_STEP\_DOWN<sub>s</sub>[i]** – Reverse Packet Data Channel Step “down” for rate  
15      control.
- 16      **REV\_PDCH\_STEP\_UP<sub>s</sub>[i]** – Reverse Packet Data Channel Step “up” for rate  
17      control.
- 18      **REV\_PDCH\_TABLE\_SEL<sub>s</sub>** – Reverse Packet Data Channel Table selector.
- 19      **REV\_PDCH\_TPR\_BOOSTED<sub>s</sub>[i]** – Reverse Packet Data Traffic to Pilot Ratio Boosted. An  
20      array indicating the traffic to pilot ratio for boosted traffic.
- 21      **REV\_PDCH\_TPR\_NORMAL<sub>s</sub>[i]** – Reverse Packet Data Channel Traffic to Pilot Normal. An  
22      array indicating the traffic to pilot ratio for non-boosted traffic.
- 23      **REV\_PWR\_CNTL\_DELAY<sub>s</sub>** – The reverse link power control delay for the reverse  
24      fundamental channel gating mode in Radio Configurations 3, 4, 5, and 6 and the gated  
25      preamble transmission on the Enhanced Access Channel or the Reverse Common Control  
26      Channel. The delay is the time between the end of the reverse link PCG and the  
27      beginning of the forward link PCG minus one, when the round trip delay is zero.
- 28      **REV\_RC<sub>s</sub>** – Reverse Channel Radio Configuration.
- 29      **REV\_REQCH\_ADJ\_GAIN<sub>s</sub>** – Reverse Request Channel Adjustment Gain.
- 30      **REV\_REQCH\_HEADROOM\_DURATION<sub>s</sub>** – Reverse Request Channel minimum power  
31      headroom update trigger interval.
- 32      **REV\_REQCH\_MAX\_POWER\_UPDATE\_DURATION<sub>s</sub>** – Reverse Request Channel  
33      maximum power headroom update trigger interval.
- 34      **REV\_REQCH\_POWER\_HEADROOM\_DECREASE<sub>s</sub>** – Reverse Request Channel Power  
35      headroom decrease delta to trigger power report.



- 1 **REV\_REQCH\_POWER\_HEADROOM\_INCREASE<sub>s</sub>** – Reverse Request Channel Power  
2 headroom increase delta to trigger power report.
- 3 **REV\_REQCH\_QUICK\_REPEAT\_ALLOWED<sub>s</sub>** – Reverse Request Channel Quick Repeat  
4 Allowed indicator.
- 5 **REV\_SCH\_DTX\_DURATION<sub>s</sub>** – Maximum duration of time in units of 20 ms that the  
6 mobile station is allowed to stop transmitting on a Reverse Supplemental Channel within  
7 the reverse assignment duration.
- 8 **REV\_SCH\_DURATION<sub>s</sub>** – A stored variable in the mobile station which contains the  
9 duration of the Reverse Supplemental Channel transmission which will begin at time  
10 REV\_SCH\_START\_TIME<sub>s</sub>.
- 11 **REV\_SCH\_FRAME\_LENGTH<sub>s</sub>** – The Reverse Supplemental Channel frame length.
- 12 **REV\_SCH\_RATE<sub>s</sub>** – The rate of the Reverse Supplemental Channel.
- 13 **REV\_SCH\_START\_TIME<sub>s</sub>** – A stored variable in the mobile station which contains the  
14 System Time, in units of time specified by START\_TIME\_UNIT<sub>s</sub>, (modulo 32) at which the  
15 mobile station shall start (or resume) processing Reverse Supplemental Channels.
- 16 **REV\_SPICH\_ADJ\_GAIN<sub>s</sub>** – Reverse Secondary Pilot Channel Adjustment Gain.
- 17 **REV\_SPICH\_EP\_SIZE<sub>s</sub>** – Minimum Encoder Packet Size for which the Reverse  
18 Secondary Pilot Channel is used.
- 19 **REV\_START\_TIME<sub>s</sub>** – A stored variable in the mobile station that contains the next 80 ms  
20 frame boundary (modulo 64) on which the mobile station is assigned to start Reverse  
21 Supplemental Code Channel transmission.
- 22 **REV\_WALSH\_ID<sub>s</sub>** – Reverse Supplemental Channel Walsh cover Identifier.
- 23 **RLGAIN\_ACKCH\_PILOT<sub>s</sub>** – Reverse Acknowledgment Channel to pilot adjustment  
24 gain.
- 25 **RLGAIN\_CQICH\_PILOT<sub>s</sub>** – Reverse Channel Quality Indicator Channel to pilot  
26 adjustment gain.
- 27 **RLGAIN\_PDCCH\_PILOT<sub>s</sub>** – Reverse Packet Data Channel to pilot adjustment gain.
- 28 **RLGAIN\_REQCH\_PILOT<sub>s</sub>** – Reverse Request Channel to pilot adjustment gain.
- 29 **RLGAIN\_SPICH\_PILOT<sub>s</sub>** – Reverse Secondary Pilot Channel to pilot adjustment  
30 gain.
- 31 **RN\_HASH\_KEY<sub>s</sub>** – Name of an internal variable having the same value as the mobile  
32 station's ESN. This variable is used by procedures defined in [3].
- 33 **ROAM\_INDI<sub>s</sub>** – Enhanced roaming indicator used for mobile station roaming condition  
34 display.
- 35 **RS** – Inter-probe sequence backoff. The delay in slots generated (pseudorandomly) by the  
36 mobile station following an unsuccessful access probe sequence or prior to the first access  
37 probe in a response attempt.

- 1    **RSC\_END\_TIME** – Reduced slot cycle mode end time. The system time at which a mobile
- 2    station operating in the reduced slot cycle mode will exit the mode.
- 3    **RSC\_MODE\_ENABLED** – Mobile Station flag that indicates whether reduced slot cycle
- 4    mode is enabled.
- 5    **RSCI<sub>s</sub>** – Reduced slot cycle index.
- 6    **RT** – Inter-probe backoff. The delay in slots generated (pseudorandomly) by the mobile
- 7    station following an unacknowledged access probe.
- 8    **RTC\_NOM\_PWR<sub>s</sub>** – Reverse Traffic Channel Nominal Power. The nominal power to be
- 9    used by the mobile station for its initial transmission on the Reverse Traffic Channel when
- 10   Direct Channel Assignment is used.
- 11   **RTC\_NOM\_PWR\_USE\_IND** – Reverse Traffic Channel Nominal Power Used Indicator.
- 12   Indicates if the mobile station uses RTC\_NOM\_PWR<sub>s</sub>. See RTC\_NOM\_PWR<sub>s</sub>.
- 13   **SCAM\_FOR\_DURATION\_MODE<sub>s</sub>** – Indicator for a specific or an indefinite Forward
- 14   Supplemental Code Channel assignment duration.
- 15   **SCAM\_FOR\_ORDER<sub>s</sub>** – The stop or start command set by a *Supplemental Channel*
- 16   *Assignment Message* that is linked to a *General Handoff Direction Message*.
- 17   **SCAM\_REV\_DURATION\_MODE<sub>s</sub>** – Indicator for a specific or an indefinite Reverse
- 18   Supplemental Code Channel assignment duration.
- 19   **SCH\_BAD\_FRAMES<sub>s</sub>** – Forward Supplemental Channel bad frames count. The number of
- 20   received bad Forward Supplemental Channel frames.
- 21   **SCH\_TOT\_FRAMES<sub>s</sub>** – Total Forward Supplemental Channel frames received. The total
- 22   number of received Forward Supplemental Channel frames, counted for Forward Traffic
- 23   Channel power control.
- 24   **SCRM\_SEQ\_NUM<sub>s</sub>** – Storage variable containing the most recently transmitted
- 25   *Supplemental Channel Request Message* sequence number.
- 26   **SEARCH\_MODE<sub>s</sub>** – Search mode to be used in a search on the Candidate Frequency.
- 27   **SEARCH\_OFFSET<sub>s</sub>** – Time offset of the start of the first search from the action time of the
- 28   *Candidate Frequency Search Request Message* or the *Candidate Frequency Search Control*
- 29   *Message* that starts a search.
- 30   **SEARCH\_PERIOD<sub>s</sub>** – Period for search on the Candidate Frequency.
- 31   **SEARCH\_PRIORITY<sub>s</sub>** – Neighbor Pilot Channel search priority.
- 32   **SEARCH\_PRIORITY\_INCL<sub>s</sub>** – Search priorities included indicator.
- 33   **SEARCH\_TIME\_RESOLUTION<sub>s</sub>** – Unit of delay used in the *Candidate Frequency Search*
- 34   *Report Message* to report the total and maximum times away from the Serving Frequency.
- 35   **SENDING\_BSPM<sub>s</sub>** – *BCMC Service Parameters Message* is being transmitted indicator.
- 36   **SENDING\_RAND<sub>s</sub>** – *ANSI-41 RAND Message* sent indicator.

- 1 **SERV\_NEG<sub>s</sub>** – Service negotiation indicator. Indicates whether the mobile station is to  
2 use service negotiation or service option negotiation.
- 3 **SERV\_REQ\_NUM<sub>s</sub>** – Service request sequence number. Sequence number to use when  
4 requesting a new service configuration.
- 5 **SERVSYS<sub>s</sub>** – Selected serving system indicator for Band Class 0. Set to SYS\_A if the  
6 mobile station operates in system A; otherwise, set to SYS\_B.
- 7 **SETTING\_SEARCH\_WIN** – SRCH\_WIN\_NGHBR Setting flag. Set to '1' if the mobile station  
8 shall set the SRCH\_WIN\_NGHBR field of each NGHBR\_REC to SEARCH\_WIN\_N<sub>s</sub> for all  
9 NGHBR\_SET\_SIZE<sub>s</sub> entries upon receiving the *System Parameters Message*.
- 10 **SF\_ADD\_INTERCEPT<sub>s</sub>** – Intercept of the handoff add criterion for the Serving Frequency,  
11 stored during hard handoff.
- 12 **SF\_CDMABAND<sub>s</sub>** – Serving Frequency CDMA band class, stored during hard handoff.
- 13 **SF\_CDMACH<sub>s</sub>** – Serving Frequency CDMA Channel number, stored during hard handoff.
- 14 **SF\_CODE\_CHAN\_LIST<sub>s</sub>** – Serving Frequency Code Channel List, stored during hard  
15 handoff.
- 16 **SF\_DROP\_INTERCEPT<sub>s</sub>** – Intercept of the handoff drop criterion for the Serving  
17 Frequency, stored during hard handoff.
- 18 **SF\_ENCRYPT\_MODE<sub>s</sub>** – Message encryption indicator for the Serving Frequency, stored  
19 during hard handoff.
- 20 **SF\_FRAME\_OFFSET<sub>s</sub>** – Traffic Channel frame offset used on the Serving Frequency,  
21 stored during hard handoff.
- 22 **SF\_NOM\_PWR<sub>s</sub>** – Nominal transmit power offset used on the Serving Frequency, stored  
23 during hard handoff.
- 24 **SF\_NOM\_PWR\_EXT<sub>s</sub>** – Extended nominal transmit power offset indicator for the Serving  
25 Frequency, stored during hard handoff.
- 26 **SF\_P\_REV<sub>s</sub>** – Protocol revision level supported by the base station on the Serving  
27 Frequency.
- 28 **SF\_P\_REV\_IN\_USE<sub>s</sub>** – Protocol revision level currently used by the mobile station on the  
29 Serving Frequency.
- 30 **SF\_PLCM\_TYPE<sub>s</sub>** – Public long code mask type for the Serving Frequency, stored during  
31 hard handoff.
- 32 **SF\_PLCM\_39<sub>s</sub>** – 39-bit public long code mask specified by the base station for the Serving  
33 Frequency, stored during hard handoff.
- 34 **SF\_PRIVATE\_LCM<sub>s</sub>** – Private long code mask indicator for the Serving Frequency, stored  
35 during hard handoff.
- 36 **SF\_PVTLCM\_42<sub>s</sub>** – Private long code mask for the Serving Frequency, stored during hard  
37 handoff.

- 1 **SF\_SERV\_NEG<sub>s</sub>** – Service negotiation indicator for the Serving Frequency, stored during
- 2 hard handoff.
- 3 **SF\_SERVICE\_CONFIG<sub>s</sub>** – Service configuration (service configuration record and non-
- 4 negotiable service configuration record) for the Serving Frequency.
- 5 **SF\_SOFT\_SLOPE<sub>s</sub>** – Slope of the handoff add/drop criterion for the Serving Frequency,
- 6 stored during hard handoff.
- 7 **SF\_SRCH\_WIN\_A<sub>s</sub>** – Search window size for the Active Set and Candidate Set used on the
- 8 Serving Frequency, stored during hard handoff.
- 9 **SF\_SRCH\_WIN\_N<sub>s</sub>** – Search window size for the Neighbor Set used on the Serving
- 10 Frequency, stored during hard handoff.
- 11 **SF\_SRCH\_WIN\_R<sub>s</sub>** – Search window size for the Remaining Set used on the Serving
- 12 Frequency, stored during hard handoff.
- 13 **SF\_T\_ADD<sub>s</sub>** – Pilot detection threshold used on the Serving Frequency, stored during hard
- 14 handoff.
- 15 **SF\_T\_COMP<sub>s</sub>** – Active Set versus Candidate Set comparison threshold used on the
- 16 Serving Frequency, stored during hard handoff.
- 17 **SF\_T\_DROP<sub>s</sub>** – Pilot drop threshold used on the Serving Frequency, stored during hard
- 18 handoff.
- 19 **SF\_T\_TDROP<sub>s</sub>** – Pilot drop timer value used on the Serving Frequency, stored during hard
- 20 handoff.
- 21 **SF\_T\_TDROP\_RANGE<sub>s</sub>** – Pilot drop timer range value used on the Serving Frequency,
- 22 stored during hard handoff.
- 23 **SF\_TOTAL\_EC\_THRESH<sub>s</sub>** – Threshold for total  $E_c$  of pilots in the Serving Frequency
- 24 Active Set used in the Candidate Frequency periodic search procedures.
- 25 **SF\_TOTAL\_EC\_IO\_THRESH<sub>s</sub>** – Threshold for total  $E_c/I_o$  of pilots in the Serving Frequency
- 26 Active Set used in the Candidate Frequency periodic search procedures.
- 27 **SID<sub>s</sub>** – System identifier.
- 28 **SID\_NID\_LIST<sub>s</sub>** – Registration SID, NID list. The SID, NID pairs in which the mobile
- 29 station has registered.
- 30 **SLOT\_CYCLE\_INDEX<sub>s</sub>** – Slot cycle index. This is a signed parameter that can take values
- 31 between -4 and +7, inclusive. It is computed from the SLOT\_CYCLE\_INDEX\_REG, and
- 32 bounded by the minimum and maximum slot cycle indices allowed by the current base
- 33 station.
- 34 **SLOT\_CYCLE\_INDEX\_REG** – Slot cycle index registered. This is a signed parameter that
- 35 can take values between -4 and +7, inclusive. It is computed based on the slot cycle index
- 36 value included in the last registration attempt.
- 37 **SLOT\_NUM** – Paging Channel or Forward Common Control Channel slot number.

- 1    **SOFT\_SLOPE<sub>s</sub>** – The slope in the inequality criterion for adding a pilot to the Active Set, or
- 2    dropping a pilot from the Active Set.
- 3    **SO\_REQ<sub>s</sub>** – Service option request number. The number of the service option requested
- 4    by the mobile station during service option negotiation.
- 5    **SR1\_BRAT\_NON\_TD<sub>s</sub>** – Spreading Rate 1 Primary Broadcast Control Channel data rate
- 6    with no transmit diversity.
- 7    **SR1\_BRAT\_TD<sub>s</sub>** – Spreading Rate 1 Primary Broadcast Control Channel data rate with
- 8    transmit diversity.
- 9    **SR1\_CRAT\_NON\_TD<sub>s</sub>** – Spreading Rate 1 coding rate with no transmit diversity.
- 10   **SR1\_CRAT\_TD<sub>s</sub>** – Spreading Rate 1 coding rate with transmit diversity.
- 11   **SR1\_TD\_MODE<sub>s</sub>** – Spreading Rate 1 transmit diversity mode in support of OTD or STS.
- 12   **SR1\_TD\_LEVEL<sub>s</sub>** – Spreading Rate 1 transmit diversity power level.
- 13   **SR3\_BRAT<sub>s</sub>** – Data rate of the Broadcast Control Channel on SR3 frequencies.
- 14   **SR3\_PRIMARY\_PILOT<sub>s</sub>** – Frequency offset of the primary SR3 pilot.
- 15   **SR3\_PILOT\_POWER1<sub>s</sub>** – The power level of the primary pilot with respect to the pilot on
- 16   the lower frequency of the two remaining SR3 frequencies.
- 17   **SR3\_PILOT\_POWER2<sub>s</sub>** – The power level of the primary pilot with respect to the pilot on
- 18   the higher frequency of the two remaining SR3 frequencies.
- 19   **SRCH\_OFFSET\_INCL<sub>s</sub>** – Neighbor pilot search window offset included indicator.
- 20   **SRCH\_OFFSET\_NGHBR<sub>s</sub>** – Neighbor pilot search window offset.
- 21   **SRCH\_WIN\_A<sub>s</sub>** – Search window size for the Active Set and Candidate Set.
- 22   **SRCH\_WIN\_NGHBR<sub>s</sub>** – Neighbor Pilot Channel search window size.
- 23   **SRCH\_WIN\_NGHBR\_INCL<sub>s</sub>** – Neighbor Pilot Channel search window size included
- 24   indicator.
- 25   **SRCH\_WIN\_N<sub>s</sub>** – Search window size for the Neighbor Set.
- 26   **SRCH\_WIN\_R<sub>s</sub>** – Search window size for the Remaining Set.
- 27   **START\_TIME\_UNIT<sub>s</sub>** – A stored variable in the mobile station which contains the time
- 28   unit used for determining FOR\_SCH\_START\_TIME and REV\_SCH\_START\_TIME on
- 29   Supplemental Channels.
- 30   **SYNC\_ID<sub>s</sub>** – Service Configuration Synchronization Identifier identifying the service
- 31   configuration currently in use (i.e. Service Configuration information record and Non-
- 32   negotiable Service Configuration information record).
- 33   **SYS\_PAR\_MSG\_SEQ<sub>s</sub>** – *System Parameters Message* sequence number.
- 34   **SYS\_TIME<sub>s</sub>** – Current value of CDMA system time as received in the *Sync Channel*
- 35   *Message*.
- 36   **TA** – Acknowledgment response timeout.

- 1    **T\_ADD<sub>s</sub>** – Pilot detection threshold. The stored value is a positive value in units of 0.5 dB.
- 2    **T\_COMP<sub>s</sub>** – Active Set versus Candidate Set comparison threshold. The stored value is a
- 3    positive value in units of 0.5 dB.
- 4    **T\_DROP<sub>s</sub>** – Pilot drop threshold. The stored value is a positive value in units of 0.5 dB.
- 5    **T\_TDROPRANGE<sub>s</sub>** – Pilot drop timer range value.
- 6    **T\_SLOTTED<sub>s</sub>** – Slotted timer, used for the slotted timer feature.
- 7    **TAG<sub>s</sub>** – Transaction identifier. This is a 4-bit parameter maintained by the mobile station
- 8    which is used to uniquely identify a new call origination (via an *Enhanced Origination*
- 9    *Message*) by the mobile station. When the mobile station is to send an *Enhanced*
- 10    *Origination Message*, the mobile station increments the stored value of TAG and includes it
- 11    in the message.
- 12    **TAG\_OUTSTANDING\_LIST** – List of outstanding TAG values. This corresponds to those
- 13    values of TAG sent in the *Enhanced Origination Message* which have neither been accepted
- 14    by the base station (by assigning the requested call) nor rejected by the base station.
- 15    **TBR\_RAND\_SUPPR\_ENABLE<sub>s</sub>** – Flag to indicate if suppression of timer-based registration
- 16    randomization based upon frequent implicit registrations is enabled.
- 17    **TBR\_RAND\_WINDOW<sub>s</sub>** – Indicates the window over which the next timer-based
- 18    registration following call release is randomized.
- 19    **TEMP\_SUB<sub>s</sub>** – User Zone temporary subscription flag.
- 20    **TF\_CDMABAND<sub>s</sub>** – Target Frequency CDMA band class. The CDMA band class specified
- 21    in the *Extended Handoff Direction Message* or the *General Handoff Direction Message*.
- 22    **TF\_CDMACH<sub>s</sub>** – Target Frequency CDMA Channel number. The CDMA Channel number
- 23    specified in the *Extended Handoff Direction Message* or the *General Handoff Direction*
- 24    *Message*.
- 25    **TF\_RESET\_FPC<sub>s</sub>** – Flag to initialize the Forward Traffic Channel power control counters
- 26    on the Target Frequency.
- 27    **TF\_RESET\_L2<sub>s</sub>** – Flag to reset acknowledgment procedures on the Target Frequency.
- 28    **TF\_T\_ADD<sub>s</sub>** – Pilot detection threshold to be used on the Target Frequency. The stored
- 29    value is a positive value in units of 0.5 dB.
- 30    **TF\_WAIT\_TIME<sub>s</sub>** – Maximum time that the mobile station may wait to receive a period of
- 31    ( $N_{11m} \times 20$ ) ms with sufficient signal quality on the CDMA Target Frequency.
- 32    **TKZ\_ID<sub>s</sub>** – Tracking zone identifier used while in tracking zone mode.
- 33    **TKZ\_LIST\_LEN<sub>s</sub>** – Number of tracking zone identifiers to be maintained in the tracking
- 34    zone list while in tracking zone mode.
- 35    **TKZ\_MAX\_NUM\_MSG<sub>s</sub>** – The maximum number of *Radio Environment Messages* that the
- 36    mobile station is permitted to transmit while in the tracking zone mode.
- 37    **TKZ\_MODE\_ENABLED** – Flag that indicates whether the tracking zone mode is currently
- 38    enabled at the mobile station.

- 1 **TKZ\_MODE\_PENDING** – Flag that indicates whether the tracking zone mode is currently  
2 pending at the mobile station. If the tracking zone mode is pending, then it becomes  
3 enabled when the radio environment reporting mode is disabled.
- 4 **TKZ\_MODE\_SUPPORTED<sub>s</sub>** – Base station support of tracking zone mode indicator.
- 5 **TKZ\_LIST** – Tracking zone list. A list of most recent TKZ\_IDs that the mobile station has  
6 received while in the tracking zone mode.
- 7 **TMSI\_ZONE<sub>s</sub>** – TMSI zone number of the base station.
- 8 **TMSI\_ZONE\_LEN<sub>s</sub>** – The number of octets in TMSI zone.
- 9 **T\_MULCHAN<sub>s</sub>** – The threshold offset that the mobile station is to use when reporting  
10 neighbor pilot strength measurements in a *Supplemental Channel Request Message*. The  
11 stored value is a positive value in units of 0.5 dB.
- 12 **TOTAL\_PUF\_PROBES<sub>s</sub>** – Maximum number of PUF probes transmitted in a PUF attempt.
- 13 **TOTAL\_ZONES<sub>s</sub>** – Number of registration zones to be retained in ZONE\_LIST<sub>s</sub>.
- 14 **TOT\_FRAMES<sub>s</sub>** – Total Forward Fundamental Channel frames received. The total number  
15 of received Forward Fundamental Channel frames, counted for Forward Traffic Channel  
16 power control.
- 17 **TX\_PWR\_LIMIT<sub>s</sub>** – Transmit Power Limit. If the mobile station is operating in the  
18 1915MHz – 1920MHz block of the PCS band, the mobile station is to limit its transmission  
19 power to no more than the value indicated by this field.
- 20 **T\_TDROPS** – Pilot drop timer value.
- 21 **USE\_ERAM<sub>s</sub>** – Use ERAM indicator. Indicates whether ERAM is to be used on the flexible  
22 and variable data rate Supplemental Channel with turbo codes in RC4 and RC5 Forward  
23 Link and RC4 Reverse Link.
- 24 **USE\_FOR\_HDM\_SEQ<sub>s</sub>** – Storage variable containing a flag indicating a pending  
25 *Supplemental Channel Assignment Message* forward assignment that is linked to a *General*  
26 *Handoff Direction Message*.
- 27 **USE\_REV\_HDM\_SEQ<sub>s</sub>** – Storage variable containing a flag indicating a pending  
28 *Supplemental Channel Assignment Message* reverse assignment that is linked to a *General*  
29 *Handoff Direction Message*.
- 30 **USE\_T\_ADD\_ABORT<sub>s</sub>** – A storage variable in the mobile station that contains the Reverse  
31 Supplement Code Channel assignment T\_ADD abort indicator.
- 32 **USE\_TMSI<sub>s</sub>** – Base station's preference of the use of TMSI.
- 33 **USER\_ZONE\_ID<sub>s</sub>** – *User Zone Identification Message* sent indicator.
- 34 **USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>** – *User Zone Identification Message* sequence number.
- 35 **UZ\_EXIT\_IN\_USE<sub>s</sub>** – The User Zone Exit parameter that the mobile station received from  
36 the *User Zone Identification Message* broadcast by the last base station of the old user  
37 zone.

- 1    **UZ\_EXIT\_RCVD<sub>s</sub>** – The User Zone Exit parameter that the mobile station just received
- 2    from the *User Zone Identification Message* broadcast by the currently serving base station.
- 3    **UZID<sub>s</sub>** – User Zone identifier.
- 4    **UZ\_REC** – Record containing information about a User Zone broadcast by the base station
- 5    (see also UZ\_REC\_LIST).
- 6    **UZ\_REC\_LIST** – Broadcast User Zone record list. A descriptive structure used to manage
- 7    the base station's information records about broadcast User Zones (see also UZ\_REC).
- 8    **UZ\_REV<sub>s</sub>** – User Zone update revision number.
- 9    **ZONE\_LIST<sub>s</sub>** – Registration zone list. List of zones in which the mobile station has
- 10   registered.
- 11   **ZONE\_TIMER<sub>s</sub>** – Zone timer length.
- 12



## 1.2 Signaling Architecture

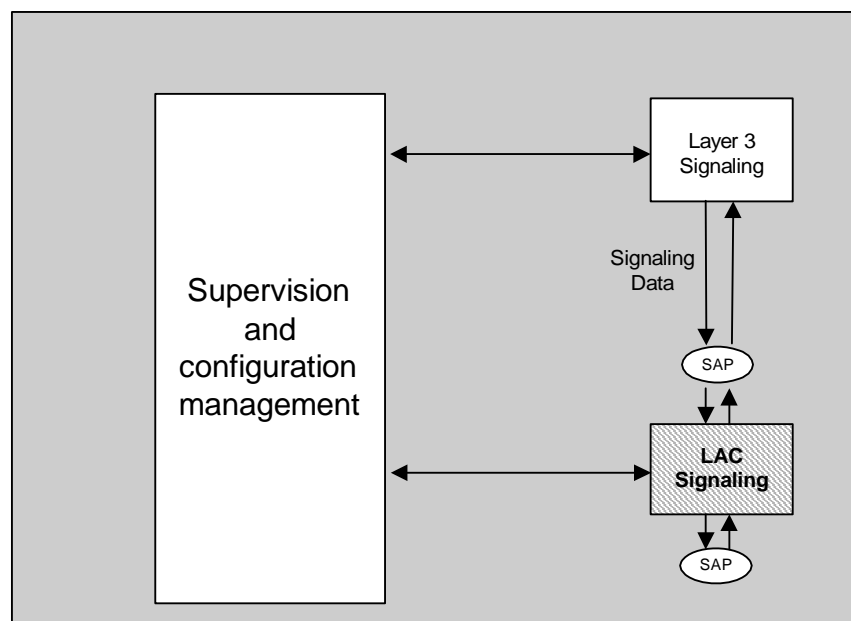
Layer 3 signaling for cdma2000 is modeled as follows:

- **Protocol Layer.** Layer 3 generates Layer 3 PDUs and passes these PDUs to Lower Layers, where proper encapsulation into Lower Layer PDUs is performed. On the receiving end, Lower Layer PDUs are decapsulated and the resulting SDUs are sent from Lower Layers to Layer 3 for processing.
- **Service Access Points.** SAPs and corresponding communication primitives are defined between the Layer 3 and Lower Layers over the data plane. No SAPs are defined for communications through the control plane.

## 1.3 Signaling and Functionality

### 1.3.1 General Architecture

The general architecture is presented in Figure 1.3.1-1.



**Figure 1.3.1-1. cdma2000 Signaling - General Architecture**

### 1.3.2 Interface to Layer 2

The interface between Layer 3 and Layer 2 is a Service Access Point (SAP). At the SAP, Layer 3 and Layer 2 exchange Service Data Units (SDU) and interface control information in the form of Message Control and Status Blocks (MCSB) using a set of primitives.

#### 1.3.2.1 Message Control and Status Block (MCSB)

The MCSB is a parameter block for the defined primitives, containing relevant information about an individual Layer 3 message (PDU), as well as instructions on how the message may be handled or how it is to be (for transmission), or was (for reception), processed by

Layer 2. The MCSB is a conceptual construct and is not subject to detailed specification in this document; see [4] for more information on the content of the MCSB.

### 1.3.2.2 Interface Primitives

The following primitives are defined for communication between the Layer 3 and Layer 2:

**Name: L2-Data.Request**

**Type: Request**

**Direction: Layer 3 to Layer 2**

**Parameters: PDU, MCSB**

**Action: The PDU is handed to Layer 2 for delivery across the radio interface.**

**Name: L2-Data.Confirm**

**Type: Confirm**

**Direction: Layer 2 to Layer 3**

**Parameters: MCSB**

**Action: Reception of the specified (in the MCSB) transmitted PDU was acknowledged at Layer 2 by the addressee.**

**Name: L2-Data.Indication**

**Type: Indication**

**Direction: Layer 2 to Layer 3**

**Parameters: PDU, MCSB**

**Action: The received PDU is handed to Layer 3.**

**Name: L2-Condition.Notification**

**Type: Indication**

**Direction: Layer 2 to Layer 3**

**Parameters: MCSB**

**Action: Layer 3 is notified of a relevant event (e.g. abnormal condition) detected at Layer 2. Details are indicated via the MCSB.**

**Name: L2-Supervision.Request**

**Type: Request**

1 Direction: Layer 3 to Layer 2

2 Parameters: MCSB

3 Action: Layer 2 executes a control command as directed by Layer 3. This could be,  
4 for example, an order to abandon retransmission of a message or an order  
5 for local reset for the message sequence number, acknowledgment  
6 sequence number and duplicate detection.

7 1.3.3 Reserved

8

9 1.3.4 Functional Description

10 In the Data Plane, Layer 3 originates and terminates signaling data units according to the  
11 semantic and timing of the communication protocol between the base station and the  
12 mobile station. From a semantic point of view the signaling data units are referred to as  
13 “messages” (or “orders”). From a protocol point of view, the signaling data units are PDUs.  
14 In general, the language of this specification does not explicitly distinguish between the  
15 terms “PDU” and “Message”. It is considered that the context provides enough  
16 information to allow the reader to make the appropriate distinctions.

17 1.3.5 PDU Transmission and Reception

18 Layer 3 employs the services offered at the interface with Layer 2 to transfer PDUs to and  
19 from the Layer 3 entity.

20 When requesting the transmission of a PDU, Layer 3 will typically specify whether the  
21 transfer will be performed in *assured mode* or in *unassured mode* (for example, by setting  
22 the proper parameters in the MCSB argument of the L2-Data.Request primitive). For  
23 transmission in assured mode, Layer 3 may specify if *confirmation of delivery* of the PDU is  
24 required.

25 Layer 2 guarantees that an assured mode PDU received from the transmitting Layer 3  
26 entity is delivered to the receiving Layer 3 entity. Each assured mode PDU is delivered to  
27 the receiving Layer 3 entity only once and without errors. Additionally, if the transmitting  
28 Layer 3 entity requests confirmation of delivery of an assured mode PDU, Layer 2 will send  
29 an indication to the transmitting Layer 3 entity (for example by using the L2-Data.Confirm  
30 primitive) when Layer 2 receives an acknowledgment for that PDU. If Layer 2 is not able to  
31 deliver an assured mode PDU, it sends an indication of the failure to Layer 3 which can  
32 then take corrective action.

33 Layer 2 does not guarantee that an unassured mode PDU received from the transmitting  
34 Layer 3 entity is delivered to the receiving Layer 3 entity. Thus, Layer 2 acknowledgments  
35 may not be required for unassured mode PDUs. To increase the probability of delivery of  
36 unassured mode PDUs, Layer 3 may request Layer 2 to send those PDUs multiple times in  
37 quick repeat sequence and rely on the duplicate detection capabilities of the receiver to  
38 achieve uniqueness of delivery.

39 Layer 3 can also request Layer 2 to perform a reset of the Layer 2 ARQ procedures (for  
40 example, by using the L2-Supervision.Request primitive).

41

- 1 This page intentionally left blank.

1    **2. REQUIREMENTS FOR MOBILE STATION CDMA OPERATION**

2    This section defines requirements that are specific to CDMA mobile station equipment and  
3    operation. A CDMA mobile station may support operation in one or more band classes.

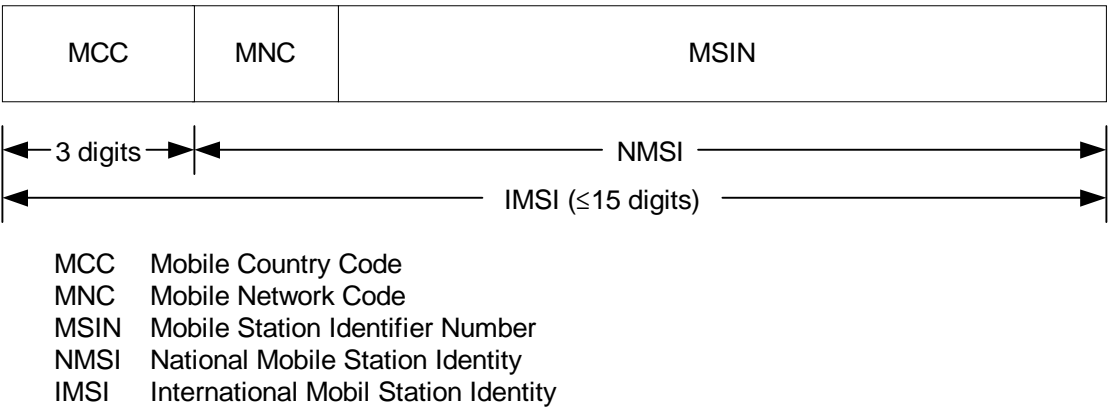
4    **2.1 Reserved**

5    **2.2 Reserved**

6    **2.3 Security and Identification**

7    2.3.1 Mobile Station Identification Number

8    Mobile stations operating in the CDMA mode are identified by the International Mobile  
9    Subscriber Identity (IMSI).<sup>9</sup> Mobile Stations shall have two different identifiers, IMSI\_T  
10   and IMSI\_M. The IMSI consists of up to 15 numerical characters (0-9). The first three  
11   digits of the IMSI are the Mobile Country Code (MCC), and the remaining digits are the  
12   National Mobile Subscriber Identity (NMSI). The NMSI consists of the Mobile Network  
13   Code (MNC) and the Mobile Station Identification Number (MSIN). The IMSI structure is  
14   shown in Figure 2.3.1-1.



16  
17  
18                    **Figure 2.3.1-1. IMSI Structure**

19  
20    An IMSI that is 15 digits in length is called a class 0 IMSI (the NMSI is 12 digits in length);  
21    an IMSI that is less than 15 digits in length is called a class 1 IMSI (the NMSI is less than  
22    12 digits in length).

---

<sup>9</sup> See [18].

IMSI\_M is an IMSI that contains a MIN in the lower ten digits of the NMSI. An IMSI\_M is always a class 0 IMSI. If the IMSI\_M is not programmed, the mobile station shall set the four least-significant digits of the IMSI\_M to the value of the ESN<sub>p</sub>, converted directly from binary to decimal, modulo 10000, and the mobile station shall set the other digits to 0.

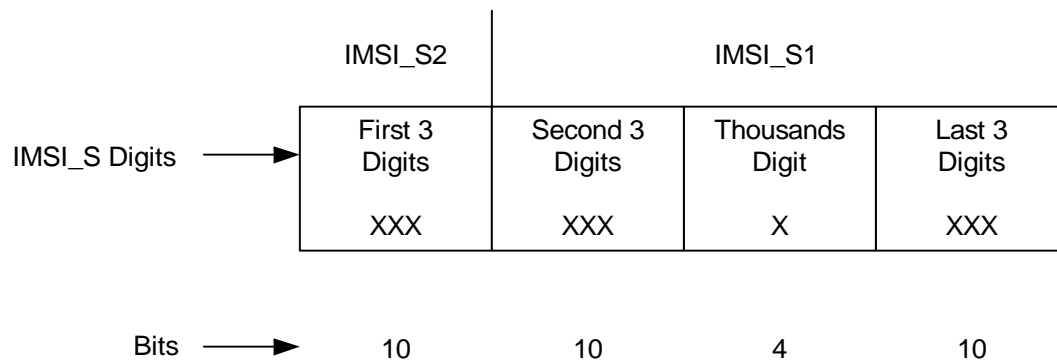
IMSI\_T is an IMSI that is not associated with the MIN assigned to the mobile station. An IMSI\_T can be a class 0 or class 1 IMSI. If the IMSI\_T is not programmed, the mobile station shall set the four least-significant digits of the IMSI\_T to the value of the ESN<sub>p</sub>, converted directly from binary to decimal, modulo 10000, and the mobile station shall set the other digits to 0.

When operating in the CDMA mode the mobile station shall set its operational IMSI value, IMSI\_O, to either the IMSI\_M or the IMSI\_T depending on the capabilities of the base station (See 2.6.2.2.5).

An IMSI\_S is a 10-digit (34-bit) number derived from the IMSI. When an IMSI has 15 digits, IMSI\_S is equal to the least significant ten digits of the IMSI. When an IMSI has fewer than fifteen digits, zeros are added to the most significant side of MSIN to obtain a 15-digit padded IMSI; IMSI\_S is equal to the last 10-digit of the padded IMSI.

A 10-digit IMSI\_S consists of 3- and 7-digit parts, called IMSI\_S2 and IMSI\_S1, respectively, as illustrated in Figure 2.3.1-2. IMSI\_S is mapped into a 34-bit number (see 2.3.1.1). The IMSI\_S derived from IMSI\_M is designated IMSI\_M\_S. The IMSI\_S derived from IMSI\_T is designated IMSI\_T\_S. The IMSI\_S derived from IMSI\_O is designated IMSI\_O\_S.

The mobile station shall have memory to store the 34-bit IMSI\_M\_S<sub>p</sub> and the 34-bit IMSI\_T\_S<sub>p</sub>. IMSI\_M\_S<sub>p</sub> is represented by the 10-bit IMSI\_M\_S2<sub>p</sub> and the 24 bit IMSI\_M\_S1<sub>p</sub>. IMSI\_T\_S<sub>p</sub> is represented by the 10-bit IMSI\_T\_S2<sub>p</sub> and the 24 bit IMSI\_T\_S1<sub>p</sub>.



**Figure 2.3.1-2. IMSI\_S Binary Mapping**

When an IMSI has 15 digits, IMSI\_11\_12 is equal to the 11th and 12th digits of the IMSI.

When an IMSI has fewer than 15 digits, zeros are added to the most significant side of

1 MSIN to obtain a 15-digit padded IMSI; the IMSI<sub>11\_12</sub> is equal to the 11th and 12th  
 2 digits of the resulting number.

3 IMSI<sub>11\_12</sub> is encoded as described in 2.3.1.2. The mobile station shall have memory to  
 4 store the 7-bit IMSI<sub>M\_11\_12p</sub> and the 7-bit IMSI<sub>T\_11\_12p</sub>.

5 The 3-digit MCC is encoded as described in 2.3.1.3. The mobile station shall have memory  
 6 to store the 10-bit MCC<sub>Mp</sub> and the 10-bit MCC<sub>Tp</sub>.

7 If the mobile station has a class 1 IMSI<sub>T</sub>, it shall have memory to store  
 8 IMSI<sub>T\_ADDR\_NUMp</sub>. IMSI<sub>T\_ADDR\_NUMp</sub> is equal to the number of digits in the  
 9 NMSI<sup>10</sup> minus four.

#### 10 2.3.1.1 Encoding of IMSI<sub>M\_S</sub> and IMSI<sub>T\_S</sub>

11 The IMSI<sub>M\_S</sub> and IMSI<sub>T\_S</sub> binary mapping is defined as follows:

- 12 1. The first three digits of the IMSI<sub>M\_S</sub> and the first three digits of the IMSI<sub>T\_S</sub> are  
 13 mapped into ten bits (corresponding to IMSI<sub>M\_S2p</sub> and IMSI<sub>T\_S2p</sub>, respectively)  
 14 by the following coding algorithm:
  - 15 a. Represent these three digits as D<sub>1</sub> D<sub>2</sub> D<sub>3</sub> with the digit equal to zero being  
 16 given the value of ten.
  - 17 b. Compute  $100 \times D_1 + 10 \times D_2 + D_3 - 111$ .
  - 18 c. Convert the result in step b to binary by the standard decimal-to-binary  
 19 conversion as shown in Table 2.3.1.1-1.

20

---

<sup>10</sup> It is assumed that the number of digits in NMSI is greater than three.

1

**Table 2.3.1.1-1. Decimal to Binary Conversion Table**

<b>Decimal Number</b>	<b>Binary Number</b>
0	0000000000
1	0000000001
2	0000000010
3	0000000011
4	0000000100
.	.
.	.
.	.
998	1111100110
999	1111100111

2

3

4

5

6

7

8

9

10

11

12

13

2. The second three digits of IMSI\_M\_S and the second three digits of IMSI\_T\_S are mapped into the ten most significant bits of IMSI\_M\_S1<sub>p</sub> and IMSI\_T\_S1<sub>p</sub>, respectively, by the coding algorithm indicated in 1.

3. The last four digits of IMSI\_M\_S and the last four digits of IMSI\_T\_S are mapped into the 14 least significant bits of IMSI\_M\_S1<sub>p</sub> and IMSI\_T\_S1<sub>p</sub>, respectively, as follows:

a. The thousands digit is mapped into four bits by a Binary-Coded-Decimal (BCD) conversion, as shown in Table 2.3.1.1-2.

b. The last three digits are mapped into ten bits by the coding algorithm indicated in 1.



1

**Table 2.3.1.1-2. BCD Mapping**

Decimal Digit	Binary Number
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001
0	1010

2

3 The following example illustrates the IMSI\_T\_S2<sub>p</sub> and IMSI\_T\_S1<sub>p</sub> calculation procedure.  
 4 Let the IMSI\_T be the 9-digit number 123456789. Since the IMSI\_T has fewer than ten  
 5 digits, the nine least significant digits of the IMSI\_T\_S are equal to the IMSI\_T digits and  
 6 the most significant IMSI\_T\_S digit is set to zero. So the 10-digit IMSI\_T\_S is 012 345 6  
 7 789. IMSI\_T\_S2<sub>p</sub> and IMSI\_T\_S1<sub>p</sub> are calculated as follows:

8 • IMSI\_T\_S2<sub>p</sub>. The ten-bit IMSI\_T\_S2<sub>p</sub> is derived from the first three digits of the  
 9 IMSI\_T\_S (i.e., 012):

10 a.  $D_1 = 10$ ;  $D_2 = 1$ ;  $D_3 = 2$ .

11 b.  $100 \times D_1 + 10 \times D_2 + D_3 - 111 = 100 \times 10 + 10 \times 1 + 2 - 111 = 901$ .

12 c. 901 in binary is '11 1000 0101'.

13 Therefore, IMSI\_T\_S2<sub>p</sub> is '11 1000 0101'.

14 • IMSI\_T\_S1<sub>p</sub>. The ten most significant bits of IMSI\_T\_S1<sub>p</sub> are derived from the  
 15 second three digits of the IMSI\_T\_S (i.e., 345):

16 a.  $D_1 = 3$ ;  $D_2 = 4$ ;  $D_3 = 5$ .

17 b.  $100 \times D_1 + 10 \times D_2 + D_3 - 111 = 100 \times 3 + 10 \times 4 + 5 - 111 = 234$ .

18 c. 234 in binary is '0011 1010 10'.

19 The next four most significant bits of IMSI\_T\_S1<sub>p</sub> are derived from the thousands digit of  
 20 the IMSI\_T\_S (i.e., 6) by BCD conversion: 6 in BCD is '0110'.

21 The ten least significant bits of IMSI\_T\_S1<sub>p</sub> are derived from the last three digits of the  
 22 IMSI\_T\_S (i.e., 789):

23 a.  $D_1 = 7$ ;  $D_2 = 8$ ;  $D_3 = 9$ .

24 b.  $100 \times D_1 + 10 \times D_2 + D_3 - 111 = 100 \times 7 + 10 \times 8 + 9 - 111 = 678$ .

c. 678 in binary is '10 1010 0110'.

Therefore, IMSI\_T\_S1<sub>p</sub> is '0011 1010 1001 1010 1010 0110'.

### 2.3.1.2 Encoding of IMSI\_M\_11\_12 and IMSI\_T\_11\_12

The IMSI\_M\_11\_12 and IMSI\_T\_11\_12 binary mapping is defined as follows:

1. Represent the 11th digit as D<sub>11</sub> and the 12th digit as D<sub>12</sub> with the digit equal to zero being given the value of ten.
2. Compute  $10 \times D_{12} + D_{11} - 11$ .
3. Convert the result in step 2 to binary by a standard decimal-to-binary conversion as described in Table 2.3.1.1-1 and limit the resulting number to the 7 least significant bits.

### 2.3.1.3 Encoding of the MCC\_M and MCC\_T

The MCC\_M and MCC\_T binary mapping is defined as follows:

1. Represent the 3-digit Mobile Country Code as D<sub>1</sub> D<sub>2</sub> D<sub>3</sub> with the digit equal to zero being given the value of ten.
2. Compute  $100 \times D_1 + 10 \times D_2 + D_3 - 111$ .
3. Convert the result in step (2) to binary by a standard decimal-to-binary conversion as described in Table 2.3.1.1-1.

### 2.3.1.4 Mobile Directory Number

A Mobile Directory Number (MDN) is a dialable number associated with the mobile station through a service subscription. A Mobile Directory Number is not necessarily the same as the mobile station identification on the air interface, i.e., MIN, IMSI\_M or IMSI\_T. An MDN consists of up to 15 digits. The mobile station should have memory to store at least one Mobile Directory Number (see Table F.3-1).

## 2.3.2 Electronic Serial Number (ESN), R-UIM Identifier (UIM\_ID), and Mobile Equipment Identifier (MEID)

The mobile station shall be configured with 32-bit ESN or 56-bit MEID, but not both. All mobile stations with MOB\_P\_REV<sub>p</sub> less than 11 shall be configured with ESN. All mobile stations with MOB\_P\_REV<sub>p</sub> greater than or equal to 11 shall be configured with MEID. The ESN or MEID is used to uniquely identify a mobile station in a wireless system.

### 2.3.2.1 Electronic Serial Number (ESN)

The ESN value is available to procedures in the mobile station as the value of the variable ESN<sub>p</sub>. The value of the variable RN\_HASH\_KEY<sub>s</sub> is the same as the value of the variable ESN<sub>p</sub>, and need not be stored separately.

### 2.3.2.2 Mobile Equipment Identifier (MEID)

The MEID value is available to procedures in the mobile station as the value of the

1 variable MEID<sub>p</sub>. If the mobile station is configured with MEID, ESN<sub>p</sub> stores 32-bit pseudo-  
 2 ESN value derived from MEID as defined in 2.3.2.2.1.

### 3 2.3.2.2.1 Pseudo-ESN

4 Pseudo-ESN is a 32-bit identifier derived from MEID.

5 Mobile station shall use the following procedure to derive pseudo-ESN from MEID<sup>11</sup>:

- 6 1. The upper 8 bits of pseudo-ESN shall be set to 0x80.
- 7 2. The lower 24 bits of pseudo-ESN shall be the 24 least significant bits of the SHA-  
 8 1 digest of the MEID. See [41] for the specification of the SHA-1 algorithm.

### 9 2.3.2.3 R-UIM Identifier (UIM\_ID, EXT\_UIM\_ID)

10 If the mobile station has a R-UIM which indicates that UIM ID is to be used, then the mobile  
 11 station shall use UIM\_ID instead of ESN in every place where ESN is used in this  
 12 document with the exception of the ESN\_ME information record (see [40]).

13 If the mobile station has a R-UIM which indicates that SF\_EUIMID is to be used in place of  
 14 MEID, then the mobile station shall use SF\_EUIMID instead of MEID in every place where  
 15 MEID is used in this document with the exception of the MEID\_ME information record  
 16 (see [40]).

### 17 2.3.3 Station Class Mark

18 Class-of-station information referred to as the station class mark (SCM<sub>p</sub>) must be stored  
 19 in a mobile station. The digital representation of this class mark is specified in Table  
 20 2.3.3-1.

21

---

<sup>11</sup> Example: if the 56-bit MEID is (hexadecimal) FF 00 00 01 12 34 56, the pseudo-ESN is (hexadecimal) 80 07 37 E1.

1

**Table 2.3.3-1. Station Class Mark**

Function	Bit(s)	Setting
Extended SCM Indicator	7	Band Classes 1,4,14 1XXXXXXX Other bands 0XXXXXXX
Dual Mode	6	Always 0 <sup>12</sup> (CDMA Only) X0XXXXXX
Slotted Class	5	Non-Slotted XX0XXXXX Slotted XX1XXXXX
MEID support indicator <sup>13</sup>	4	MEID not configured XXX0XXXX MEID configured XXX1XXXX
25 MHz Bandwidth	3	Always 1 XXXX1XXX
Transmission	2	Continuous XXXXX0XX Discontinuous XXXXX1XX
Power Class for Band Class 0 Analog Operation	1 - 0	Always 00 <sup>14</sup> XXXXXX00

2

3 The mobile station shall set the Power Class function bits to '00'.

4 The mobile station shall set bit 4 (MEID support indicator) of the Station Class Mark field  
5 to '1' in the *Registration Message*, *Origination Message*, *Page Response Message*, *Terminal*  
6 *Information* and *Extended Terminal Information* information record.

#### 7 2.3.4 Registration Memory

8 The mobile station shall have memory to store one element in the zone-based registration  
9 list ZONE\_LIST<sub>S-P</sub> (see 2.6.5.1.5 and 2.6.5.5). This stored element shall include both  
10 REG\_ZONE and the corresponding (SID, NID) pair. The data retention time under power-  
11 off conditions shall be at least 48 hours. If, after 48 hours, the data integrity cannot be  
12 guaranteed, then the entry in ZONE\_LIST<sub>S-P</sub> shall be deleted upon power-on.

---

<sup>12</sup> 'Dual Mode' bit is always set to '0' to indicate 'CDMA only' mode.

<sup>13</sup> The corresponding bit '4' was previously defined as the IS-54 Power Class which was always set to '0'. The base station uses this field to identify mobile stations that comply with [47].

<sup>14</sup> 'Power Class for Band Class 0 Analog Operation' bits are always set to '00' to indicate mobile station does not support analog mode operation.

1 The mobile station shall have memory to store one element in the system/network  
 2 registration list  $SID\_NID\_LIST_{s-p}$  (see 2.6.5.1.5 and 2.6.5.5). The data retention time  
 3 under power-off conditions shall be at least 48 hours. If, after 48 hours, the data integrity  
 4 cannot be guaranteed, then the entry in  $SID\_NID\_LIST_{s-p}$  shall be deleted upon power-on.

5 The mobile station shall have memory to store the distance-based registration variables  
 6  $BASE\_LAT\_REG_{s-p}$ ,  $BASE\_LONG\_REG_{s-p}$ , and  $REG\_DIST\_REG_{s-p}$  (see 2.6.5.1.4 and  
 7 2.6.5.5). The data retention time under power-off conditions shall be at least 48 hours. If,  
 8 after 48 hours, the data integrity cannot be guaranteed, then  $REG\_DIST\_REG_{s-p}$  shall be  
 9 set to zero upon power-on.

### 10 2.3.5 Access Overload Class

11 The 4-bit access overload class indicator ( $ACCOLC_p$ ) is used to identify which overload  
 12 class controls access attempts by the mobile station and is used to identify redirected  
 13 overload classes in global service redirection.

14 The mobile station shall store 4-bit access overload class ( $ACCOLC_p$ ). Mobile stations that  
 15 are not for test or emergency use should be assigned to overload classes  $ACCOLC$  0  
 16 through  $ACCOLC$  9. For mobile stations that are classified as overload classes  $ACCOLC$  0  
 17 through  $ACCOLC$  9, the mobile station's 4-bit access overload class indicator ( $ACCOLC_p$ )  
 18 shall be automatically derived from the last digit of the associated decimal representation  
 19 of the  $IMSI\_M$  by a decimal to binary conversion as specified in Table 2.3.5-1. When a  
 20 mobile station's  $IMSI\_M$  is updated, the mobile station shall re-calculate the  $ACCOLC_p$  as  
 21 indicated above. Mobile stations designated for test use should be assigned to  $ACCOLC$   
 22 10; mobile stations designated for emergency use should be assigned to  $ACCOLC$  11.  
 23  $ACCOLC$  12 through  $ACCOLC$  15 are reserved.<sup>15</sup> Programming the 4-bit  $ACCOLC_p$  for  
 24 overload classes  $ACCOLC$  10 through  $ACCOLC$  15 as specified in Table 2.3.5-2 shall  
 25 require a special facility only available to equipment manufacturers and system operators.

26 The content of  $ACCOLC_p$  shall not be visible through the mobile station's display.

27

---

<sup>15</sup> For more information, refer to [28].

**Table 2.3.5-1. ACCOLCp Mapping for ACCOLC 0 through ACCOLC 9**

<b>Last Digit of the Decimal Representation of the IMSI (decimal)</b>	<b>ACCOLC<sub>p</sub></b>
0	0000
1	0001
2	0010
3	0011
4	0100
5	0101
6	0110
7	0111
8	1000
9	1001

**Table 2.3.5-2. ACCOLCp Mapping for ACCOLC 10 through ACCOLC 15**

<b>Overload Class (decimal)</b>	<b>ACCOLC<sub>p</sub></b>
10	1010
11	1011
12	1100
13	1101
14	1110
15	1111

### 2.3.6 Public Long Code Mask and Private Long Code Mask

The Public Long Code Mask and the Private Long Code Mask consist of 42 bits (see [2]).

When using a Public Long Code Mask, the long code mask is generated based on the value of `PLCM_TYPES`. When using the Private Long Code Mask, the value of `PLCM_TYPES` is maintained unless updated by the base station.

#### 2.3.6.1 Public Long Code Mask Formats

The 42 bit Public Long Code Mask `PLCM_42` is generated using `PLCM_37` or `PLCM_40` as defined in section 2.3.6.1.1, where the least significant bits `PLCM_37` or `PLCM_40` are set

1 as defined in this section below.

2 The 42 bit Public Long Code Mask ADD\_PLCM\_FOR\_FCH\_42 is generated using  
3 ADD\_PLCM\_FOR\_FCH\_40 as defined in section 2.3.6.1.1, where the least significant bits  
4 ADD\_PLCM\_FOR\_FCH\_40 are set as defined in this section below.

5 The 42 bit Public Long Code Mask ADD\_PLCM\_FOR\_SCH\_42 is generated using  
6 ADD\_PLCM\_FOR\_SCH\_35 as defined in section 2.3.6.1.1, where the least significant bits  
7 ADD\_PLCM\_FOR\_SCH\_35 are set as defined in this section below.

8 If  $PLCM\_TYPE_S$  is equal to '0000', the 37 least significant bits (PLCM\_37) are set as follows:

- 9 • Bits  $M_{36}$  through  $M_{32}$  shall be set to '11000';
- 10 • Bits  $M_{31}$  through  $M_0$  shall be set to a permutation of the mobile station's ESN as  
11 follows:

12  $ESN = (E_{31}, E_{30}, E_{29}, E_{28}, E_{27}, E_{26}, E_{25}, \dots E_2, E_1, E_0)$

13 Permuted ESN =  $(E_0, E_{31}, E_{22}, E_{13}, E_4, E_{26}, E_{17}, E_8, E_{30}, E_{21}, E_{12}, E_3, E_{25}, E_{16},$   
14  $E_7, E_{29}, E_{20}, E_{11}, E_2, E_{24}, E_{15}, E_6, E_{28}, E_{19}, E_{10}, E_1, E_{23}, E_{14},$   
15  $E_5, E_{27}, E_{18}, E_9).$

16 If  $PLCM\_TYPE_S$  is equal to '0001', the 40 least significant bits (PLCM\_40) are set as follows:

- 17 • Bit  $M_{39}$  shall be set to '1';
- 18 • Bits  $M_{38}$  through  $M_0$  of the public long code mask shall be specified by  $PLCM_{39_S}$   
19 and shall be set as follows:

20  $PLCM_{39_S} = (P_{38}, P_{37}, P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, \dots P_2, P_1, P_0)$

21 If  $ADD\_PLCM\_FOR\_FCH\_TYPE_S$  is equal to '1', the 40 least significant bits  
22 ( $ADD\_PLCM\_FOR\_FCH_{40}$ ) are set as follows:

- 23 • Bit  $M_{39}$  shall be set to '1';
- 24 • Bits  $M_{38}$  through  $M_0$  of the public long code mask shall be specified by  
25  $ADD\_PLCM\_FOR\_FCH_{39_S}$  and shall be set as follows:

26  $ADD\_PLCM\_FOR\_FCH_{39_S} = (P_{38}, P_{37}, P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, \dots P_2, P_1, P_0)$

27 If  $ADD\_PLCM\_FOR\_SCH\_TYPE_S$  is equal to '1', the 35 least significant bits  
28 ( $ADD\_PLCM\_FOR\_SCH_{35}$ ) are set as follows:

- 29 • Bits  $M_{34}$  through  $M_0$  of the public long code mask shall be specified by  
30  $ADD\_PLCM\_FOR\_SCH_{35_S}$  and shall be set as follows:

31  $ADD\_PLCM\_FOR\_SCH_{35_S} = (P_{34}, P_{33}, P_{32}, P_{31}, P_{30}, P_{29}, P_{28}, \dots P_2, P_1, P_0)$

32 If  $PLCM\_TYPE_S$  is equal to '0010', the 37 least significant bits (PLCM\_37) are set as follows:

- 33 • Bits  $M_{36}$  through  $M_{34}$  shall be set to '001';
- 34 • Bits  $M_{33}$  through  $M_0$  shall be set to  $IMSI\_O\_S$ .

If `PLCM_TYPEs` is equal to '0011', the 37 least significant bits (`PLCM_37`) are set as follows:

- Bits `M36` through `M34` shall be set to '000';
- Bits `M33` through `M0` shall be set to `IMSI_O_S`.

If `PLCM_TYPEs` is equal to '0100', the 40 least significant bits (`PLCM_40`) are set as follows:

- Bit `M39` shall be set to '0';
- Bits `M38` through `M0` shall be set as follows:
- The 39 least significant bits of the SHA-1 digest of the MEID<sup>16</sup>. See [41] for the specification of the SHA-1 algorithm.

#### 2.3.6.1.1 Public Long Code Mask `PLCM_42`, `ADD_PLCM_FOR_FCH_42` and `ADD_PLCM_FOR_SCH_42`

If `PLCM_37` is defined, the public long code mask `PLCM_42` shall be as follows: bits `M36` through `M0` of the public long code mask shall be specified by `PLCM_37` (see 2.3.6). Bits `M41` through `M37` shall be set to '11000'. The resulting public long code mask `PLCM_42` is shown in Figure 2.3.6.1-1 (a).

If `PLCM_40` is defined, the public long code mask `PLCM_42` shall be as follows: bits `M39` through `M0` of the public long code mask shall be specified by `PLCM_40` (see 2.3.6.1). Bits `M41` through `M40` shall be set to '10'. The resulting public long code mask `PLCM_42` is shown in Figure 2.3.6.1-1 (b).

If `ADD_PLCM_FOR_FCH_40` is defined, the public long code mask `ADD_PLCM_FOR_FCH_42` shall be as follows: bits `M39` through `M0` of the public long code mask shall be specified by `ADD_PLCM_FOR_FCH_40` (see 2.3.6.1). Bits `M41` through `M40` shall be set to '10'. The resulting public long code mask `ADD_PLCM_FOR_FCH_42` is shown in Figure 2.3.6.1-1 (c).

If `ADD_PLCM_FOR_SCH_35` is defined, the public long code mask `ADD_PLCM_FOR_SCH_42` shall be as follows: bits `M34` through `M0` of the public long code mask shall be specified by `ADD_PLCM_FOR_SCH_35` (see 2.3.6.1). Bits `M41` through `M35` shall be set to '1100111'. The resulting public long code mask `ADD_PLCM_FOR_SCH_42` is shown in Figure 2.3.6.1-1 (d).

---

<sup>16</sup> Example: if the 56-bit MEID is (hexadecimal) FF 00 00 01 12 34 56, the bits `M38` through `M0` of `PLCM` are (hexadecimal) 1A 0E 07 37 E1, and (binary) '001 1010 0000 1110 0000 0111 0011 0111 1110 0001'.



1

41	40	39	...	37	36	...	0
11	000	PLCM_37					

a) Public Long Code Mask PLCM\_42 given PLCM\_37

41	40	39	...	0
10	PLCM_40			

b) Public Long Code Mask PLCM\_42 given PLCM\_40

41	40	39	...	0
10	ADD_PLCM_FOR_FCH_40			

c) Public Long Code Mask ADD\_PLCM\_FOR\_FCH\_42 given ADD\_PLCM\_FOR\_FCH\_40

41	35	34	...	0
1100111	ADD_PLCM_FOR_SCH_35			

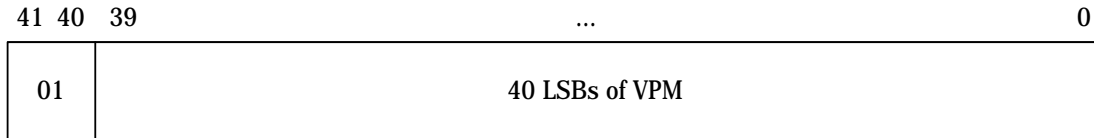
d) Public Long Code Mask ADD\_PLCM\_FOR\_SCH\_42 given ADD\_PLCM\_FOR\_SCH\_35

2  
3

4 **Figure 2.3.6.1-1. Public Long Code Mask PLCM\_42, ADD\_PLCM\_FOR\_FCH\_42, or**  
5 **ADD\_PLCM\_FOR\_SCH\_42 Format**

6 2.3.6.2 Private Long Code Mask PVTLCM\_42

7 The 42 bit private long code mask PVTLCM\_42 shall be as follows: Bits M<sub>41</sub> through M<sub>40</sub>  
8 shall be set to '01'. Bits M<sub>39</sub> through M<sub>0</sub> shall be the 40 least significant bits of the Voice  
9 Privacy Mask (VPM) generated by the Key\_VPM\_Generation procedure or  
10 CDMA\_3G\_2G\_Conversion procedure. M<sub>0</sub> of the private long code mask shall be the least  
11 significant bit of the VPM. See [15] for details of the Key\_VPM\_Generation procedure and  
12 see [44] for details of the CDMA\_3G\_2G\_Conversion procedure. The resulting private long  
13 code mask PVTLCM\_42 is shown in Figure 2.3.6.2-1.



**Figure 2.3.6.2-1 Private Long Code Mask PVTLCM\_42 Format**

### 2.3.7 Reserved

### 2.3.8 Home System and Network Identification

The mobile station shall provide memory to store at least one home (SID<sub>p</sub>, NID<sub>p</sub>) pair. The mobile station shall also provide memory to store the 1-bit parameters MOB\_TERM\_HOME<sub>p</sub>, MOB\_TERM\_FOR\_SID<sub>p</sub>, and MOB\_TERM\_FOR\_NID<sub>p</sub> (see 2.6.5.3).

### 2.3.9 Local Control Option

If the mobile station supports the local control option, a means shall be provided within the mobile station to enable or disable the local control option.

### 2.3.10 Preferred Operation Selection

#### 2.3.10.1 Preferred System

If the mobile station supports operation in Band Class 0 or Band Class 3 (see [2]), a means shall be provided within the mobile station to identify the preferred system. In addition, the mobile station may provide a means for allowing operation only with System A or only with System B.

#### 2.3.10.2 Reserved

### 2.3.11 Discontinuous Reception

The mobile station shall provide memory to store the preferred slot cycle index, SLOT\_CYCLE\_INDEX<sub>p</sub> (see 2.6.2.1.1.3.2).

### 2.3.12 Authentication, Encryption of Signaling Information/User Data and Voice Privacy

#### 2.3.12.1 Authentication

Authentication is the process by which information is exchanged between a mobile station and base station for the purpose of confirming the identity of the mobile station. A successful outcome of the authentication process occurs only when it can be demonstrated that the mobile station and base station possess identical sets of shared secret data.

The authentication algorithms are described in [15]. The interface (input and output parameters) for the algorithms is described in [23], Table 2.3.12.1-1 summarizes the setting of the input parameters of the Auth\_Signature procedure for each of its uses in this standard.

For authentication purposes, the mobile station shall use IMSI\_M if it is programmed; otherwise, the mobile station shall use IMSI\_T. The base station uses the IMSI selected according to the same criteria.

**Table 2.3.12.1-1. Auth\_Signature Input Parameters**

Procedure	RAND_CHALLENGE	ESN	AUTH_DATA	SSD_AUTH	SAVE_REGISTERS
Unique Challenge (2.3.12.1.4)	RANDU and 8 LSBs of IMSI_S2	ESN <sub>p</sub>	IMSI_S1	SSD_A	TRUE if GEN_CMEAKEY is set to 1 in the AUCM; otherwise FALSE

#### 2.3.12.1.1 Shared Secret Data (SSD)

SSD is a 128-bit quantity that is stored in semi-permanent memory in the mobile station and is readily available to the base station. As depicted in Figure 2.3.12.1.1-1, SSD is partitioned into two distinct subsets. Each subset is used to support a different process.

Contents	SSD_A	SSD_B
Length (bits)	64	64

**Figure 2.3.12.1.1-1. Partitioning of SSD**

SSD\_A is used to support the authentication procedures and SSD\_B is used to support voice privacy (see 2.3.12.3) and message encryption (see 2.3.12.2). SSD is generated according to the procedure specified in 2.3.12.1.5. The SSD shall not be accessible to the user.

#### 2.3.12.1.2 Random Challenge Memory (RAND)

RAND is a 32-bit value held in the mobile station. When operating in CDMA mode, it is equal to the RAND value received in the last *Access Parameters Message* (see 3.7.2.3.2.2) or the *ANSI-41 RAND Message* (see 3.7.2.3.2.31) of the CDMA f-csch.

RAND<sub>s</sub> is used in conjunction with SSD\_A and other parameters, as appropriate, to authenticate mobile station originations, terminations and registrations.

#### 2.3.12.1.3 Call History Parameter (COUNT<sub>s-p</sub>)

COUNT<sub>s-p</sub> is a modulo-64 count held in the mobile station. COUNT<sub>s-p</sub> is updated by the mobile station when a *Parameter Update Order* is received on the f-dsch (see 3.7.4).

#### 2.3.12.1.4 Unique Challenge-Response Procedure

The Unique Challenge-Response Procedure is initiated by the base station and can be carried out either on the f-csch and r-csch, or on the f-dsch and r-dsch. The procedure is as follows:

The base station generates the 24-bit quantity RANDU and sends it to the mobile station in the *Authentication Challenge Message* on either the f-csch or f-dsch. Upon receipt of the *Authentication Challenge Message*, the mobile station shall set the input parameters of the Auth\_Signature procedure (see [23] section 2.3) as illustrated in Figure 2.3.12.1.5-3. The 24 most significant bits of the RAND\_CHALLENGE input parameter shall be filled with RANDU, and the 8 least significant bits of RAND\_CHALLENGE shall be filled with the 8 least significant bits of IMSI\_S2.

The mobile station shall set the SAVE\_REGISTERS input parameter to TRUE if the GEN\_CMEAKEY field is set to '1' and FALSE if the GEN\_CMEAKEY is set to '0'.

The mobile station shall then execute the Auth\_Signature procedure. The 18-bit output AUTH\_SIGNATURE shall be used to fill the AUTHU field of the *Authentication Challenge Response Message*, which shall be sent to the base station.

The base station computes the value of AUTHU in the same manner as the mobile station, but using its internally stored value of SSD\_A. The base station compares its computed value of AUTHU to the value received from the mobile station. If the comparison fails, the base station may deny further access attempts by the mobile station, drop the call in progress, or initiate the process of updating SSD (see 2.3.12.1.5).

Upon receiving delivery confirmation for the *Authentication Challenge Response Message* from the LAC layer indicating a successful Unique Challenge, MS may perform the following procedure: If GEN\_CMEAKEY was set to '1' in the *Authentication Challenge Message* and either of the following conditions is met:

- If neither encryption nor integrity protection is turned on and mobile station wants to turn on encryption or integrity protection or both.
- If the encryption or integrity protection is turned on and mobile station wants to switch to new keys based on new SSD.

the mobile station shall perform the following procedures:

- If MSG\_INTEGRITY\_SUPs is equal to '1', the mobile station then associates a pending key id NEW\_KEY\_ID with the pending CMEAKEY.
- The mobile station shall send a *Security Mode Request Message*. If MSG\_INTEGRITY\_SUPs is equal to '0', the mobile station shall select a 24-bit number and include this number in the NEW\_SSEQ\_H field in the *Security Mode Request Message*; otherwise, the mobile station shall select a 24-bit number and deliver this number to the LAC Layer along with the *Security Mode Request Message*.

- Upon reception of the *Security Mode Request Message*, the base station validates the NEW\_SSEQ\_H\_SIG field in the message. If validation returns success, then the CMEAKEY associated with the AUTHU generated during Unique Challenge-Response procedure and the pending NEW\_SSEQ\_H can become “in use” in the base station. If Voice Privacy was enabled during this procedure, the base station shall indicate to the mobile station to disable Voice Privacy. The base station then confirms the key set-up by sending the *Security Mode Command Message* to the mobile station. Upon reception of *Security Mode Command Message*, the CMEAKEY associated with the AUTHU generated during Unique Challenge-Response procedure, the pending NEW\_SSEQ\_H and key id become “in use” for the mobile station.

#### 2.3.12.1.5 Updating the Shared Secret Data (SSD)

SSD is updated using the SSD\_Generation procedure (see [23], section 2.2.1), initialized with mobile station specific information, random data, and the mobile station's A-key. The A-key is 64 bits long. It is assigned to the mobile station and is stored in the mobile station's permanent security and identification memory. The A-key is known only to the mobile station and to its associated Home Location Register/Authentication Center (HLR/AC) (see [13]). Non-manual methods, such as described in [26], are preferred for entry of the A-key into the mobile station. A manual method of entry that may be used when automated methods are not available is described in [29].

The SSD update procedure is performed as follows (see Figure 2.3.12.1.5-1):

The base station sends an *SSD Update Message* on either the f-csch or the f-dsch. The RANDSSD field of the *SSD Update Message* contains the same value used for the HLR/AC computation of SSD.

Upon receipt of the *SSD Update Message* the mobile station shall set the input parameters of the SSD\_Generation procedure (see [23], section 2.2.1) as illustrated in Figure 2.3.12.1.5-2. The mobile station shall then execute the SSD\_Generation procedure. The mobile station shall set SSD\_A\_NEW and SSD\_B\_NEW to the outputs of the SSD\_Generation procedure.

The mobile station shall then select a 32-bit random number, RANDBS, and shall send it to the base station in a *Base Station Challenge Order* on the r-csch or r-dsch.

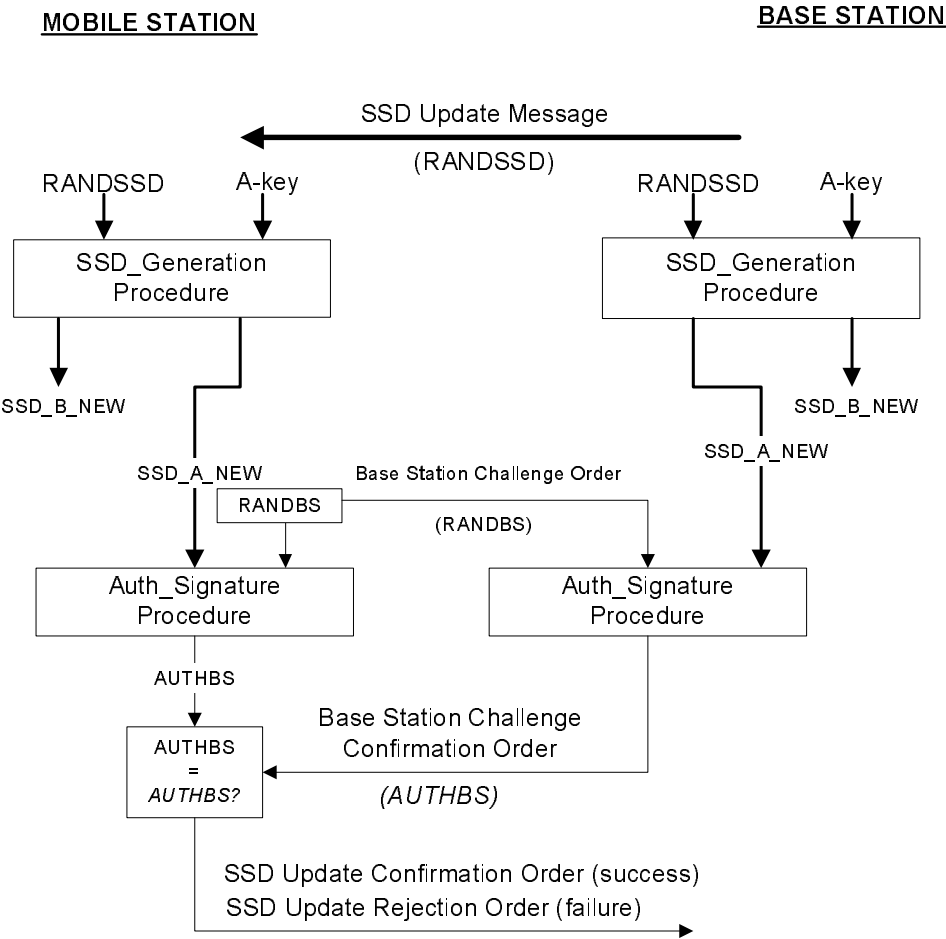
Both the mobile station and the base station shall then set the input parameters of the Auth\_Signature procedure (see [23], section 2.3) as illustrated in Figure 2.3.12.1.5-3 and shall execute the Auth\_Signature procedure.

The mobile station and base station shall set the SAVE\_REGISTERS input parameter to FALSE.

The mobile station and base station shall execute the Auth\_Signature procedure. AUTHBS is set to the 18-bit result AUTH\_SIGNATURE. The base station sends its computed value of AUTHBS to the mobile station in a *Base Station Challenge Confirmation Order* on the f-csch or the f-dsch.

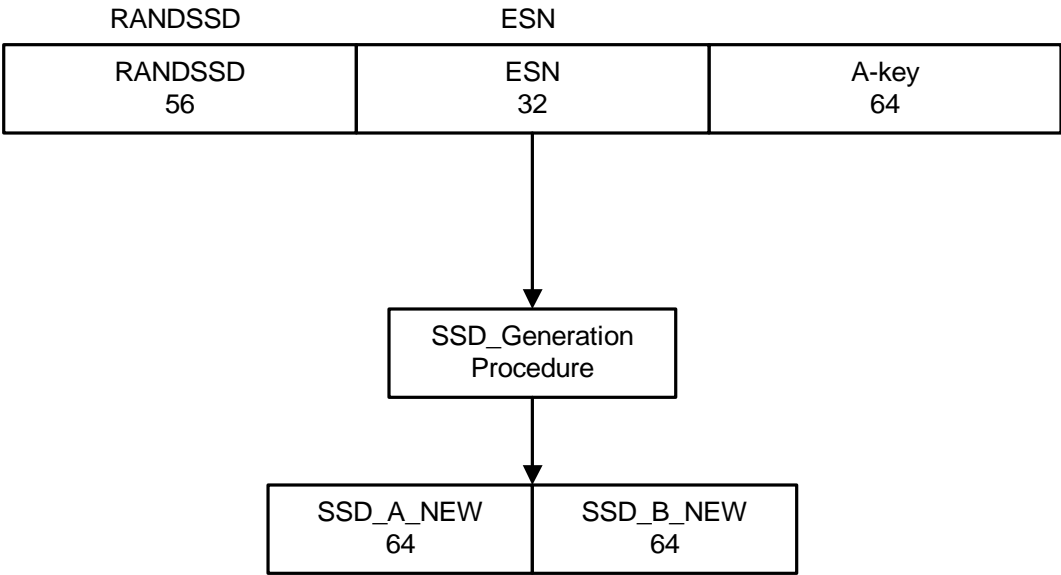
- 1 Upon receipt of the *Base Station Challenge Confirmation Order* the mobile station shall  
2 compare the received value of AUTHBS to its internally computed value. (If the mobile  
3 station receives a *Base Station Challenge Confirmation Order* when an SSD update is not in  
4 progress, the mobile station shall respond with an *SSD Update Rejection Order*.)
- 5 If the comparison is successful, the mobile station shall execute the SSD\_Update  
6 procedure (see [23], section 2.2.2) to set SSD\_A and SSD\_B to SSD\_A\_NEW and  
7 SSD\_B\_NEW, respectively. The mobile station shall then send an *SSD Update*  
8 *Confirmation Order* to the base station, indicating successful completion of the SSD  
9 update.
- 10 If the comparison is not successful, the mobile station shall discard SSD\_A\_NEW and  
11 SSD\_B\_NEW. The mobile station shall then send an *SSD Update Rejection Order* to the  
12 base station, indicating unsuccessful completion of the SSD update.
- 13 Upon receipt of the *SSD Update Confirmation Order*, the base station sets SSD\_A and  
14 SSD\_B to the values received from the HLR/AC (see [13]).
- 15 If the mobile station fails to receive the *Base Station Challenge Confirmation Order* within  
16 T<sub>64m</sub> seconds of when the acknowledgment to the *Base Station Challenge Order* was  
17 received, the mobile station shall discard SSD\_A\_NEW and SSD\_B\_NEW. The mobile  
18 station shall then terminate the SSD update process.
- 19

1  
2  
3

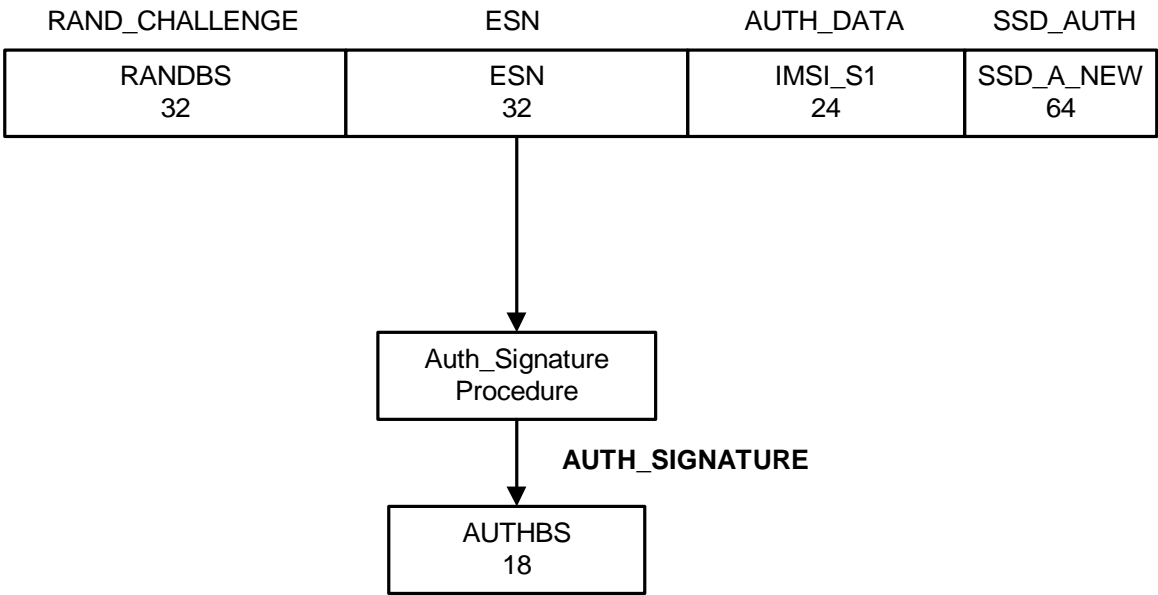


4  
5  
6

**Figure 2.3.12.1.5-1. SSD Update Message Flow**



**Figure 2.3.12.1.5-2. Computation of Shared Secret Data (SSD)**



**Figure 2.3.12.1.5-3. Computation of AUTHBS**



### 2.3.12.2 Signaling Message Encryption

In an effort to enhance the authentication process and to protect sensitive subscriber information (such as PINs), a method is provided to encrypt certain fields of selected f-dsch or r-dsch signaling messages.

The following is a description of the messages on f-dsch (see 2.3.12.2.1) and r-dsch (see 2.3.12.2.2) that are enciphered using the Cellular Message Encryption Algorithm (see section 2.5.1, [15]) or the Enhanced Cellular Message Encryption Algorithm (see section 2.5.2, [15]), and when ENCRYPT\_MODE<sub>S</sub> is set to '01' or '10'. The availability of encryption algorithm information is under government control.

For each message, the enciphered fields are identified. The messages are grouped by channel designation.

Messages shall not be encrypted if authentication is not performed (AUTH<sub>S</sub> is set to '00'). See [23] for details of the initialization and use of the encryption procedure.

Signaling message encryption is controlled for each call individually. If P\_REV\_IN\_USE<sub>S</sub> is less than or equal to six, the mobile station identifies its encryption capability in the ENCRYPTION\_SUPPORTED field in the *Origination Message* and the *Page Response Message* as shown in Table 2.7.1.3.2.4-5. If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to seven, the mobile station identifies its encryption capability in the SIG\_ENCRYPT\_SUP field in *Registration Message*, *Origination Message*, *Page Response Message*, *Security Mode Request Message*, and the encryption capability information record in *Status Response Message* and *Extended Status Response Message*, as shown in Table 2.7.1.3.2.1-5. The initial encryption mode for the call is established by setting the ENCRYPT\_MODE field to '00', '01', or '10' in the *Channel Assignment Message* or in the *Extended Channel Assignment Message*. If ENCRYPT\_MODE is set to '00', message encryption is off. To turn encryption on after channel assignment, the base station sends one of the following f-dsch messages to the mobile station:

- *Extended Handoff Direction Message* with the ENCRYPT\_MODE field set to '01' or '10'
- *General Handoff Direction Message* with the ENCRYPT\_MODE field set to '01' or '10'
- *Universal Handoff Direction Message* with the ENCRYPT\_MODE field set to '01' or '10'
- *Message Encryption Mode Order* with the ENCRYPT\_MODE field set to '01' or '10'

To turn signaling message encryption off, the base station sends one of the following f-dsch messages to the mobile station:

- *Extended Handoff Direction Message* with the ENCRYPT\_MODE field set to '00'
- *General Handoff Direction Message* with the ENCRYPT\_MODE field set to '00'
- *Universal Handoff Direction Message* with the ENCRYPT\_MODE field set to '00'
- *Message Encryption Mode Order* with the ENCRYPT\_MODE field set to '00'

Encryption shall apply only to the part of the Layer 3 message specified below.

When encryption is off, all fields of all Layer 3 messages sent by the mobile station and base station are unencrypted.

When additional octets are inserted, the overall Lower Layers message length is updated to reflect the addition. Specific Layer 3 record length fields (e.g., RECORD\_LEN, NUM\_FIELDS, or NUM\_DIGITS) shall not be affected by the insertion of additional bits.

If the Enhanced Cellular Message Encryption Algorithm is used, the following requirements apply:

- The mobile station and base station shall each maintain an 8-bit encryption sequence counter. The encryption sequence counter shall be incremented modulo 256 for each new encryption. The counter value, hereafter called ES\_COUNT, shall be used to form the SYNC parameter of the Enhanced Cellular Message Encryption Algorithm as described below.
- As part of each encryption, an additional octet of value ES\_COUNT shall be inserted immediately following the encrypted part of the message. This additional octet shall not be encrypted. The additional octet shall be removed from the message after decryption.

#### 2.3.12.2.1 Encrypted Messages on the f-dsch

When encryption is on (ENCRYPT\_MODE<sub>s</sub> equal to binary '01' or '10'), the encryptable fields of the following messages sent on f-dsch, as listed below, shall be encrypted. All other messages sent on f-dsch shall be unencrypted.

1. Alert With Information Message (see 3.7.3.3.2.3) and Extended Alert With Information Message (see 3.7.3.3.2.42) are encrypted.

The type-specific fields of all information records (see 3.7.5) shall be encrypted. For each information record, the type-specific fields shall be treated by the encryption procedure as a new single message. If the type-specific fields of an information record consist of a single octet (RECORD\_LEN field equal to 1), an additional octet of value '00000000' shall be inserted following the information record and shall be encrypted as if part of the record. (If the RECORD\_LEN field is 0, the information record contains no type-specific fields, and the record contains no encrypted data.)

No other fields in the *Alert With Information Message* and *Extended Alert With Information Message* are encrypted.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub> equal to binary '10'), the following requirements apply for each information record:

- The DATA\_TYPE parameter shall be set to '0'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT
  - SYNC[1] = RECORD\_TYPE

2. Flash With Information Message (see 3.7.3.3.2.14) and Extended Flash With Information Message (see 3.7.3.3.2.43) are encrypted.

The type-specific fields of all information records (see 3.7.5) shall be encrypted. For each information record, the type-specific fields shall be treated by the encryption procedure as a new single message. If the type-specific fields of an information record consist of a single octet (RECORD\_LEN field equal to 1), an additional octet of value '00000000' shall be inserted following the information record and shall be encrypted as if part of the record. (If the RECORD\_LEN field is 0, the information record contains no type-specific fields, and the record contains no encrypted data.)

No other fields in the *Flash With Information Message* and *Extended Flash With Information Message* are encrypted.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub> equal to binary '10'), the following requirements apply for each information record:

- The DATA\_TYPE parameter shall be set to '0'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT
  - SYNC[1] = RECORD\_TYPE

3. *Send Burst DTMF Message* (see 3.7.3.3.2.9) is encrypted.

The DIGIT<sub>i</sub> fields of the *Send Burst DTMF Message* shall be encrypted. These fields are treated by the encryption procedure as a new single message, with the 4-bit digit codes packed into consecutive octets. If the NUM\_DIGITS field contains an odd number, four bits of value '0000' shall follow the last digit and shall be included in the encrypted message. If NUM\_DIGITS is less than 3, an additional eight bits of value '00000000' shall follow the DIGIT<sub>i</sub> fields and shall be included in the encrypted part of the message.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub> equal to binary '10'), the following requirements apply:

- The DATA\_TYPE parameter shall be set to '0'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT
  - SYNC[1] = MSG\_TYPE = '00001001'

4. *Continuous DTMF Tone Order* (see 3.7.3.3.2.1) is encrypted.

The 16 bits comprised of ADD\_RECORD\_LEN, the order-specific fields and the first five (5) bits of the RESERVED field shall be encrypted. These fields shall be treated by the encryption procedure as a new single message.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub> equal to binary '10'), the following requirements apply:

- The DATA\_TYPE parameter shall be set to '0'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT

1           - SYNC[1] = MSG\_TYPE = '00000001'

2   5. *Data Burst Message* (see 3.7.3.3.2.4) is encrypted.

3   If BURST\_TYPE is equal to '111110' or '111111', all CHAR<sub>i</sub> fields after the first two  
4   shall be encrypted; otherwise, all CHAR<sub>i</sub> fields shall be encrypted.

5   If the CHAR<sub>i</sub> field consists of a single octet (NUM\_FIELDS field equal to 1), an  
6   additional octet of value '00000000' shall be inserted following the information record  
7   and shall be encrypted as if part of the record. (If the NUM\_FIELDS field is 0, the  
8   information record contains no type-specific fields, and the record contains no  
9   encrypted data).

10   If the Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub> equal to  
11   binary '01'), the following requirements apply:

- 12       • If BURST\_TYPE is equal to '000011' (SMS) or '000100' (OTASP), the message  
13       shall be encrypted.
- 14       • For all other values of BURST\_TYPE, the message shall be encrypted only if  
15       encryption is required by the service option standard governing use of the *Data*  
16       *Burst Message*; otherwise, the message shall not be encrypted.

17   If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub>  
18   equal to binary '10'), the following requirements apply:

- 19       • If BURST\_TYPE is equal to '000100' (OTASP), the DATA\_TYPE parameter shall  
20       be set to '0'. Otherwise, the DATA\_TYPE parameter shall be set to '1'.
- 21       • The SYNC parameter shall be set as follows:  
22       - SYNC[0] = ES\_COUNT  
23       - SYNC[1] = MSG\_TYPE = '00000100'

24   6. *Power Up Function Completion Message* (see 3.7.3.3.2.30) is encrypted.

25   If the LOC\_IND field is set to '1', the fields RESERVED (3 bits), MS\_LAT (22 bits),  
26   MS\_LONG (23 bits), and MS\_LOC\_TSTAMP (24 bits) are encrypted. These fields shall  
27   be treated by the encryption procedure as a new single message.

28   Otherwise, if the LOC\_IND field is set to '0', no fields in this message are encrypted.

29   If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub>  
30   equal to binary '10'), the following requirements apply:

- 31       • The DATA\_TYPE parameter shall be set to '1'.
- 32       • The SYNC parameter shall be set as follows:  
33       - SYNC[0] = ES\_COUNT  
34       - SYNC[1] = MSG\_TYPE = '00011110'

35   2.3.12.2.2 Encrypted Messages on the r-dsch

36   When encryption is on (ENCRYPT\_MODE<sub>s</sub> equal to binary '01' or '10') the encryptable  
37   fields of the following r-dsch Layer 3 messages, as listed below, shall be encrypted. All

1 other r-dsch messages shall be unencrypted.

2 1. Origination Continuation Message (see 2.7.2.3.2.9) and Enhanced Origination Message  
3 are encrypted.

4 The CHARi fields of the *Origination Continuation Message* and *Enhanced Origination*  
5 *Message* shall be encrypted. These fields shall be treated by the encryption procedure  
6 as a new single message, with the character codes packed into consecutive octets. If  
7 DIGIT\_MODE is '0' and the NUM\_FIELDS field contains an odd number, four bits of  
8 value '0000' shall follow the last digit and shall be included in the encrypted part of  
9 the message. In addition, if ENCRYPT\_MODE<sub>S</sub> is equal to '01', the following  
10 requirement applies

- 11 • If DIGIT\_MODE is '0' and NUM\_FIELDS is less than 3, or if DIGIT\_MODE is '1'  
12 and NUM\_FIELDS is less than 2, an additional eight bits of value '00000000'  
13 shall follow the CHARi fields and shall be included in the encrypted part of the  
14 message.

15 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>S</sub>  
16 equal to binary '10'), the following requirements apply:

- 17 • The DATA\_TYPE parameter shall be set to '0'.
- 18 • The SYNC parameter shall be set as follows:  
19 – SYNC[0] = ES\_COUNT  
20 – SYNC[1] = MSG\_TYPE = '00001001' for *Origination Continuation Message*  
21 – SYNC[1] = MSG\_TYPE = '00011010' for *Enhanced Origination Message*

22 The type-specific fields of all information records (see 2.7.4) in the *Origination*  
23 *Continuation Message* and *Enhanced Origination Message* shall be encrypted. For each  
24 information record, the type-specific fields shall be treated by the encryption  
25 procedure as a new single message. If the type-specific fields of an information record  
26 consist of a single octet (RECORD\_LEN field equal to 1), an additional octet of value  
27 '00000000' shall be inserted following the information record and shall be encrypted as  
28 if part of the record. (If the RECORD\_LEN field is 0, the information record contains no  
29 type-specific fields, and the record contains no encrypted data.)

30 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>S</sub>  
31 equal to binary '10'), the following requirements apply for each information record:

- 32 • The DATA\_TYPE parameter shall be set to '0'.
- 33 • The SYNC parameter shall be set as follows:  
34 – SYNC[0] = ES\_COUNT  
35 – SYNC[1] = RECORD\_TYPE

36 2. Flash With Information Message (see 2.7.2.3.2.3) and Extended Flash With Information  
37 Message (see 2.7.2.3.2.32) are encrypted.

38 The type-specific fields of all information records (see 2.7.4) shall be encrypted. For  
39 each information record, the type-specific fields shall be treated by the encryption

procedure as a new single message. If the type-specific fields of an information record consist of a single octet (RECORD\_LEN field equal to 1), an additional octet of value '00000000' shall be inserted following the information record and shall be encrypted as if part of the record. (If the RECORD\_LEN field is 0, the information record contains no type-specific fields, and the record contains no encrypted data.)

No other fields in the *Flash With Information Message* and *Extended Flash With Information Message* are encrypted.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>S</sub> equal to binary '10'), the following requirements apply for each information record:

- The DATA\_TYPE parameter shall be set to '0'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT
  - SYNC[1] = RECORD\_TYPE

### 3. *Send Burst DTMF Message* (see 2.7.2.3.2.7) is encrypted.

The DIGIT<sub>i</sub> fields of the *Send Burst DTMF Message* shall be encrypted. These fields shall be treated by the encryption procedure as a new single message, with the 4-bit digit codes packed into consecutive octets. If the NUM\_DIGITS field contains an odd number, four bits of value '0000' shall follow the last digit and shall be included in the encrypted message. If NUM\_DIGITS is less than 3, an additional eight bits of value '00000000' shall follow the DIGIT<sub>i</sub> fields and shall be included in the encrypted part of the message.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>S</sub> equal to binary '10'), the following requirements apply:

- The DATA\_TYPE parameter shall be set to '0'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT
  - SYNC[1] = MSG\_TYPE = '00000111'

### 4. *Continuous DTMF Tone Order* (see 2.7.2.3.2.1) is encrypted.

The 16 bits comprised of ADD\_RECORD\_LEN, the order-specific fields and the first five (5) bits of the RESERVED field shall be encrypted. These fields shall be treated by the encryption procedure as a new single message.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>S</sub> equal to binary '10'), the following requirements apply:

- The DATA\_TYPE parameter shall be set to '0'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT
  - SYNC[1] = MSG\_TYPE = '00000001'

5. *Data Burst Message* (see 2.7.2.3.2.4) is encrypted.

If BURST\_TYPE is equal to '111110' or '111111', all CHAR<sub>i</sub> fields after the first two shall be encrypted; otherwise, all CHAR<sub>i</sub> fields shall be encrypted.

If the CHAR<sub>i</sub> field consists of a single octet (NUM\_FIELDS field equal to 1), an additional octet of value '00000000' shall be inserted following the information record and shall be encrypted as if part of the record. (If the NUM\_FIELDS field is 0, the information record contains no type-specific fields, and the record contains no encrypted data).

If the Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub> equal to binary '01'), the following requirements apply:

- If BURST\_TYPE is equal to '000011' (SMS) or '000100' (OTASP), the message shall be encrypted.
- For all other values of BURST\_TYPE, the message shall be encrypted only if encryption is required by the service option standard governing use of the *Data Burst Message*; otherwise, the message shall not be encrypted.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT\_MODE<sub>s</sub> equal to binary '10'), the following requirements apply:

- If BURST\_TYPE is equal to '000100' (OTASP), the DATA\_TYPE parameter shall be set to '0'. Otherwise, the DATA\_TYPE parameter shall be set to '1'.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES\_COUNT
  - SYNC[1] = MSG\_TYPE = '00000100'

### 2.3.12.3 Voice Privacy

Also see [2].

Voice privacy is provided in the CDMA system by means of the private long code mask used for PN spreading.

Voice privacy is provided on the Traffic Channels only. All calls are initiated using the public long code mask for PN spreading. The mobile station user may request voice privacy during call set-up using the *Origination Message* or *Page Response Message*, and during Traffic Channel operation using the *Long Code Transition Request Order*.

The transition to private long code mask shall not be performed if authentication is not performed (AUTH<sub>s</sub> is set to '00' or mobile station unable to perform authentication).

To initiate a transition to the private or public long code mask, either the base station or the mobile station sends a *Long Code Transition Request Order* on the f-dsch or r-dsch. The mobile station actions in response to receipt of this order are specified in 2.6.4, and the base station actions in response to receipt of this order are specified in 3.6.4.

The base station can also cause a transition to the private or public long code mask by sending the *Extended Handoff Direction Message*, the *General Handoff Direction Message*, or the *Universal Handoff Direction Message* with the PRIVATE\_LCM bit set appropriately.

#### 2.3.12.4 Extended Encryption for Signaling Message and User Information

Extended encryption is an encryption framework used for encrypting/decrypting both signaling messages and user information on f/r-dsch, f/r-csch, or f/r-dtch. Signaling message and user information encryption algorithms can be negotiated independently. Signaling message and user information encryption can be turned on or off independently.

Signaling messages or user information shall not be encrypted if authentication is not performed (i.e., when MSG\_INTEGRITY\_SUP<sub>s</sub> is equal to '0' and AUTH<sub>s</sub> is set to '00' (see 2.3.12.1)) or authentication has not been performed (i.e., when MSG\_INTEGRITY\_SUP<sub>s</sub> is equal to '1' and the INT\_KEY[KEY\_ID] is equal to NULL (see 2.3.12.5)).

##### 2.3.12.4.1 Extended Encryption for Signaling Messages

Signaling messages with zero length shall be sent un-encrypted, in which case Layer 3 shall indicate to LAC layer that the messages are sent un-encrypted.

All mini messages shall be sent un-encrypted.

When sending a Registration Accepted Order, Security Mode Command Message, or Base Station Reject Order, the base station should use assured mode.

##### 2.3.12.4.1.1 Extended Encryption for Signaling on f/r-csch

To turn f/r-csch signaling encryption on or off, the base station sends a *Registration Accepted Order* or *Security Mode Command Message* on f-csch, with the C\_SIG\_ENCRYPT\_MODE field set to one of the values specified in Table 3.7.4.5-1. The value of C\_SIG\_ENCRYPT\_MODE<sub>r</sub> is then stored in C\_SIG\_ENCRYPT\_MODE<sub>s</sub>.

If C\_SIG\_ENCRYPT\_MODE<sub>s</sub> is not equal to '000' and ENC\_KEY[KEY\_ID] is not equal to NULL, all f/r-csch signaling messages shall be encrypted based on the value of C\_SIG\_ENCRYPT\_MODE<sub>s</sub> using the procedures specified in 2.3.12.4.1.3; except for the exceptions listed below in the rest of this section.

On the f-csch, *General Page Message*, *Universal Page Message*, *Registration Request Order*, *Authentication Challenge Message*, *Registration Accepted Order*, *Base Station Reject Order*, and *Authentication Request Message* shall be sent un-encrypted. *Channel Assignment Message*, *Extended Channel Assignment Message*, and *Security Mode Command Message* may be sent un-encrypted. All overhead messages and all signaling messages with a broadcast address type shall be sent un-encrypted.

On the r-csch, *Registration Message*, *Page Response Message*, *Reconnect Message* (if sent in response to a *General Page Message* or a *Universal Page Message*), *Authentication Challenge Response Message*, *Security Mode Request Message*, *Authentication Response Message*, *Mobile Station Reject Order* (ORDQ = '00010110', '00011000', '00011001' or '00011010') and *Authentication Resynchronization Message* shall be sent un-encrypted.



When sending an *Origination Message*, if all of the following conditions are true, the mobile station shall not include the dialed digits in the *Origination Message*, and the mobile station shall include the dialed digits in the *Origination Continuation Message*:

- The base station supports extended encryption;
- C\_SIG\_ENCRYPT\_MODE<sub>S</sub> is equal to '000' or ENC\_KEY[KEY\_ID] is equal to NULL;
- C\_SIG\_ENCRYPT\_REQ is set to '1' or D\_SIG\_ENCRYPT\_REQ is set to '1' in the *Origination Message*;
- The mobile station does not recognize that this is an emergency call.

#### 2.3.12.4.1.2 Extended Encryption for Signaling on f/r-dsch

The initial mode of extended encryption for f/r-dsch signaling messages is established by sending a *Channel Assignment Message* or *Extended Channel Assignment Message* with the ENCRYPT\_MODE field set to '11'<sup>17</sup> and the D\_SIG\_ENCRYPT\_MODE field set to one of the values specified in Table 3.7.4.5-1. The value of D\_SIG\_ENCRYPT\_MODE<sub>r</sub> is then stored in D\_SIG\_ENCRYPT\_MODE<sub>S</sub>.

To turn f/r-dsch signaling encryption on or off after channel assignment, the base station sends a *General Handoff Direction Message* or *Universal Handoff Direction Message* with the ENCRYPT\_MODE field and the D\_SIG\_ENCRYPT\_MODE field set accordingly. Alternatively, the base station may send a *Security Mode Command Message* on f-dsch with the D\_SIG\_ENCRYPT\_MODE field set accordingly.

If D\_SIG\_ENCRYPT\_MODE<sub>S</sub> is not equal to '000' and ENC\_KEY[KEY\_ID] is not equal to NULL, all f/r-dsch signaling messages shall be encrypted based on the value of D\_SIG\_ENCRYPT\_MODE<sub>S</sub> using the procedures specified in 2.3.12.4.1.3, except for the exceptions listed below in the rest of this section.

On the f-dsch, the *Security Mode Command Message* may be sent un-encrypted. The *Base Station Reject Order*, *Authentication Challenge Message* and *Authentication Request Message* shall be sent un-encrypted.

On the r-dsch, the *Security Mode Request Message*, *Authentication Challenge Response Message*, *Authentication Response Message*, *Mobile Station Reject Order* (ORDQ = '00010110', '00011000', '00011001' or '00011010') and *Authentication Resynchronization Message* shall be sent un-encrypted.

#### 2.3.12.4.1.3 Signaling Encryption/Decryption Procedures

In order to perform signaling encryption, message integrity, or both, on f/r-csch or f/r-dsch, both the mobile station and the base station shall each maintain the following 32-bit counters:

---

<sup>17</sup> If ENCRYPT\_MODE is set to a value other than '11', see section 2.3.12.2.1.

- 1 • TX\_EXT\_SSEQ[i][j] (the 32-bit crypto-sync for encryption and message integrity.  $i =$   
2 0 and 1,  $j =$  '00' to '11')
- 3 • RX\_EXT\_SEQ[i][j] (the 32-bit crypto-sync for decryption and message integrity.  $i =$   
4 0 and 1,  $j =$  '00' to '11')

5 The above counters in the base station and the mobile station shall only be initialized by a  
6 *Registration Accepted Order*, *Channel Assignment Message*, *Extended Channel Assignment*  
7 *Message*, or *Security Mode Command Message* in response to a *Registration Message*,  
8 *Origination Message*, *Page Response Message*, or *Security Mode Request Message* that  
9 carries a NEW\_SSEQ\_H field with a valid NEW\_SSEQ\_H\_SIG field.<sup>18</sup> The response to a  
10 *Registration Message* is a *Registration Accepted Order*. The response to an *Origination*  
11 *Message* or *Page Response Message* is a *Channel Assignment Message* or *Extended Channel*  
12 *Assignment Message*. The response to a *Security Mode Request Message* is a *Security Mode*  
13 *Command Message*.

14 Upon initialization of the crypto-sync counters, the following initialization shall be  
15 performed at the mobile station: the 24 most significant bits of TX\_EXT\_SSEQ[i][KEY\_ID]  
16 and RX\_EXT\_SSEQ[i][KEY\_ID] shall be initialized by the value of the NEW\_SSEQ\_H field  
17 included in the message for  $i = 0$  and 1.

18 The sender shall perform the following procedures for each Layer 3 PDU (including all  
19 Layer 3 PDU retransmitted by Layer 3) that is to be encrypted:

- 20 1. Append between 0 and 7 inclusive padding bits (set to any random combination of  
21 '0's and '1's) to the Layer 3 PDU such that the padded Layer 3 PDU in bits is an  
22 integer multiple of eight (the padding bits become part of the L3 PDU).
- 23 2. Compute an 8-bit Layer 3 PDU CRC as specified in 2.3.12.1.4 over the un-  
24 encrypted Layer 3 PDU (including the padding bits, if any).
- 25 3. Append the 8-bit CRC to the end of the Layer 3 PDU.
- 26 4. If the PDU is to be transmitted on f/r-csch, let SDU\_ENCRYPT\_MODE equal  
27 C\_SIG\_ENCRYPT\_MODE<sub>S</sub>. If the PDU is to be transmitted on f/r-dsch, let  
28 SDU\_ENCRYPT\_MODE equal D\_SIG\_ENCRYPT\_MODE<sub>S</sub>. If the Layer 3 PDU uses  
29 unassured mode, let  $i = 0$ ; otherwise, let  $i = 1$ .
- 30 5. Let EXT\_SSEQ equal TX\_EXT\_SSEQ[i][KEY\_ID]. Encrypt the concatenated Layer 3  
31 PDU and the 8-bit CRC by using EXT\_SSEQ and the encryption algorithm specified  
32 by SDU\_ENCRYPT\_MODE, in accordance with 2.3.12.4.3.
- 33 6. The sender shall pass the encrypted concatenated Layer 3 PDU, the 8-bit Layer 3  
34 CRC, the 32-bit EXT\_SSEQ, SDU\_ENCRYPT\_MODE, and an indication whether the  
35 Layer 3 PDU shall be integrity-protected to the LAC layer.

---

<sup>18</sup> The mobile station should select a different value of NEW\_SSEQ\_H every time NEW\_SSEQ\_H is included in a message. This is to prevent the re-use of the same 24 most significant bits of the 32-bit crypto-sync.

1        7. Set TX\_EXT\_SSEQ[i][KEY\_ID] to (TX\_EXT\_SSEQ[i][KEY\_ID] + 1) mod  $2^{32}$ .

2        The receiver shall perform the following procedures upon reception of an encrypted  
3        signaling message with an 8-bit SDU\_SSEQ field or a 32-bit EXT\_SSEQ passed by the LAC  
4        Layer (e.g., if SDU\_ENCRYPT\_MODE indicated by LAC Layer is not equal to '000'):

5            1. If the Layer 3 PDU uses unassured mode, let  $i = 0$  and  $N = 8$ ; otherwise, let  $i = 1$   
6            and  $N = 4$ . Let  $V$  be the 8 least significant bits of RX\_EXT\_SSEQ[i][SDU\_KEY\_ID].  
7            Perform the duplicate detection procedures in accordance with 2.3.12.4.1.5 using  
8             $N$  and  $V$ , before proceeding further.

9            2. If SDU\_SSEQ is supplied by the LAC Layer, the mobile station shall construct  
10            EXT\_SSEQ as follows:

11            If (SDU\_SSEQ -  $V$ ) mod 256 < 128:

12                    EXT\_SSEQ = (RX\_EXT\_SSEQ[i][SDU\_KEY\_ID] + (SDU\_SSEQ -  $V$ ) mod 256) mod  
13                     $2^{32}$

14            Else:

15                    EXT\_SSEQ = (RX\_EXT\_SSEQ[i][SDU\_KEY\_ID] - ( $V$  - SDU\_SSEQ) mod 256) mod  
16                     $2^{32}$

17            3. Remove the LAC Layer padding, at the end of the Layer 3 PDU, if any, such that the  
18            Layer 3 PDU is octet aligned.

19            4. Decrypt the concatenated Layer 3 PDU and the 8-bit Layer 3 CRC using EXT\_SSEQ  
20            and the encryption algorithm specified by SDU\_ENCRYPT\_MODE, in accordance  
21            with 2.3.12.4.3.

22            5. Compute an 8-bit CRC as specified in 2.3.12.4.1.4 over the un-encrypted Layer 3  
23            PDU (excluding the received 8-bit CRC).

24            6. Compare the value of the computed CRC with the decrypted 8-bit CRC. If the two  
25            CRCs are equal, the decryption is defined to be successful; otherwise the  
26            decryption is defined to be unsuccessful.

27            7. If the decryption was unsuccessful, the message shall be discarded; otherwise, if  
28            SDU\_SSEQ is supplied by the LAC Layer and ((SDU\_SSEQ -  $V$ ) mod 256) < 128, the  
29            receiver shall set RX\_EXT\_SSEQ[i] to EXT\_SSEQ constructed in step 2 above.

30            8. If the base station can not decrypt an *Origination Message* or the LAC Layer  
31            indicates that the MACI is not valid in an *Origination Message*, the base station  
32            should send a *Base Station Reject Order* (ORDQ = '00000000'). If the base station  
33            can not decrypt any other message or the LAC Layer indicates that the MACI is not  
34            valid for other message, the base station should send a *Base Station Reject Order*  
35            (ORDQ = '00000001').

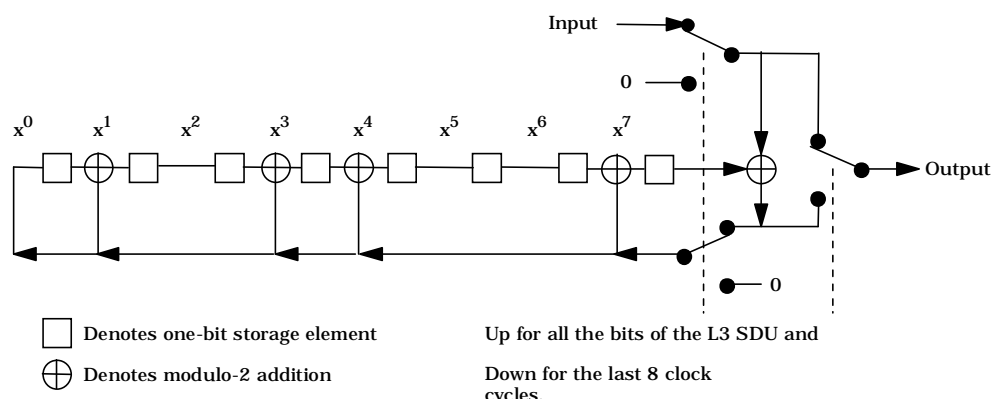
#### 36        2.3.12.4.1.4 Computation of the 8-bit Layer 3 PDU CRC Field

37        The generator polynomials for the 8-bit Layer 3 PDU CRC field shall be as follows:

38                    
$$g(x) = x^8 + x^7 + x^4 + x^3 + x + 1$$

The Layer 3 PDU CRC field shall be computed according to the following procedure using the logic shown in Figures 2.3.12.4.5-1:

- Initially, all shift register elements shall be set to logical one and the switches shall be set in the up position.
- The register shall be clocked a number of times equal to the number bits in the Layer 3 PDU with those bits as input.
- The switches shall be set in the down position so that the output is a modulo-2 addition with a '0' and the successive shift register inputs are '0'.
- The register shall be clocked an additional 8 number of times.
- These additional bits shall be the Layer 3 PDU CRC field indicator bits.
- The bits shall be transmitted in the order calculated.



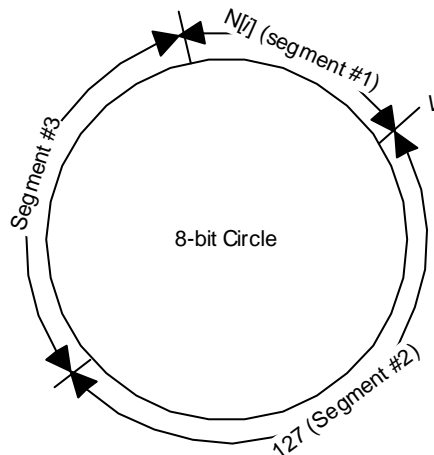
**Figure 2.3.12.4.1.4-1. 8-Bit Layer 3 SDU CRC Field Calculation**

#### 2.3.12.4.1.5 Duplicate Detection of Security Sequence Number

This section describes the duplicate detection of encrypted signaling messages (see the decryption procedures at the receiver described in 2.3.12.4.1.3).

Given the value of the latest sequence number received,  $V$ , and the window size,  $N$  (see the decryption procedures at the receiver described in 2.3.12.4.1.3), the 8-bit encryption sequence number space at the receiver can be divided into the following three segments as shown in Figure 2.3.12.4.1.5-1:

- Segment #1 - sequence numbers from  $((V - N + 1) \bmod 256)$  to  $V$  inclusive (the anti-replay window)
- Segment #2 - sequence numbers from  $((V + 1) \bmod 256)$  to  $((V + 127) \bmod 256)$  inclusive (future sequence numbers)
- Segment #3 - sequence numbers from  $((V + 128) \bmod 256)$  to  $((V - N) \bmod 256)$  inclusive (past sequence numbers)



**Figure 2.3.12.4.1.5-1 An 8-bit Encryption Sequence Number Space Divided into 3 Segments**

If the received sequence number, SDU\_SSEQ, belongs to segment #1, the receiver shall check whether SDU\_SSEQ has already been received.<sup>19</sup> If SDU\_SSEQ has been received already, the receiver shall discard the message and shall not perform the remaining steps of the decryption procedures described in 2.3.12.4.1.3; otherwise, the receiver shall continue the decryption procedures described in 2.3.12.4.1.3.

If the received sequence number, SDU\_SSEQ, belongs to segment #2, the receiver shall continue the decryption procedures described in 2.3.12.4.1.3.

If the received sequence number, SDU\_SSEQ, belongs to segment #3, the receiver shall discard the message and shall not perform the remaining steps of the decryption procedures described in 2.3.12.4.1.3.

#### 2.3.12.4.2 Extended Encryption for User Information

Extended encryption can be turned on or off independently for each individual service on f/r-dtch.

<sup>19</sup> The actual means of checking is left to implementation. One simple implementation is for the receiver to maintain an  $N$ -bit bitmap,  $w$ , to represent the sequence numbers in segment #1. The order of  $w$  is most significant bit first (i.e.,  $w[N-1]$ ,  $w[N-2]$ , ...,  $w[1]$ ,  $w[0]$ ). Let  $w[0]$  represent  $V$ ,  $w[1]$  represent  $((V - 1) \bmod 256)$ , etc.  $w[i] = '1'$  means sequence number  $i$  has already been received. When a message with sequence number  $i$  has been decrypted successfully,  $w[i]$  is set to '1'. Whenever  $V$  moves from  $V_1$  to  $V_2$ , left-shift  $w$   $((V_2 - V_1) \bmod 256)$  times. Each time  $w$  is left-shifted, stuff a '0' at the eight end of  $w$ . After all the shifting, set  $w(0)$  to '1'.

The initial encryption mode of user information of a service is established by sending a *Security Mode Command Message* on f-csch or by setting the UI\_ENCRYPT\_MODE field in the Service Configuration information record, with the UI\_ENCRYPT\_MODE field set to one of the values specified in 3.7.5.7-3. The value of the UI\_ENCRYPT\_MODE field is then stored in SO\_CON\_REC<sub>s</sub>[j].UI\_ENCRYPT\_MODE, where SO\_CON\_REC<sub>s</sub>[j] is the service option connection record (see 2.6.4.1.12) corresponding to the service.

To turn user information encryption for a service on or off after channel assignment, the base station sends a *Security Mode Command Message* on f-dsch with the UI\_ENCRYPT\_MODE field set accordingly. Explicit action time should be used when sending the *Security Mode Command Message*.

User information shall be encrypted based on the value of SO\_CON\_REC<sub>s</sub>[j].UI\_ENCRYPT\_MODE, where SO\_CON\_REC<sub>s</sub>[j] is the service option connection record (see 2.6.4.1.12) corresponding to the service.

#### 2.3.12.4.2.1 User Information Encryption/Decryption Procedures

If P\_REV\_IN\_USE<sub>s</sub> is less than nine and extended encryption for user information is turned on for a service, the sender shall encrypt each data block (see [3]) from that service, in accordance with 2.3.12.4.3, before passing the data blocks to MAC Layer. On the receiver side, the receiver shall decrypt each data block for that service from MAC Layer, in accordance with 2.3.12.4.3, before passing them to that service.

If P\_REV\_IN\_USE<sub>s</sub> is greater than or equal to nine and extended encryption for user information is turned on for a service, the sender shall encrypt the user data in the service layer before passing it to the MAC Layer. On the receiver side, the receiver shall pass each data block from MAC Layer to that service. Details of encryption are specified in the corresponding service option specification (see [30]).

If P\_REV\_IN\_USE<sub>s</sub> is greater than or equal to nine and extended encryption for user information is turned on for a voice service option<sup>20</sup>, the sender shall encrypt each data block from the voice service, in accordance with 2.3.12.4.3, before passing the data blocks to MAC Layer. On the receiver side, the receiver shall decrypt each data block for the voice service from MAC Layer, in accordance with 2.3.12.4.3, before passing them to that service.

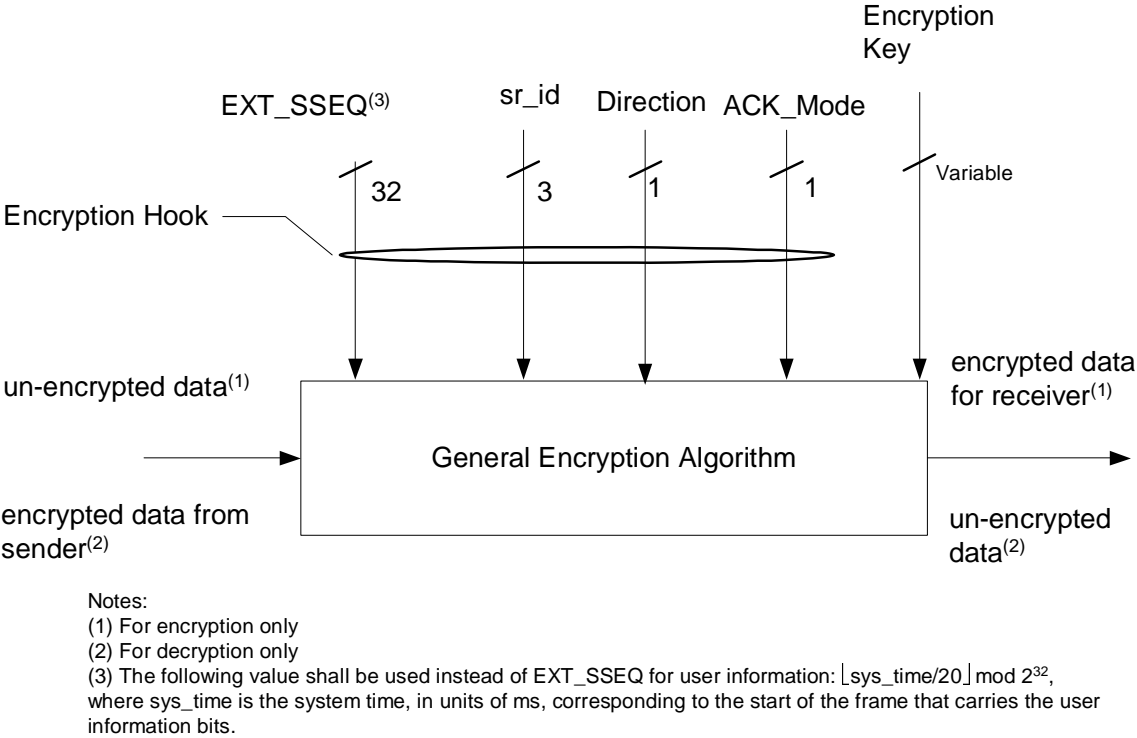
#### 2.3.12.4.3 Interface to the Encryption Algorithms

Figure 2.3.12.4.3-1 shows the structure for encrypting/decrypting both signaling messages and user information. Various encryption algorithms can be used with this structure. The encryption algorithm takes all or part of the following parameters as inputs, as illustrated in Figure 2.3.12.4.3-1. The actual inputs to the algorithm are specified in the rest of this section.

---

<sup>20</sup> Voice service option refers to SO 60, SO 61 or any service option in Service Option Group 0 in [30].

1



2

3

**Figure 2.3.12.4.3-1. Encryption Input Parameters**

4

5 The inputs to the encryption algorithm are described as follows:

- 6 • EXT\_SSEQ - A 32-bit Security Encryption Sequence Number for  
7 encryption/decryption.
- 8 • sr\_id - Service Reference Identifier (see [3]), which identifies the associated service  
9 option instance.
- 10 • Direction - The direction of the data being encrypted/decrypted. This shall be set  
11 to '0' if the data is transmitted on or received on a forward link. Otherwise, it shall  
12 be set to '1'.
- 13 • Encryption Key - Session Key for Encryption. This shall be a result of successful  
14 Session Key Agreement between the base station and the mobile station. The  
15 Encryption Key shall be stored by the mobile station in ENC\_KEY[KEY\_ID].
- 16 • Channel\_id - Channel identifier, which identifies the physical channel that carries  
17 the data to be encrypted or decrypted. This is applicable only to user information  
18 encryption on f/r-dtch. Channel\_id shall be set to, '000' for Fundamental Channel,  
19 '001' for Dedicated Control Channel, '010' for Supplemental Code Channel, '011' for  
20 Supplemental Channel 0, and '101' for Supplemental Channel 1.
- 21 • ACK\_Mode - The delivery mode (unassured or assured) of the signaling message.

1           This shall be set to '0' if the message is delivered using unassured mode;  
2           otherwise, this shall be set to '1'.

3   If the Enhanced Cellular Message Encryption Algorithm is used for encrypting/decrypting  
4   signaling messages, the input parameters of the Enhanced Cellular Message Encryption  
5   Algorithm (see [23]) shall be set as follows:

- 6       • The DATA\_TYPE parameter shall be set to '0'.
- 7       • The SYNC parameter shall be set as follows:
  - 8           – SYNC[0] = EXT\_SSEQ [7:0]<sup>21</sup>.
  - 9           – SYNC[1] = (ACK\_Mode | Direction | EXT\_SSEQ [13:8] ), where “|” denotes  
10           concatenation and EXT\_SSEQ<sub>s</sub> [13:8] is bits 8 through 13 of EXT\_SSEQ (with  
11           the LSB being bit 0).
- 12       • The CMEAKEY[0-7] parameter shall be set to the first 64 bits of ENC\_KEY[KEY\_ID].

13   If the Rijndael Encryption Algorithm is used for encrypting/decrypting signaling  
14   messages, the input parameters of ESP\_AES (see [44]) shall be set as follows:

- 15       • The encryption key parameter shall be set to ENC\_KEY[KEY\_ID].
- 16       • The FRESH parameter shall be set to (ACK\_Mode | sr\_id [2:0] | Direction |  
17       EXT\_SSEQ [31:0] | '000').
- 18       • The FRESHSIZE parameter shall be set to 5.
- 19       • The BUF parameter shall be set to the pointer of the most significant bit of the  
20       buffer<sup>22</sup> that contains the data to be encrypted or decrypted.
- 21       • The BIT\_OFFSET parameter shall be set to the offset between the bit position of the  
22       most significant bit of the data to be encrypted/decrypted and the bit position of  
23       the most significant bit of the buffer (e.g., if the bit position of the most significant  
24       bit of the data to be encrypted/decrypted and the bit position of the most  
25       significant bit of the buffer are equal, BIT\_OFFSET = 0).
- 26       • The BIT\_COUNT parameter shall be set to the number of bits of the data to be  
27       encrypted/decrypted.
- 28       • The full 128 bits of ENC\_KEY[KEY\_ID] shall be used.

29   If the Rijndael Encryption Algorithm is used for encrypting/decrypting user information,  
30   the input parameters of ESP\_AES (see [44]) shall be set as follows:

- 31       • The encryption key parameter shall be set to ENC\_KEY[KEY\_ID].

---

<sup>21</sup> Z [y:x] denotes bit x to bit y of the binary value Z with bit 0 the least significant bit of Z.

<sup>22</sup> “Buffer” refers to the physical memory that stores the data to be encrypted or decrypted. The octets in the buffer are assumed to be most-significant first, and the first bit of the buffer is the most significant bit of the first octet.



- 1       • The FRESH parameter shall be set to  $(\text{sr\_id [2:0]} \mid \text{Direction} \mid \lfloor \text{sys\_time}/20 \rfloor \bmod 2^{32}) \ll 31 \mid \text{Channel\_id [2:0]} \mid '0')$ , where sys\_time is the system time, in units of
- 2       ms, corresponding to the start of the physical layer frame that carries the data
- 3       block(s).
- 4
- 5       • The FRESHSIZE parameter shall be set to 5.
- 6       • The BUF parameter shall be set to the pointer of the most significant bit of the
- 7       buffer<sup>23</sup> that contains the data to be encrypted or decrypted.
- 8       • The BIT\_OFFSET parameter shall be set to the offset between the bit position of the
- 9       most significant bit of the data to be encrypted/decrypted and the bit position of
- 10       the most significant bit of the buffer (e.g., if the bit position of the most significant
- 11       bit of the data to be encrypted/decrypted and the bit position of the most
- 12       significant bit of the buffer are equal, BIT\_OFFSET = 0).
- 13       • The BIT\_COUNT parameter shall be set to the number of bits of the data to be
- 14       encrypted/decrypted.
- 15       • The full 128 bits of ENC\_KEY[KEY\_ID] shall be used.

#### 16   2.3.12.4.4 Encryption Negotiation

17   The mobile station shall indicate to the base station the encryption algorithms supported  
18   by using SIG\_ENCRYPT\_SUP and UI\_ENCRYPT\_SUP in one of the following messages:

- 19       • *Registration Message*
- 20       • *Origination Message*
- 21       • *Page Response Message*
- 22       • *Security Mode Request Message*
- 23       • *Status Response Message* (in Encryption Capability information record)
- 24       • *Extended Status Response Message* (in Encryption Capability information record)

25   The base station may turn on or turn off the encryption of the voice, data services, or  
26   signaling encryption with a *Security Mode Command Message*, *Universal Handoff Direction*  
27   *Message*, or *General Handoff Direction Message* sent on f-dsch or *Security Mode Command*  
28   *Message* sent on f-csch. Similarly, the mobile station may propose to turn on or turn off  
29   the user information encryption or signaling encryption with a *Security Mode Request*  
30   *Message* sent on r-dsch or r-csch.

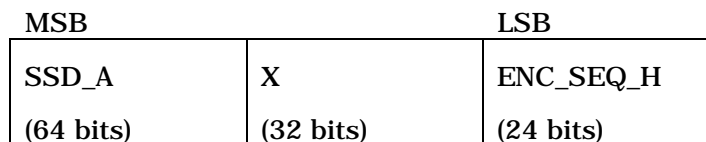
---

<sup>23</sup> "Buffer" refers to the implementation-dependent physical memory that stores the data to be encrypted or decrypted. The octets in the buffer are assumed to be most-significant first, and the first bit of the buffer is the most significant bit of the first octet.

#### 2.3.12.4.5 Computation of NEW\_SSEQ\_H\_SIG

The NEW\_SSEQ\_H\_SIG field (included in the *Registration Message*, *Origination Message*, *Page Response Message*, and *Security Mode Request Message*) is a signature of the 24 most significant bits of the crypto-sync (NEW\_SSEQ\_H). The mobile station shall compute this 8-bit field as follows:

1. The mobile station shall construct the *message bits* as shown in Figure 2.3.12.4.5-1.  
For messages that are sent on the r-csch, X is set to  $RAND_S$ . For messages that are sent on the r-dsch, X is set to  $(\lfloor \text{sys\_time} / 20000 \rfloor) \bmod 2^{32}$ , where sys\_time is the system time in ms at which the message is assembled.



**Figure 2.3.12.4.5-1. Message Bits**

2. The mobile station shall pad the *message bits* constructed in the previous step, as specified in [38], and compute the 160-bit *message digest* as specified in [38].
3. The mobile station shall store the 8 rightmost (least significant) bits of the *message digest* in NEW\_SSEQ\_H\_SIG.

#### 2.3.12.5 Authentication and Key Set-up Procedures when P\_REV\_IN\_USE<sub>S</sub> >= 10

If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than ten and MSG\_INTEGRITY\_SUP<sub>S</sub> is equal to '1', then message integrity is performed (see [4]). The mobile station performs authentication in accordance with the procedures in this section. Before any message integrity or extended encryption (see 2.3.12.4) can be performed, the mobile station and base station need to set up the same set of integrity key, encryption key, and security sequence number in a secured manner.

There are two types of keys that the base station could obtain from the network – the CMEA key or the (IK, CK) pair. Each requires a different method to be established. CMEA key is the key generated using CAVE during 2G authentication as described in 2.3.12.1. The (IK, CK) pair is a result of AKA (3G authentication. See [44]).

All base stations with P\_REV greater than or equal to ten shall be able to execute 2G authentication or AKA. Whether the AKA procedures are actually performed on a mobile station depends on various factors such as whether the HLR/AC has enabled AKA, whether the ANSI-41 interfaces between the MSC/VLR and AC supports AKA, etc.

All mobile stations with MOB\_P\_REV greater than or equal to ten shall support 2G authentication, AKA, and message integrity.

1 In general, when an idle mobile station does not have any integrity key and encryption key  
 2 to use, it starts the 2G authentication and key set-up procedures by registering via a  
 3 *Registration Message*, *Origination Message*, or *Page Response Message*.

4 Details of Authentication and Key Set-Up Procedures are described in the rest of this  
 5 section.

6 The mobile station requests (IK, CK) from the UIM. If (IK, CK) are available, the mobile  
 7 station has already performed the 3G authentication and the (IK, CK) may still be valid, in  
 8 which case, the mobile station needs to perform the (IK, CK) restoration procedures in  
 9 2.3.12.5.3 to restore the (IK, CK).

10 If (IK, CK) in the UIM are not available, the mobile station sets KEY\_ID to NULL to indicate  
 11 that the mobile station does not have any integrity key and encryption key and thus not  
 12 authenticated. The mobile station then registers and sends an *ROP*. The *ROP* contains a  
 13 new key id (NEW\_KEY\_ID) and a new security sequence number (NEW\_SSEQ\_H)  
 14 associated with the AUTHR (see [4]) of the message. The mobile station also starts a Key  
 15 Set-Up timer.<sup>24</sup>

16 Since the mobile station does not know beforehand whether the serving base station it  
 17 roams to supports 2G authentication, 3G authentication, or both, the mobile station  
 18 always starts with 2G authentication. When a mobile station sends an *ROP*, it always  
 19 starts with performing the 2G authentication by including an AUTHR (see [4]) in the  
 20 message. If an AKA is performed during a 2G authentication, the mobile station will abort  
 21 the 2G authentication.

22 The types of authentication are distinguished according to what the network provides the  
 23 base station with during the authentication process. If the base station receives a CMEA  
 24 key, 2G authentication is performed (see 2.3.12.5.1). If the base station receives  
 25 Authentication Vectors (AV's), 3G authentication is performed (see 2.3.12.5.2).

26 In the 2G authentication, the mobile station concatenates the CMEA key with a copy of  
 27 itself to form a 128-bit key to be used as both the integrity key, CIK, and the encryption  
 28 key, CCK. The CIK and CCK will be referred to as the (CIK, CCK) pair.

29 In the 3G authentication, the mobile station uses IK as the integrity key and CK as the  
 30 encryption key – referred to as the (IK, CK) pair.

31 The key strength of CCK or CK may be reduced by the “Key Strength Reduction Algorithm”  
 32 (see 2.3.12.5.4), which takes the key and converts it into another key of the same length  
 33 but with the entropy reduced. For simplicity, all the procedures hereafter only mention  
 34 CCK and CK.

---

<sup>24</sup> If the base station knows it is not going to get any keys from the network for whatever reason, the base station should indicate so in the *Registration Accepted Order*, so that the mobile station could stop waiting. However, if there is no current CIK “in use”, the *Registration Accepted Order* could not be MAC'ed, in which case, it is up to the mobile station whether or not to trust the *Registration Accepted Order*.

1 Whenever the key set-up is complete, all the messages shall include a MACI with the  
2 following exceptions:

- 3 • On the f-csch, the *General Page Message*, *Universal Page Message*, *Registration*  
4 *Request Order*, *Authentication Request Message* and *Authentication Challenge*  
5 *Message* shall not include a MACI. The *Extended Channel Assignment Message*  
6 may not include a MACI. All overhead messages and all signaling messages with a  
7 broadcast address type shall not include a MACI.
- 8 • On the f-dsch, the *Authentication Challenge Message* shall not include a MACI.
- 9 • On the r-csch or r-dsch, the *Authentication Response Message*, *Authentication*  
10 *Resynchronization Message* and *Mobile Station Reject Order* (ORDQ = '00010110',  
11 '00011000', '00011001' or '00011010') shall not include a MACI.
- 12 • All mini messages shall not include a MACI.

13 When the mobile station sends a *Registration Message*, *Origination Message*, or *Page*  
14 *Response Message* when RESTORE\_KEYS is equal to '1', Layer 3 shall deliver the message  
15 with a 24-bit number (selected by Layer 3) to LAC. The 24-bit number is used to perform  
16 the MAC-I computation and to initialize TX\_EXT\_SSEQ[i][j] and RX\_EXT\_SSEQ[i][j], where *i*  
17 = '0' or '1', *j* = '00' to '11'.

#### 18 2.3.12.5.1 2G Authentication when P\_REV\_IN\_USE<sub>S</sub> >= 10

19 This section applies to a base station that performs 2G authentication with the mobile  
20 station.

21 If KEY\_ID is equal to NULL and mobile station wants to set up encryption and integrity  
22 keys, it shall start Key Set-Up timer with expiration time of T75m seconds and execute the  
23 key set-up procedure described in this section by sending an *ROP*.

24 If an *ROP* does not include a MACI, it implies that the mobile station does not have an  
25 integrity key, in which case, the base station gets a CMEA key from the network and  
26 authenticates the mobile station's AUTHR (which is always included, see [4]). If the  
27 authentication is successful, when the CMEA key is available at the base station, the base  
28 station uses assured mode to send a *RES* that includes a Message Authentication Code  
29 generated using the pending CIK, and the pending NEW\_SSEQ\_H (proposed by the mobile  
30 station). Upon reception of the *RES*, the mobile station validates the MACI. If the  
31 validation is successful, the pending (CIK, CCK) and NEW\_SSEQ\_H can become "in use" in  
32 the mobile station. The mobile station stores the NEW\_KEY\_ID in KEY\_ID, the CIK in  
33 INT\_KEY[KEY\_ID], and the CCK in ENC\_KEY[KEY\_ID].

34 The mobile station then stops the Key Set-Up timer and sends a *Security Mode Completion*  
35 *Order* using assured mode to the base station that includes a Message Authentication  
36 Code. At this point, if the base station successfully validates the *Security Mode Completion*  
37 *Order* that the mobile station sends, the pending (CIK, CCK) and NEW\_SSEQ\_H can  
38 become "in use" in the base station; otherwise, the base station resends the *RES* until it  
39 receives a valid *Security Mode Completion Order* from the mobile station. If the mobile  
40 station receives a *RES* with an invalid MACI, the mobile station shall enter the *System*  
41 *Determination Substate* with an encryption/message integrity failure indication.

1 Once (CIK, CCK) has been established, the mobile station can perform integrity protection  
2 and encryption.

3 If the Key Set-Up timer expires and the mobile station determines that it is not attempting  
4 to originate an emergency call, the mobile station may go to the *System Determination*  
5 *Substate* with an encryption/message integrity failure indication, which will trigger re-  
6 registrations or the mobile station may continue with normal Layer 3 Signaling  
7 procedures, not to retry key set-up, and not to perform message integrity in both  
8 directions<sup>25</sup>. If the mobile station retries key set-up but still cannot establish the keys  
9 after an implementation dependent number of retries, the mobile station may reject the  
10 serving base station.

11 If the *ROP* includes a MACI in addition to AUTHR, this implies the mobile station has an  
12 integrity key, in which case, the base station has two options. It can either continue using  
13 the current (CIK, CCK) or change to a new pair.

14 If the base station decides to change to a new pair of (CIK, CCK), the base station will  
15 perform the key set-up procedures described above.

16 If the base station decides not to change to any new keys, the base station sends to the  
17 mobile station an *RES* that includes a Message Authentication Code. Upon reception of  
18 the *RES*, the mobile station validates the MACI and if the MAC-I checks, the mobile  
19 station sends a *Security Mode Completion Order* that includes a Message Authentication  
20 Code using assured mode and removes the pending keys, the associated key id, and the  
21 associated NEW\_SSEQ\_H.

22 To minimize race conditions, on the base station side, the base station does not send any  
23 messages that are encrypted or include a Message Authentication Code, and are non-  
24 essential to the key set-up between the time it receives an *ROP* and the time it receives  
25 the *Security Mode Completion Order* of an *RES*, which is always sent using the assured  
26 mode. On the mobile station side, to the same purpose, the mobile station does not send  
27 any messages that are encrypted or include a Message Authentication Code, and are non-  
28 essential to the key set-up between the time it sends an *ROP* and the time it receives an  
29 *RES*. Also, the mobile station does not send another *ROP* between the time it sends an  
30 *ROP* and the time it receives a *RES*.

#### 31 2.3.12.5.2 3G Authentication (AKA) when P\_REV\_IN\_USE<sub>s</sub> >= 10

32 This section applies to a base station that performs 3G authentication (AKA) with the  
33 mobile station. The AKA procedure and related algorithms take mobile station specific  
34 information, data received from base station and the mobile station's subscriber  
35 authentication key as inputs. The subscriber authentication key is 128-bits long. It is  
36 assigned to the mobile station and is stored in the mobile station's permanent security

---

<sup>25</sup> This is to allow the mobile station to operate and accept services from the base station without message integrity protection in case the keys cannot be established for whatever reason (e.g., shared secret root keys in the mobile station and base station do not match).

and identification memory. The subscriber authentication key is known only to the mobile station and to its associated Authentication Center (AC) (see [13]). Refer to Figures 2.3.12.5.2-1, 2.3.12.5.2-2, 2.3.12.5.2-3, and 2.3.12.5.2-4. In these figures, the input K is the mobile station's subscriber authentication key.

The purposes of AKA are to mutually authenticate the mobile station and the serving base station, and to establish a new set of (IK, CK) and UAK, if supported. Upon completion of AKA, CK and IK are stored in the mobile station while UAK, if supported, is stored in the UIM. Mentioning of (IK, CK) hereafter already implicitly implies that UAK is also included, if supported. When extended encryption is turned on, CK is used as the encryption key in the extended encryption described in 2.3.12.4. IK is used as the integrity key to provide message integrity check in the base station. UAK is used to convert the result of message integrity check, MAC-I, into UMAC.

AKA can be initiated by the base station at any time for any reason. For example, when (IK, CK) expires in the mobile station. Also, when the base station receives an *ROP*, the base station checks if the *ROP* contains a MACI or not. If there is no MACI, or the MACI does not check, or can not be checked, the base station may initiate AKA. Regardless of the reasons, if the base station initiates AKA, the following events occur.

The base station invokes the procedure by selecting the next unused AV from the ordered array of AV's stored in the VLR. If an AV is not available in the serving node, one (or more) AV's are requested from the subscriber's home system. The base station sends the mobile station an *Authentication Request Message* which contains the random challenge RANDA and the authentication token for network authentication, AUTN, associated with the selected AV.

Each AV contains the following information (see figure 2.3.12.5.2-1):

- Authentication Random Challenge Number (RANDA)
- Expected Result (XRES)
- Encryption Key (CK)
- Integrity Key (IK)
- UIM Authentication Key (UAK) (support of this field is optional)
- Authentication Token (AUTN), which consists of the Concealed Sequence Number (CON\_SQN), the Authentication Management Function (AMF), and the Message Authentication Code (MAC-A).

Upon reception of the *Authentication Request Message*, the mobile station aborts any pending 2G key set-up, starts the Key Set-Up timer with expiration time of T75m seconds and the UIM computes the expected message authentication code (XMAC). If this is not equal to the MAC-A received in the AUTN, the mobile station shall enter the *System Determination Substate* with an encryption/message integrity failure indication; otherwise, the UIM verifies that the sequence number SQN (see [46]) received in the AUTN is in the correct range (a test of freshness).

If the UIM determines that the received SQN is not in the correct range (see [46]), the mobile station sends an *Authentication Resync Message* to the base station that includes

1 the concealed value of the sequence number stored in the UIM (CON\_MS\_SQN). If the SQN  
 2 is in the correct range, the UIM computes the (IK, CK) pair and the RES and passes the  
 3 (IK, CK) pair and RES to the mobile station. The mobile station then associates a pending  
 4 key id NEW\_KEY\_ID and a pending NEW\_SSEQ\_H with the pending (IK, CK) pair and  
 5 sends an *Authentication Response Message* containing RES to the base station. The  
 6 *Authentication Response Message* shall contain a Message Authentication Code that is  
 7 computed based on the pending NEW\_SSEQ\_H and the pending IK.

8 The mobile station also stores (RANDA, RES, IK, CK, key id, NEW\_SSEQ\_H) in case it  
 9 receives, in the near future, the same retransmitted *Authentication Request Message* that  
 10 requires the mobile station to resend the same *Authentication Response Message*. The UIM  
 11 stores (IK, CK) until the next successful execution of AKA.

12 Upon reception of the *Authentication Response Message*, the base station compares RES  
 13 with the expected response XRES from the selected AV. If XRES equals RES, then the  
 14 authentication of the user has passed and the pending (IK, CK) and the pending  
 15 NEW\_SSEQ\_H can become “in use” in the base station. The base station then confirms the  
 16 AKA completion by sending an *RES* that includes a Message Authentication Code  
 17 generated using the pending IK to confirm the use of the pending (IK, CK). Upon reception  
 18 of this confirmation, the mobile station stops the Key Set-Up timer and the pending (IK,  
 19 CK), NEW\_SSEQ\_H, and key id become “in use” for the mobile station. The mobile station  
 20 stores the NEW\_KEY\_ID in KEY\_ID, the IK in INT\_KEY[KEY\_ID], and the CK in  
 21 ENC\_KEY[KEY\_ID].

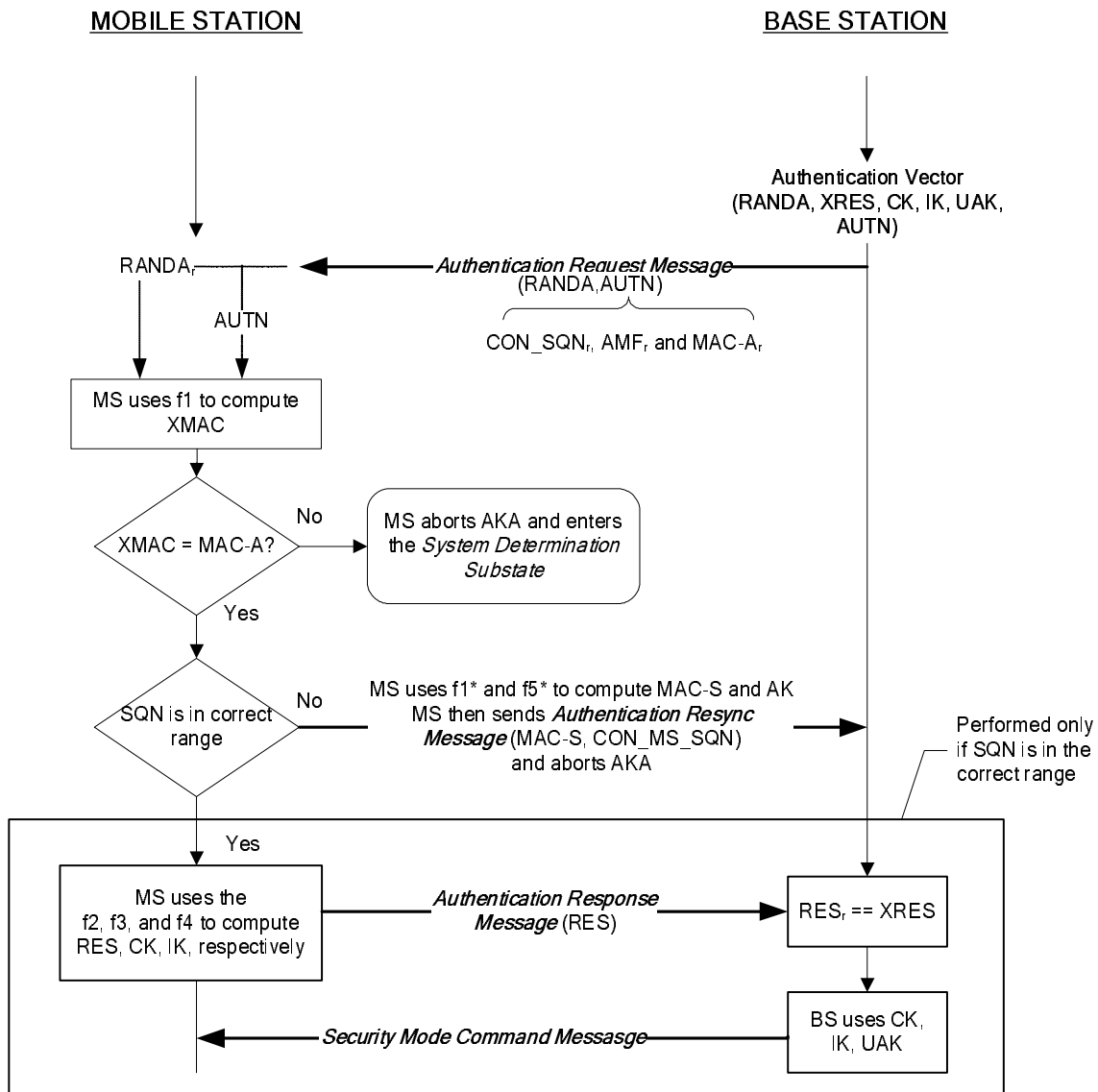
22 Once (IK, CK) has been established, the mobile station may start integrity protection and  
 23 encryption.

24 If the Key Set-Up timer expires and the mobile station determines that it is not attempting  
 25 to originate an emergency call, the mobile station shall go to the *System Determination*  
 26 *Substate* with an encryption/message integrity failure indication, which will trigger re-  
 27 registrations. If the mobile station retries key set-up but still cannot establish the keys  
 28 after an implementation dependent number of retries, the mobile station may reject the  
 29 serving base station.

30 To ensure the base station has agreed to switch to the pending (IK, CK), the mobile station  
 31 keeps sending the *Authentication Response Message* until it gets the *RES* that includes a  
 32 Message Authentication Code generated using the pending IK (or until the Key Set-Up  
 33 timer expires, whichever comes first). Also, if the ME receives the (RANDA, AUTN) that are  
 34 the same as the last received, the ME does not pass the (RANDA, AUTN) to the UIM but  
 35 responds with an *Authentication Response Message* including the corresponding RES.

36 To minimize race conditions, on the base station side, the base station does not send any  
 37 messages that are encrypted or include a Message Authentication Code, and are non-  
 38 essential to the key set-up between the time it sends the *Authentication Request Message*  
 39 and the time it receives the *Authentication Response Message*. On the mobile station side,  
 40 the mobile station does not send any messages that are encrypted or include a Message  
 41 Authentication Code, and are non-essential to the key set-up between the time it receives  
 42 the *Authentication Request Message* and the time it receives the *Security Mode Command*  
 43 *Message* that includes a Message Authentication Code generated using the pending IK.

1



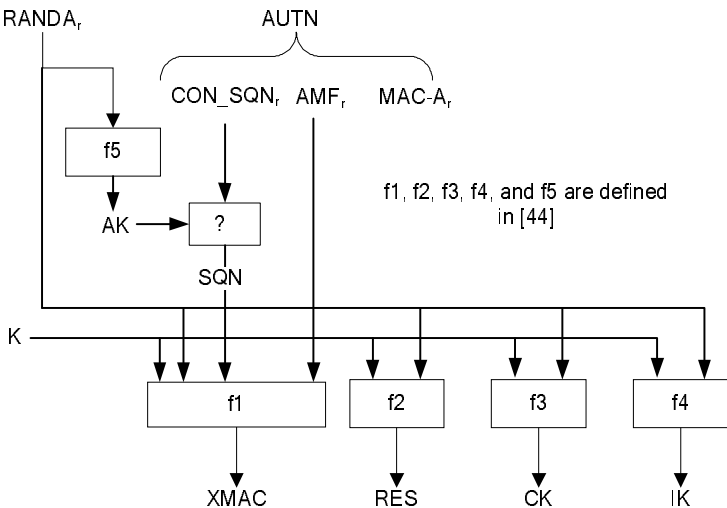
2

3 **Figure 2.3.12.5.2-1. Authentication and Key Agreement Procedures Message Flow**

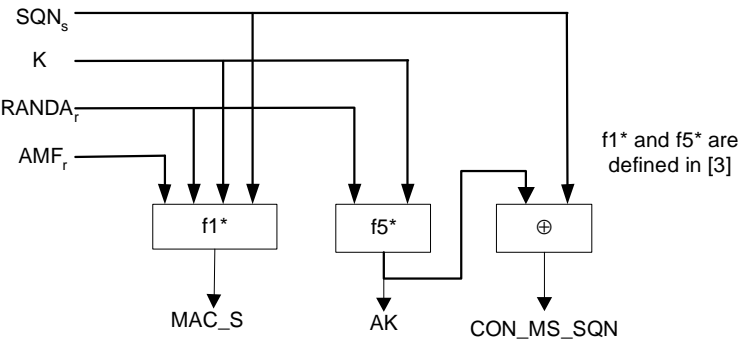
4

5

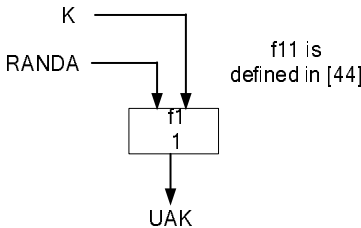




**Figure 2.3.12.5.2-2. User Authentication Function used by the Mobile Station**



**Figure 2.3.12.5.2-3. Function used by the Mobile Station for Calculation of CON\_MS\_SQN and MACs in case of Out-of-Synch SQN**



**Figure 2.3.12.5.2-4. Function used for Calculation of UAK**

### 2.3.12.5.3 Restoring (IK, CK) upon power on

Since (IK, CK) is stored in UIM even when the mobile station is powered off, it is possible for the mobile station, when the mobile station powers on again, to try to restore and use the stored (IK, CK) in order to avoid unnecessary AKA. However, the mobile station will need to re-establish the crypto-sync and key id, which are not stored when the mobile station is powered off.

If the base station no longer has the (IK, CK) available, the base station initiates an AKA and establishes a new (IK, CK) anyway, thus it will not need the following procedures.

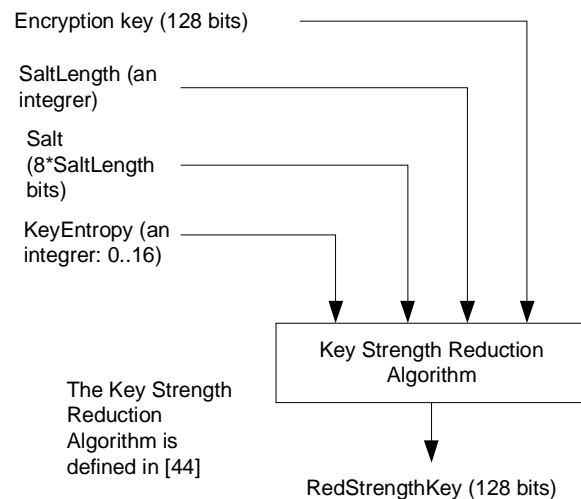
The mobile station could try to restore the key id association with its (IK, CK) via an *ROP* and a subsequent response from the base station. The mobile station sends an *ROP* that includes a Message Authentication Code generated using the stored IK and a pending *NEW\_SSEQ\_H*. The mobile station includes the *NEW\_SSEQ\_H* in the LAC Layer in the *ROP* and sets the *SDU\_KEY\_ID* to a value selected by the mobile station to associate with this (IK, CK). When the base station receives the *ROP*, it validates the MACI using its own IK stored for this mobile station and with the pending *NEW\_SSEQ\_H* provided in the message. If the MACI is valid, the base station sends a *Security Mode Command Message* that includes a Message Authentication Code generated using the stored IK and *NEW\_SSEQ\_H*.

When the mobile station receives the *RES*, the mobile station validates the MACI. If the MACI checks, the mobile station then starts using the key id for the stored (IK, CK) and the (IK, CK) and *NEW\_SSEQ\_H* can become “in use” in the mobile station. The mobile station then sends a *Security Mode Completion Order* that includes a Message Authentication Code using assured mode.

Upon reception of the *Security Mode Completion Order*, base station validates the MACI and if the MACI is valid, the base station starts to set the key id for the (IK, CK) to the value selected by the mobile station (in *NEW\_KEY\_ID* and *SDU\_KEY\_ID*), regardless of the current key id being used at the base station. The (IK, CK) pair and *NEW\_SSEQ\_H* can become in “in use” in the base station. The (IK, CK) pair is now successfully restored. The base station resends the *RES* until it gets the expected *Security Mode Completion Order*.

### 2.3.12.5.4 Key Strength Reduction Algorithm

Due to local security regulations, the base station may ask the mobile station to perform the Key Strength Reduction Algorithm (by setting *ENC\_KEY\_SIZE<sub>r</sub>*) and use the resultant key from the algorithm. The Key Strength Reduction Algorithm uses the encryption key, *RAND*, and *ENC\_KEY\_SIZE<sub>r</sub>* to determine the values of the inputs to the algorithm. The key strength reduction procedure is shown in Figure 2.3.12.5.4-1. The algorithm is defined in [44].



**Figure 2.3.12.5.4-1. Key Strength Reduction**

The input parameters of KeyStrengthRedAlg (see [44]) shall be set as follows:

- KeyLength shall be set to 16.
- OriginalKey shall be set to ENC\_KEY[KEY\_ID].
- SaltLength shall be set to 4.
- Salt shall be set to RAND<sub>S</sub>.
- KeyEntropy shall be set to ENC\_KEY\_SIZE<sub>r</sub>.

The mobile station shall set the ENC\_KEY[KEY\_ID] to RedStrengthKey.

#### 2.3.12.5.5 Message Integrity Check Negotiation and Other Requirements

The base station shall indicate the supported user integrity algorithms in the SIG\_INTEGRITY\_SUP field in the *Extended System Parameters Message* and *ANSI-41 System Parameters Message*.

The mobile station shall indicate to the base station the message integrity algorithms supported and preferred by using SIG\_INTEGRITY\_SUP and SIG\_INTEGRITY\_REQ in one of the following messages:

- *Registration Message*
- *Origination Message*
- *Page Response Message*
- *Security Mode Request Message*
- *Status Response Message* (in Encryption Capability information record)
- *Extended Status Response Message* (in Encryption Capability information record)

In response, the base station shall select the integrity algorithm to be used among the

integrity algorithms that are supported by both the mobile station and the base station, and then compute the MAC-I of a *Registration Accepted Order*, *Extended Channel Assignment Message*, or *Security Mode Command Message* based on the selected algorithm.

If and only if the base station sends a *Registration Accepted Order*, *Extended Channel Assignment Message*, or *Security Mode Command Message* with the CHANGE\_KEYS field<sup>26</sup> set to '1', the base station shall supply the base station LAC layer with the 24-bit value carried in NEW\_SSEQ\_H field and the 2-bit value in the NEW\_KEY\_ID field in the *Registration Message*, *Origination Message*, *Page Response Message*, *Authentication Response Message*, or the *Security Mode Request Message* that the base station is responding to.

### 2.3.13 Lock and Maintenance Required Orders

The mobile station shall have memory to store the lock reason code (LCKRSN\_P<sub>s-p</sub>) received in the *Lock Until Power-Cycled Order*. The data retention time under power-off conditions shall be at least 48 hours.

The mobile station shall have memory to store the maintenance reason code (MAINTRSN<sub>s-p</sub>) received in the *Maintenance Required Order*. The data retention time under power-off conditions shall be at least 48 hours.

There are no requirements on the use of the lock and maintenance reason codes, and interpretation and use are implementation dependent.

### 2.3.14 Mobile Station Revision Identification

The mobile station shall provide memory to store the following parameters sent in the *Status Message*, the *Status Response Message*, or the *Extended Status Response Message* (*Terminal Information* record or *Extended Terminal information* record):

- Mobile manufacturer code (MOB\_MFG\_CODE<sub>p</sub>)
- Manufacturer's model number (MOB\_MODEL<sub>p</sub>)
- Firmware revision number (MOB\_FIRM\_REV<sub>p</sub>)

In addition, the mobile station shall provide memory to store the following parameter for each supported band class:

- Protocol revision number (MOB\_P\_REV<sub>p</sub>)

### 2.3.15 Temporary Mobile Subscriber Identity

#### 2.3.15.1 Overview

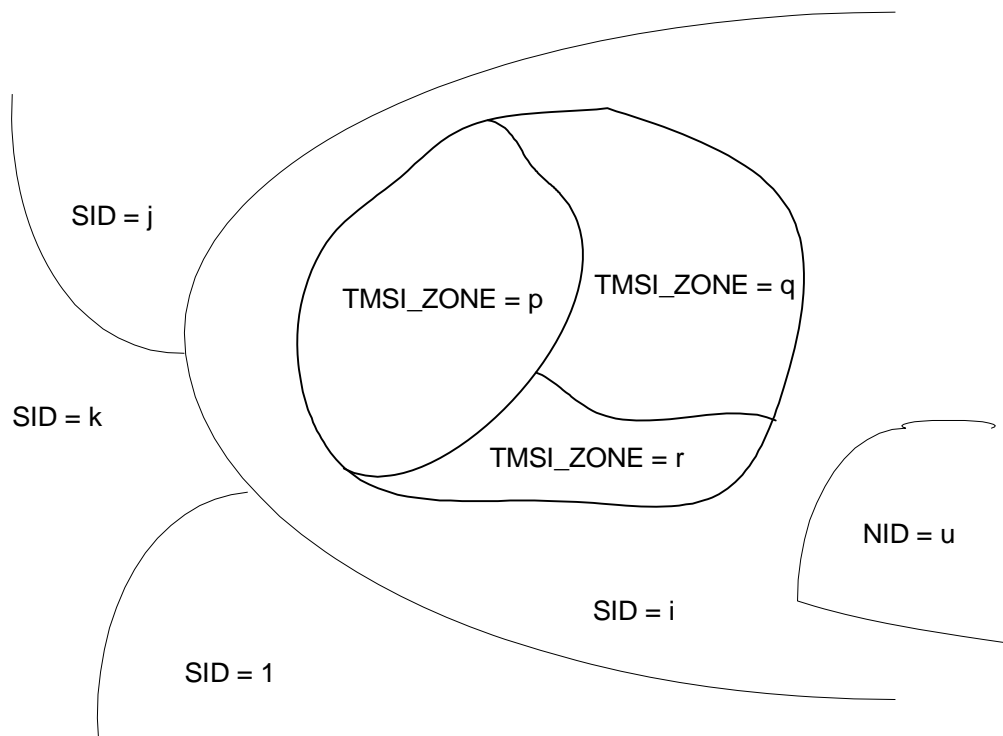
The Temporary Mobile Subscriber Identity (TMSI) is a temporary locally assigned number used for addressing the mobile station. The mobile station obtains a TMSI when assigned

---

<sup>26</sup> The base station sets the CHANGE\_KEYS field to '1' to trigger the mobile station to reinitialize the crypto-sync and the keys or to reinitialize just the crypto-sync alone depending on different cases.

by the base station. The TMSI as a number does not have any association with the mobile station's IMSI, ESN, or directory number all of which are permanent identifications.

A TMSI zone is an arbitrary set of base stations for the administrative assignment of TMSIs. A TMSI\_CODE is uniquely assigned to a mobile station inside a TMSI zone. A TMSI zone is identified by the TMSI\_ZONE field. The same TMSI\_CODE may be reused to identify a different mobile station in a different TMSI zone. The pair (TMSI\_ZONE, TMSI\_CODE) is a globally unique identity for the mobile station. This pair is called the full TMSI. The TMSI\_CODE can be two, three, or four octets in length. The TMSI\_ZONE can range from 1 to 8 octets in length. Figure 2.3.15-1 shows an example of a TMSI\_ZONE where the TMSI\_ZONE is a subset of the NID (see 2.6.5.2).



**Figure 2.3.15-1. TMSI Zone Example**

The base station sends a *TMSI Assignment Message* to assign a TMSI. In response, the mobile station sends a *TMSI Assignment Completion Message*. The base station instructs the mobile station to delete the TMSI by sending a *TMSI Assignment Message* with all the bits in the TMSI\_CODE field set equal to '1'.

The TMSI expiration time is used to automatically delete the assigned TMSI. The mobile station obtains the expiration time when the TMSI is assigned in the *TMSI Assignment Message*. The mobile station compares the expiration time to the current System Time when it powers up and periodically during operation.

Whenever the mobile station sends its full TMSI, the mobile station sets a timer, called the full-TMSI timer. If the full-TMSI timer expires, the mobile station deletes the TMSI by setting all bits in the TMSI\_CODE field to '1'.

### 2.3.15.2 TMSI Assignment Memory

The mobile station shall provide memory to store the following parameters:

- 4-bit assigning TMSI zone length (ASSIGNING\_TMSI\_ZONE\_LEN<sub>S-p</sub>)
- 8-octet assigning TMSI zone (ASSIGNING\_TMSI\_ZONE<sub>S-p</sub>)
- 4-octet TMSI code (TMSI\_CODE<sub>S-p</sub>)
- 3-octet TMSI expiration time (TMSI\_EXP\_TIME<sub>S-p</sub>)

## 2.4 Accumulated Statistics

### 2.4.1 Monitored Quantities and Statistics

The mobile station shall store the value described in Table 2.4.1-1.

**Table 2.4.1-1. Monitored Quantities and Statistics**

Quantity Identifier	Length (bits)	Description
OTHER_SYS_TIME	36	The SYS_TIME field from the most recently received <i>Sync Channel Message</i>

### 2.4.2 Accumulated Paging, Broadcast, and Forward Common Control Channel Statistics

The mobile station shall maintain the counters shown in Table 2.4.2-1. The counters shall have the length as specified in Table 2.4.2-1. The mobile station shall initialize each counter described herein to zero upon power-on; the mobile station shall not re-initialize any counter described herein at any other time except upon command from the base station. Each counter shall be maintained modulo  $2^{\text{Length}}$ , where Length is specified in Table 2.4.2-1.

The mobile station shall increment the counter PAG\_6 each time that it declares a loss of the Paging Channel (see 2.6.2.1.1.4). The mobile station shall increment the counter PAG\_7 for each idle handoff it performs. The mobile station shall increment the counter FCCCH\_4 each time that it declares a loss of the Forward Common Control Channel (see 2.6.2.1.1.4). The mobile station shall increment the counter BCCH\_5 each time that it declares a loss of the Broadcast Control Channel (see 2.6.2.1.1.4).

**Table 2.4.2-1. Accumulated PCH/BCCH/F-CCCH Channel Statistics**

Counter Identifier	Length (bits)	Description
PAG_6	16	Number of times that the mobile station declared a loss of the Paging Channel
PAG_7	16	Number of mobile station idle handoffs

FCCCH_4	16	Number of times that the mobile station declared a loss of the Forward Common Control Channel
BCCH_5	16	Number of times that the mobile station declared a loss of the Broadcast Control Channel

**1 2.5 Reserved**

2

3

4

5



## 1    **SECTION (CONTINUED)**

### 2    **2.6 Layer 3 Processing**

3    This section describes mobile station Layer 3 processing. It contains frequent references  
 4    to the messages that flow between the mobile station and base station. While reading this  
 5    section, it may be helpful to refer to the PDU formats (see 2.7 and 3.7), and to the message  
 6    flow examples (see Annex B and Annex C).

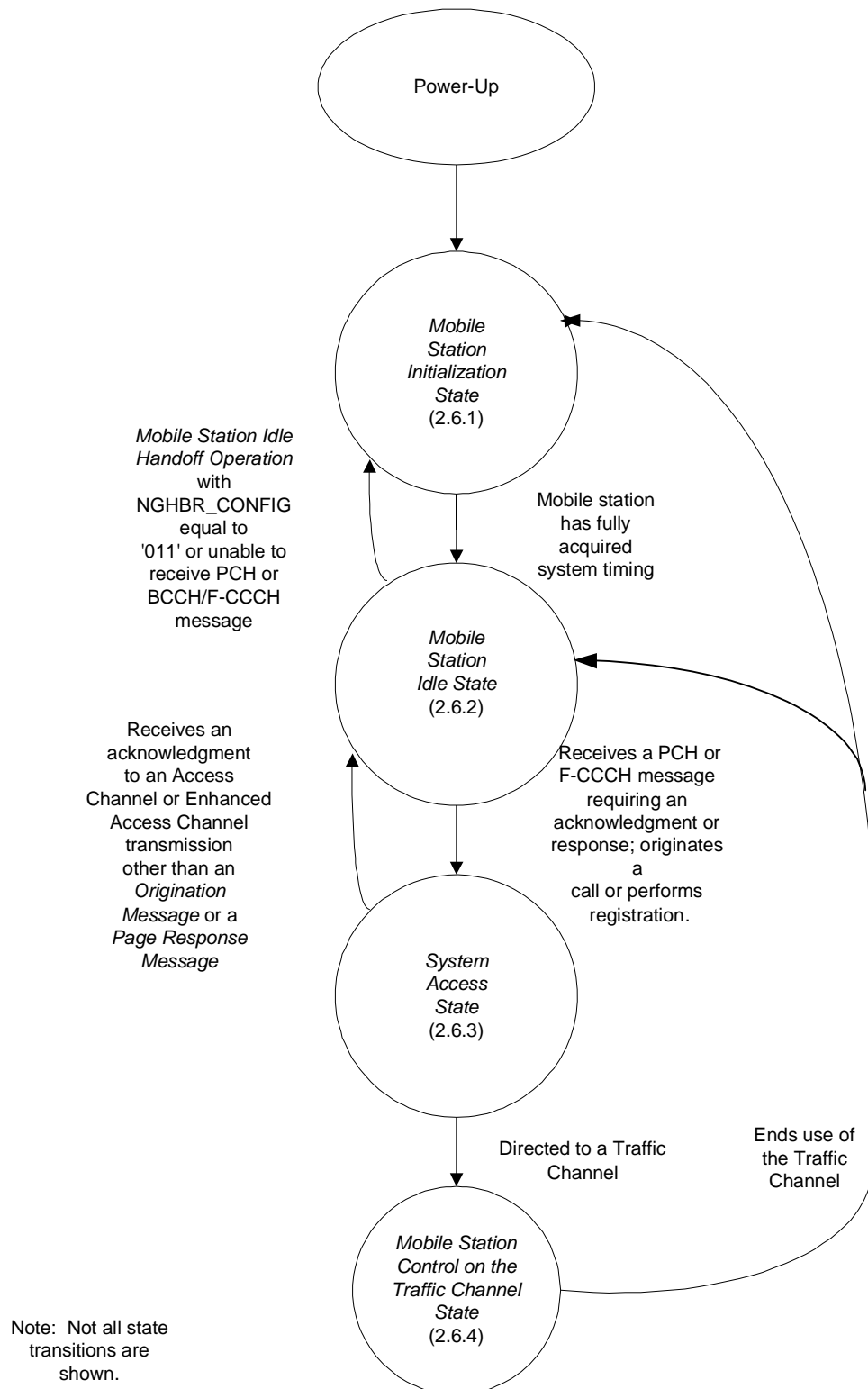
7    The mobile station shall ignore fields at the end of messages that do not exist in the  
 8    protocol revision supported by the mobile station.

9    The values for the time and numerical constants used in this section (e.g.,  $T_{20m}$ ,  $N_{4m}$ ) are  
 10   specified in Annex D.

11   As illustrated in Figure 2.6-1, mobile station Layer 3 processing consists of the following  
 12   states:

- 13       • *Mobile Station Initialization State* - In this state, the mobile station selects and  
 14       acquires a system.
- 15       • *Mobile Station Idle State* - In this state, the mobile station monitors messages on  
 16       the f-csch.
- 17       • *System Access State* - In this state, the mobile station sends messages to the base  
 18       station on the r-csch and receives messages from the base station on the f-csch.
- 19       • *Mobile Station Control on the Traffic Channel State* - In this state, the mobile station  
 20       communicates with the base station using the f/r-dsch and f/r-dtch.

21   After power is applied to the mobile station, it shall enter the *System Determination*  
 22   *Substate* of the *Mobile Station Initialization State* with a power-up indication (see 2.6.1.1).  
 23



**Figure 2.6-1. Mobile Station Layer 3 Processing States**

1    2.6.1 Mobile Station Initialization State

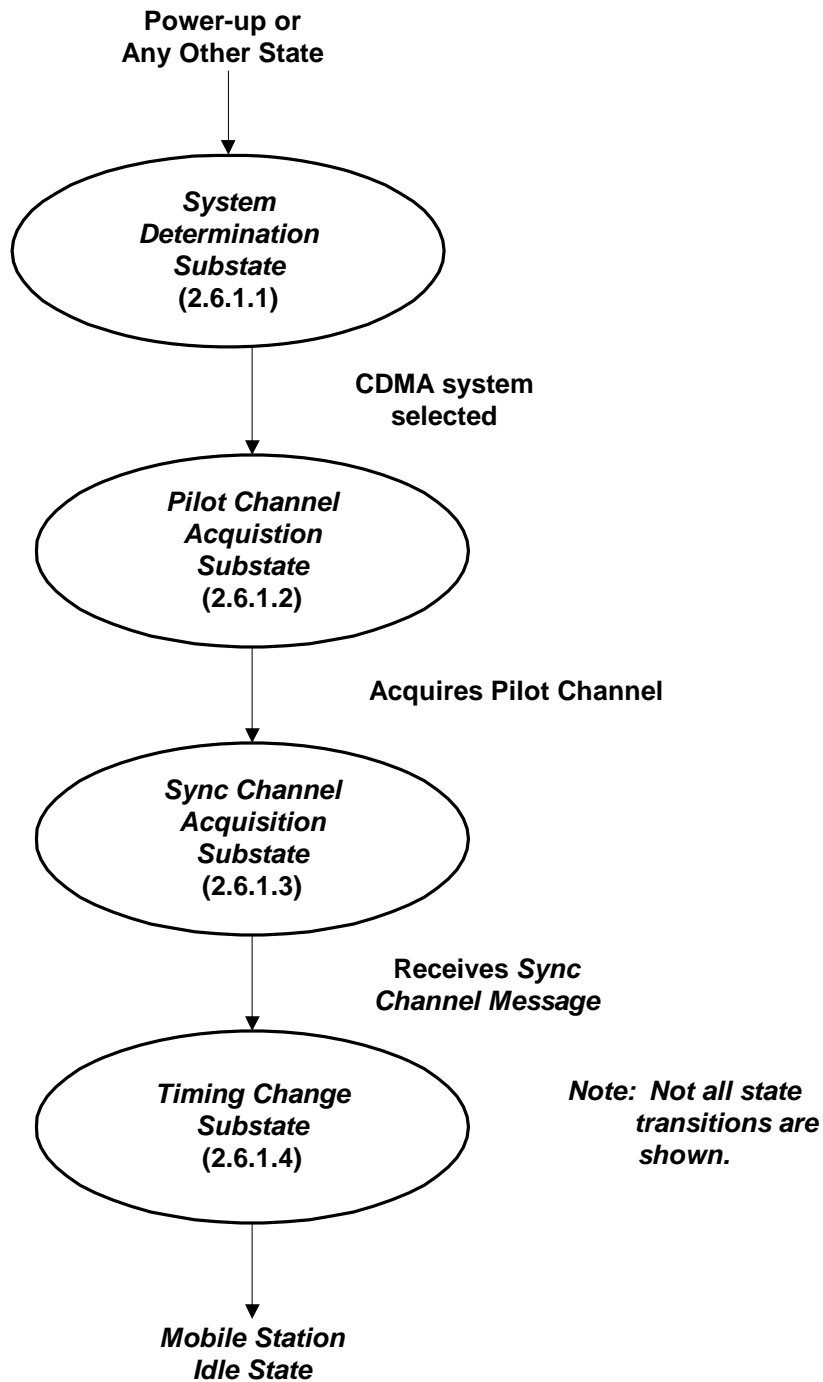
2    In this state, the mobile station first selects a system to use. If the selected system is a  
3    CDMA system, the mobile station proceeds to acquire and then synchronize to the CDMA  
4    system.

5    As illustrated in Figure 2.6.1-1, the *Mobile Station Initialization State* consists of the  
6    following substates:

- 7        • *System Determination Substate* - In this substate, the mobile station selects which  
8        system to use.
- 9        • *Pilot Channel Acquisition Substate* - In this substate, the mobile station acquires the  
10       Pilot Channel of a CDMA system.
- 11       • *Sync Channel Acquisition Substate* - In this substate, the mobile station obtains  
12       system configuration and timing information for a CDMA system.
- 13       • *Timing Change Substate* - In this substate, the mobile station synchronizes its  
14       timing to that of a CDMA system.

15    While in the *Mobile Station Initialization State*, the mobile station shall update all active  
16    registration timers as specified in 2.6.5.5.1.2.

17



**Figure 2.6.1-1. Mobile Station Initialization State**

1  
2  
3

## 1 2.6.1.1 System Determination Substate

2 In this substate, the mobile station selects the system to use.

3 Upon entering the *System Determination Substate*, the mobile station shall initialize the  
4 registration parameters as specified in 2.6.5.5.1.1.

5 If the mobile station enters the *System Determination Substate* with a power-up indication,  
6 the mobile station shall set RAND<sub>S</sub> to 0 (see 2.3.12.1.2), PACA<sub>S</sub> to disabled, PACA\_CANCEL  
7 to '0', the PACA state timer to disabled, NDSS\_ORIG<sub>S</sub> to disabled,  
8 MAX\_REDIRECT\_DELAY<sub>S</sub> to 31, REDIRECTION<sub>S</sub> to disabled, all entries of SDB\_SO\_OMIT<sub>S</sub>  
9 to '0', RER\_MODE\_ENABLED to NO, TKZ\_MODE\_ENABLED to NO, TKZ\_MODE\_PENDING  
10 to NO, RSC\_MODE\_ENABLED to NO, and T\_SLOTTED<sub>S</sub> to T<sub>74m</sub>. The mobile station shall  
11 select a system in accordance with the custom system selection process (see 2.6.1.1.1) and  
12 shall attempt to acquire the selected system (see 2.6.1.1.4).

13 If the mobile station enters the *System Determination Substate* with any indication other  
14 than a power-up indication, and if PACA<sub>S</sub> is equal to enabled, the mobile station shall also  
15 set PACA<sub>S</sub> to disabled, PACA\_CANCEL to '0', the PACA state timer to disabled, and should  
16 indicate to the user that the PACA call has been canceled.

17 If the mobile station enters the *System Determination Substate* with an acquisition failure  
18 indication, the mobile station shall perform the following:

- 19 • If REDIRECTION<sub>S</sub> is equal to enabled, the mobile station shall attempt to select  
20 another system in accordance with the current redirection criteria (see 2.6.1.1.2). If  
21 the mobile station is able to select another system, the mobile station shall attempt  
22 to acquire the selected system (see 2.6.1.1.4). Otherwise, if the mobile station has  
23 exhausted all possible selections using the current redirection criteria, the mobile  
24 station shall perform the following:
  - 25 – The mobile station shall set REDIRECTION<sub>S</sub> to disabled.
  - 26 – The mobile station shall set RETURN\_CAUSE<sub>S</sub> to '0001'.
  - 27 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '1', the mobile station shall attempt to select the  
28 system from which it was redirected and shall attempt to acquire the selected  
29 system (see 2.6.1.1.4). The precise process for determining how to select the  
30 system from which the mobile station was redirected is left to the mobile station  
31 manufacturer.
  - 32 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '0', the mobile station shall select a system  
33 other than the system from which it was redirected in accordance with the  
34 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the  
35 selected system (see 2.6.1.1.4). The precise process that the mobile station  
36 uses to avoid selecting the system from which it was redirected is left to the  
37 mobile station manufacturer.
- 38 • If REDIRECTION<sub>S</sub> is equal to disabled, the mobile station shall select a system in  
39 accordance with the custom system selection process (see 2.6.1.1.1) and shall  
40 attempt to acquire the selected system (see 2.6.1.1.4).

1 If the mobile station enters the *System Determination Substate* with a new system  
 2 indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is  
 3 enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the  
 4 user that the call origination has been canceled. The mobile station shall select a system  
 5 in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt  
 6 to acquire the selected system (see 2.6.1.1.4).

7 If the mobile station enters the *System Determination Substate* with a new band indication,  
 8 the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the  
 9 mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the  
 10 call origination has been canceled. The mobile station shall attempt to acquire the system  
 11 found on the frequency and band defined in NEW\_BAND\_RECORD (see 2.6.1.1.4).

12 If the mobile station enters the *System Determination Substate* with a CDMA available  
 13 indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is  
 14 enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the  
 15 user that the call origination is canceled. The mobile station should set CDMACH<sub>S</sub> to the  
 16 CDMA Channel (CDMA\_FREQ) specified in the *CDMA Capability Global Action Message*  
 17 and should attempt to acquire a CDMA system on the specified CDMA channel (see  
 18 2.6.1.1.4). If the mobile station does not attempt to acquire a CDMA system on the  
 19 specified CDMA Channel, the mobile station shall select a system in accordance with the  
 20 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected  
 21 system (see 2.6.1.1.4).

22 If the mobile station enters the *System Determination Substate* with an additional CDMA  
 23 available indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If  
 24 NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should  
 25 indicate to the user that the call origination is canceled. The mobile station should set  
 26 CDMACH<sub>S</sub> to the CDMA Channel (CDMA\_FREQ) specified in the *CDMA Info Order* and  
 27 should attempt to acquire a CDMA system on the specified CDMA channel (see 2.6.1.1.4).  
 28 If the mobile station does not attempt to acquire a CDMA system on the specified CDMA  
 29 Channel, the mobile station shall select a system in accordance with the custom system  
 30 selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see  
 31 2.6.1.1.4).

32 If the mobile station enters the *System Determination Substate* with a reselection  
 33 indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is  
 34 enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the  
 35 user that the call origination is canceled. The mobile station shall select a system in  
 36 accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to  
 37 acquire the selected system (see 2.6.1.1.4).

38 If the mobile station enters the *System Determination Substate* with an  
 39 encryption/message integrity failure indication, the mobile station shall set  
 40 REDIRECTION<sub>S</sub> to disabled, KEY\_ID to '00', D\_SIG\_ENCRYPT\_MODE<sub>S</sub> to '000',  
 41 C\_SIG\_ENCRYPT\_MODE<sub>S</sub> to '000', LAST\_2G\_KEY\_ID<sub>S</sub> to '00', LAST\_3G\_KEY\_ID<sub>S</sub> to '10',  
 42 ENC\_KEY[j] to NULL, INT\_KEY[j] to NULL, TX\_EXT\_SSEQ[i][j] to 0, RX\_EXT\_SSEQ[i][j] to 0,  
 43 where i ranges from '0' to '1' and j ranges from '00' to '11'. If NDSS\_ORIG<sub>S</sub> is enabled, the  
 44 mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the

1 call origination is canceled. The mobile station shall select a system in accordance with  
 2 the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the  
 3 selected system (see 2.6.1.1.4).

4 If the mobile station enters the *System Determination Substate* with a system reselection  
 5 indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is  
 6 enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the  
 7 user that the call origination is canceled. The mobile station should attempt to select a  
 8 system available for system reselection as specified in 2.6.1.1.3, and should attempt to  
 9 acquire the selected system (see 2.6.1.1.4). The precise process for determining how to  
 10 select such a system is left to the mobile station manufacturer. If the mobile station does  
 11 not attempt to select such a system, the mobile station shall select a system in accordance  
 12 with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the  
 13 selected system (see 2.6.1.1.4).

14 If the mobile station enters the *System Determination Substate* with a rescan indication,  
 15 the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the  
 16 mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the  
 17 call origination is canceled. The mobile station shall select a system in accordance with  
 18 the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the  
 19 selected system (see 2.6.1.1.4).

20 If the mobile station enters the *System Determination Substate* with a protocol mismatch  
 21 indication, the mobile station shall perform the following:

- 22 • If REDIRECTION<sub>S</sub> is equal to enabled, the mobile station shall attempt to select  
 23 another system in accordance with the current redirection criteria (see 2.6.1.1.2). If  
 24 the mobile station is able to select another system, the mobile station shall attempt  
 25 to acquire the selected system (see 2.6.1.1.4). Otherwise, if the mobile station has  
 26 exhausted all possible selections using the current redirection criteria, the mobile  
 27 station shall perform the following:
  - 28 – The mobile station shall set REDIRECTION<sub>S</sub> to disabled.
  - 29 – The mobile station shall set RETURN\_CAUSE<sub>S</sub> to '0010'.
  - 30 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '1', the mobile station shall attempt to select the  
 31 system from which it was redirected and shall attempt to acquire the selected  
 32 system (see 2.6.1.1.4). The precise process for determining how to select the  
 33 system from which the mobile station was redirected is left to the mobile station  
 34 manufacturer.
  - 35 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '0', the mobile station shall select a system  
 36 other than the system from which it was redirected in accordance with the  
 37 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the  
 38 selected system (see 2.6.1.1.4). The precise process for determining how to  
 39 avoid the system from which the mobile station was redirected is left to the  
 40 mobile station manufacturer.

- If REDIRECTION<sub>S</sub> is equal to disabled, the mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the *System Determination Substate* with a system lost indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the call origination is canceled. The mobile station should attempt to select the same system that was lost, and should attempt to acquire the selected system (see 2.6.1.1.4). The precise process for determining how to select the same system is left to the mobile station manufacturer. If the mobile station does not attempt to select the same system, the mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the *System Determination Substate* with a lock indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the *System Determination Substate* with an unlock indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the *System Determination Substate* with an access denied indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the *System Determination Substate* with an ACCT blocked indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the *System Determination Substate* with an NDSS off indication, the mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).



1 If the mobile station enters the *System Determination Substate* with a release indication  
 2 and REDIRECTION<sub>S</sub> is equal to enabled, the mobile station shall attempt to select the  
 3 same system on which the release occurred and shall attempt to acquire the selected  
 4 system (see 2.6.1.1.4). The precise process for determining how to select the same system  
 5 is left to the mobile station manufacturer. If REDIRECTION<sub>S</sub> is equal to disabled, the  
 6 mobile station shall select a system in accordance with the custom system selection  
 7 process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4). If  
 8 NDSS\_ORIG<sub>S</sub> is enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled.

9 If the mobile station enters the *System Determination Substate* with an error indication, the  
 10 mobile station shall set REDIRECTION<sub>S</sub> to disabled. If NDSS\_ORIG<sub>S</sub> is enabled, the mobile  
 11 station shall set NDSS\_ORIG<sub>S</sub> to disabled and should indicate to the user that the call  
 12 origination is canceled. The mobile station shall select a system in accordance with the  
 13 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected  
 14 system (see 2.6.1.1.4).

15 If the mobile station enters the *System Determination Substate* with a redirection  
 16 indication, the mobile station shall set REDIRECTION<sub>S</sub> to enabled. The mobile station  
 17 shall delete all entries from the ZONE\_LIST<sub>S</sub> and SID\_NID\_LIST<sub>S</sub>. The mobile station shall  
 18 select a system in accordance with the current redirection criteria (see 2.6.1.1.2) and shall  
 19 attempt to acquire the selected system (see 2.6.1.1.4).

20 If the mobile station enters the *System Determination Substate* with a registration rejected  
 21 indication, the mobile station shall perform the following:

- 22 • The mobile station shall delete the newly generated encryption key (if any).
- 23 • If REDIRECTION<sub>S</sub> is equal to enabled, the mobile station shall perform the  
 24 following:
  - 25 – The mobile station shall set REDIRECTION<sub>S</sub> to disabled.
  - 26 – The mobile station shall set RETURN\_CAUSE<sub>S</sub> to '0011'.
  - 27 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '1', the mobile station shall attempt to select the  
 28 system from which it was redirected and shall attempt to acquire the selected  
 29 system (see 2.6.1.1.4). The precise process for determining how to select the  
 30 system from which the mobile station was redirected is left to the mobile station  
 31 manufacturer.
  - 32 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '0', the mobile station shall select a system  
 33 other than the system from which it was redirected in accordance with the  
 34 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the  
 35 selected system (see 2.6.1.1.4). The precise process for determining how to  
 36 avoid the system from which the mobile station was redirected is left to the  
 37 mobile station manufacturer.
- 38 • If REDIRECTION<sub>S</sub> is equal to disabled, the mobile station shall select a system in  
 39 accordance with the custom system selection process (see 2.6.1.1.1) and shall  
 40 attempt to acquire the selected system (see 2.6.1.1.4).

1 If the mobile station enters the *System Determination Substate* with a wrong system  
2 indication, the mobile station shall perform the following:

- 3 • If REDIRECTION<sub>S</sub> is equal to enabled, the mobile station shall attempt to select  
4 another system in accordance with the current redirection criteria (see 2.6.1.1.2). If  
5 the mobile station is able to select another system, the mobile station shall attempt  
6 to acquire the selected system (see 2.6.1.1.4). Otherwise, if the mobile station has  
7 exhausted all possible selections using the current redirection criteria, the mobile  
8 station shall perform the following:
  - 9 – The mobile station shall set REDIRECTION<sub>S</sub> to disabled.
  - 10 – The mobile station shall set RETURN\_CAUSE<sub>S</sub> to '0100'.
  - 11 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '1', the mobile station shall attempt to select the  
12 system from which it was redirected and shall attempt to acquire the selected  
13 system (see 2.6.1.1.4). The precise process for determining how to select the  
14 system from which the mobile station was redirected is left to the mobile station  
15 manufacturer.
  - 16 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '0', the mobile station shall select a system  
17 other than the system from which it was redirected in accordance with the  
18 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the  
19 selected system (see 2.6.1.1.4). The precise process for determining how to  
20 avoid the system from which the mobile station was redirected is left to the  
21 mobile station manufacturer.
- 22 • If REDIRECTION<sub>S</sub> is equal to disabled, the mobile station shall select a system in  
23 accordance with the custom system selection process (see 2.6.1.1.1) and shall  
24 attempt to acquire the selected system (see 2.6.1.1.4).

25 If the mobile station enters the *System Determination Substate* with a wrong network  
26 indication, the mobile station shall perform the following:

- 27 • If REDIRECTION<sub>S</sub> is equal to enabled, the mobile station shall attempt to select  
28 another system in accordance with the current redirection criteria (see 2.6.1.1.2). If  
29 the mobile station is able to select another system, the mobile station shall attempt  
30 to acquire the selected system (see 2.6.1.1.4). Otherwise, if the mobile station has  
31 exhausted all possible selections using the current redirection criteria, the mobile  
32 station shall perform the following:
  - 33 – The mobile station shall set REDIRECTION<sub>S</sub> to disabled.
  - 34 – The mobile station shall set RETURN\_CAUSE<sub>S</sub> to '0101'.
  - 35 – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '1', the mobile station shall attempt to select the  
36 system from which it was redirected and shall attempt to acquire the selected  
37 system (see 2.6.1.1.4). The precise process for determining how to select the  
38 system from which the mobile station was redirected is left to the mobile station  
39 manufacturer.

- 1       – If RETURN\_IF\_FAIL<sub>S</sub> is equal to '0', the mobile station shall select a system
- 2       other than the system from which it was redirected in accordance with the
- 3       custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the
- 4       selected system (see 2.6.1.1.4). The precise process for determining how to
- 5       avoid the system from which the mobile station was redirected is left to the
- 6       mobile station manufacturer.
- 7       • If REDIRECTION<sub>S</sub> is equal to disabled, the mobile station shall select a system in
- 8       accordance with the custom system selection process (see 2.6.1.1.1) and shall
- 9       attempt to acquire the selected system (see 2.6.1.1.4).

#### 10   2.6.1.1.1 Custom System Selection Process

11   The precise process for custom system selection is left to the mobile station manufacturer.

12   The mobile station shall perform the custom system selection process as follows:

- 13       • The mobile station shall determine which system to use.
- 14       • If the mobile station is to use a CDMA system, it shall set CDMABAND<sub>S</sub> to the band
- 15       class (see [30]) for the selected system.
- 16       • If the mobile station is to use a CDMA system with CDMABAND<sub>S</sub> = '00000' or
- 17       CDMABAND<sub>S</sub> = '00011', it shall perform the following:
  - 18           – If the mobile station is to use System A, it shall set SERVSYS<sub>S</sub> to SYS\_A. If the
  - 19           mobile station is to use System B, it shall set SERVSYS<sub>S</sub> to SYS\_B.
  - 20           – The mobile station shall set CDMACH<sub>S</sub> either to the Primary or Secondary
  - 21           CDMA Channel number (see [2]) for the selected serving system (SERVSYS<sub>S</sub>). If
  - 22           the mobile station fails to acquire a CDMA system on the first CDMA Channel it
  - 23           tries, the mobile station should attempt to acquire on the alternate CDMA
  - 24           Channel (Primary or Secondary) before attempting other alternatives.
  - 25       • If the mobile station is to use a CDMA system with CDMABAND<sub>S</sub> other than '00000'
  - 26       or '00011', it shall set CDMACH<sub>S</sub> to the CDMA Channel number (see [2]) for the
  - 27       selected system.

#### 28   2.6.1.1.2 System Selection Using Current Redirection Criteria

29   To perform system selection using current redirection criteria:

- 30       • When a single redirection record is received in a *Service Redirection Message*, a
- 31       *Global Service Redirection Message*, or an *Extended Global Service Redirection*
- 32       *Message*, the mobile station shall use the information received and stored in the
- 33       variable REDIRECT\_REC<sub>S</sub> to perform current system selection as specified in
- 34       2.6.1.1.2.1.
- 35       • If multiple redirection records are received in an *Extended Global Service*
- 36       *Redirection Message*, the mobile station shall process at most *j* sequential
- 37       redirection records, where *j* is equal to the number of redirection records in
- 38       REDIRECT\_REC\_LIST as follows:

- 1       – If the DELETE\_TMSI field of REDIRECT\_REC\_LIST[k] is equal to '1', the mobile  
2       station shall set all the bits of TMSI\_CODE<sub>S-P</sub> to '1'; otherwise the mobile  
3       station shall set TMSI\_CODE<sub>S-P</sub> to TEMP\_TMSI\_CODE.
- 4       – Store the redirection record (REDIRECT\_REC<sub>S</sub> = REDIRECT\_REC\_LIST[k]).
- 5       – If the RECORD\_TYPE field of REDIRECT\_REC\_LIST[k] is equal to '00000001' the  
6       mobile station shall:
  - 7       + Set CDMA\_MODE<sub>S</sub> to '1'.
  - 8       + Set DIGITAL\_REG<sub>S-P</sub> to '00000000'.
  - 9       + Set the maximum delay upon redirection (MAX\_REDIRECT\_DELAY<sub>S</sub> =  
10       MAX\_REDIRECT\_DELAY field of REDIRECT\_REC\_LIST[k]).
- 11      – If the mobile station has not exhausted all possible selections using the  
12      REDIRECT\_REC\_LIST[k], the mobile station shall attempt to select a system  
13      according to 2.6.1.1.2.1; otherwise, if k is not the last record in  
14      REDIRECT\_REC\_LIST, the mobile station shall continue the system selection  
15      with REDIRECT\_REC\_LIST[k+1].

#### 16   2.6.1.1.2.1 System Selection Using Current Redirection Record

17   If the RECORD\_TYPE field of REDIRECT\_REC<sub>S</sub> is equal to '00000001' and the mobile  
18   station supports Band Class 0, the mobile station shall perform system selection as  
19   follows:

- 20      • If the SYS\_ORDERING field is equal to '000', the mobile station shall make  
21      sequential system selections as follows:
  - 22      – The mobile station shall set SERVSYS<sub>S</sub> either to SYS\_A or SYS\_B. The precise  
23      process for determining how many system selections to make and for  
24      determining whether to use SYS\_A or SYS\_B is left to the mobile station  
25      manufacturer.
- 26      • If the SYS\_ORDERING field is equal to '001', the mobile station shall select no more  
27      than one system selection as follows:
  - 28      – The mobile station shall set SERVSYS<sub>S</sub> to SYS\_A.
- 29      • If the SYS\_ORDERING field is equal to '010', the mobile station shall select no more  
30      than one system selection as follows:
  - 31      – The mobile station shall set SERVSYS<sub>S</sub> to SYS\_B.
- 32      • If the SYS\_ORDERING field is equal to '011', the mobile station shall make at most  
33      two sequential system selections as follows:
  - 34      – For the first system selection, the mobile station shall set SERVSYS<sub>S</sub> to SYS\_A.
  - 35      – For the second system selection, the mobile station shall set SERVSYS<sub>S</sub> to  
36      SYS\_B.
- 37      • If the SYS\_ORDERING field is equal to '100', the mobile station shall make at most  
38      2 sequential system selections as follows:

- 1       – For the first system selection, the mobile station shall set  $SERVSYS_S$  to  $SYS\_B$ .
- 2       – For the second system selection, the mobile station shall set  $SERVSYS_S$  to
- 3        $SYS\_A$ .
- 4       • If the  $SYS\_ORDERING$  field is equal to '101', the mobile station shall make at most
- 5       2 sequential system selections as follows:
- 6       – For the first system selection, the mobile station shall set  $SERVSYS_S$  either to
- 7        $SYS\_A$  or  $SYS\_B$ . The precise process for determining whether to use  $SYS\_A$  or
- 8        $SYS\_B$  first is left to the mobile station manufacturer.
- 9       – For the second system selection, the mobile station shall set  $SERVSYS_S$  to
- 10        $SYS\_B$  if  $SYS\_A$  was used for the first selection, or to  $SYS\_A$  if  $SYS\_B$  was used
- 11       for the first selection.

12 If the  $RECORD\_TYPE$  field of  $REDIRECT\_REC_S$  is equal to '00000010', the mobile station  
13 shall perform system selection as follows:

- 14       • If the mobile station supports CDMA mode operation in the band class identified by
- 15       the  $BAND\_CLASS$  field, the mobile station shall make at most  $n$  sequential system
- 16       selections, where  $n$  is equal to the value of the  $NUM\_CHANS$  field, as follows:
- 17       – For the  $i^{th}$  system selection, where  $i$  ranges from 1 to  $n$ :
- 18       + If the mobile station supports operation on the CDMA channel
- 19       associated with the value of the  $i^{th}$  occurrence of the  $CDMA\_CHAN$  field
- 20       and the CDMA channel is supported for at least one band subclass
- 21       listed in the record (when included), the mobile station shall set
- 22        $CDMACH_S$  to the value of the  $i^{th}$  occurrence of the  $CDMA\_CHAN$  field
- 23       and shall set  $CDMABAND_S$  to the value specified in the  $BAND\_CLASS$
- 24       field.
- 25       + Otherwise, the mobile station shall not make the  $i^{th}$  system selection.

#### 26 2.6.1.1.3 System Selection Using System Reselection Criteria

27 The precise process for selecting a system using system reselection criteria is left to the  
28 mobile station manufacturer. The mobile station should use information received in the  
29 *Neighbor List Message*, *Extended Neighbor List Message*, *General Neighbor List Message*, or  
30 the *Universal Neighbor List Message* to perform the system reselection process as follows:

- 31       • If there are pilots in the Neighbor List on a different Frequency Assignment than
- 32       that of the mobile station, the mobile station may select the CDMA system
- 33       consisting of these neighbor pilots. If the mobile station is to use a CDMA system,
- 34       it shall set  $CDMABAND_S$  to the band class (see [30]) for the selected system and
- 35       shall set  $CDMACH_S$  to the CDMA Channel number (see [2]) for the selected system.

#### 36 2.6.1.1.4 Acquiring the Selected System

37 The mobile station shall attempt to acquire the selected system as follows:

- If the selected system is a CDMA system, the mobile station shall enter the *Pilot Channel Acquisition Substate*.

#### 2.6.1.2 Pilot Channel Acquisition Substate

In this substate, the mobile station acquires the Pilot Channel of the selected CDMA system.

Upon entering the *Pilot Channel Acquisition Substate*, the mobile station shall tune to the CDMA Channel number equal to  $CDMACH_s$ , shall set its code channel for the Pilot Channel (see [2]) and shall search for the Pilot Channel for no longer than  $T_{20m}$  seconds (see Annex D). If the mobile station acquires the Pilot Channel, the mobile station shall enter the *Sync Channel Acquisition Substate*.

If the mobile station determines that it is unlikely to acquire the Pilot Channel within  $T_{20m}$  seconds, the mobile station may enter the *System Determination Substate* with an acquisition failure indication (see 2.6.1.1). The time, to either acquire the Pilot Channel or determine that Pilot Channel acquisition is unlikely, shall not exceed  $T_{20m}$  seconds (see Annex D), after which the mobile station shall enter the *System Determination Substate* with an acquisition failure indication (see 2.6.1.1).

#### 2.6.1.3 Sync Channel Acquisition Substate

In this substate, the mobile station receives and processes the *Sync Channel Message* to obtain system configuration and timing information. A valid *Sync Channel Message* is one that passes the CRC check and is in the appropriate format according to the protocol revision of the base station.

Upon entering the *Sync Channel Acquisition Substate*, the mobile station shall set its code channel for the Sync Channel (see [2]).

If the mobile station does not receive a valid *Sync Channel Message* within  $T_{21m}$  seconds, the mobile station shall enter the *System Determination Substate* with an acquisition failure indication.

If the mobile station receives a valid *Sync Channel Message* within  $T_{21m}$  seconds, but the protocol revision level supported by the mobile station ( $MOB\_P\_REV_p$  of the current band class) is less than the minimum protocol revision level supported by the base station ( $MIN\_P\_REV_r$ ), the mobile station shall enter the *System Determination Substate* with a protocol mismatch indication (see 2.6.1.1).

If the mobile station receives a valid *Sync Channel Message* within  $T_{21m}$  seconds, but the values of the  $PRAT_r$ , the  $SR1\_BRAT\_NON\_TD_r$ , the  $SR1\_BRAT\_TD_r$ , or the  $SR3\_BRAT_r$  fields are designated as reserved by the protocol revision level supported by the mobile station ( $MOB\_P\_REV_p$  of the current band class), the mobile station shall enter the *System Determination Substate* with a protocol mismatch indication (see 2.6.1.1).

If the mobile station receives a valid *Sync Channel Message* within  $T_{21m}$  seconds and the protocol revision level supported by the mobile station ( $MOB\_P\_REV_p$  of the current band class) is greater than or equal to the minimum protocol revision level supported by the

base station ( $\text{MIN\_P\_REV}_T$ ), the mobile station shall store the following information from the message:

- Protocol revision level ( $\text{P\_REV}_S = \text{P\_REV}_T$ )
- Minimum protocol revision level ( $\text{MIN\_P\_REV}_S = \text{MIN\_P\_REV}_T$ )
- System identification ( $\text{SID}_S = \text{SID}_T$ )
- Network identification ( $\text{NID}_S = \text{NID}_T$ )
- Pilot PN sequence offset index ( $\text{PILOT\_PN}_S = \text{PILOT\_PN}_T$ )
- Long code state ( $\text{LC\_STATE}_S = \text{LC\_STATE}_T$ )
- System Time ( $\text{SYS\_TIME}_S = \text{SYS\_TIME}_T$ )
- Paging Channel data rate ( $\text{PRAT}_S = \text{PRAT}_T$ )
- Protocol revision level currently in use ( $\text{P\_REV\_IN\_USE}_S =$  the lesser value of  $\text{P\_REV}_S$  and  $\text{MOB\_P\_REV}_P$  of the current band class)
- SR1 Non-TD BCCH support indicator ( $\text{SR1\_BCCH\_NON\_TD\_INCL}_S = \text{SR1\_BCCH\_NON\_TD\_INCL}_T$ )
- SR1 TD BCCH support indicator ( $\text{SR1\_TD\_INCL}_S = \text{SR1\_TD\_INCL}_T$ )
- If  $\text{SR1\_BCCH\_NON\_TD\_INCL}_T$  is equal to '1':
  - $\text{SR1\_BRAT\_NON\_TD}_S = \text{SR1\_BRAT\_NON\_TD}_T$ ;
  - $\text{SR1\_CRAT\_NON\_TD}_S = \text{SR1\_CRAT\_NON\_TD}_T$ ;
  - $\text{BCCH\_CODE\_CHAN\_NON\_TD}_S = \text{SR1\_BCCH\_CODE\_CHAN\_NON\_TD}_T$ .
- If  $\text{SR1\_TD\_INCL}_T$  is included and is equal to '1', and the mobile station supports the Transmit Diversity indicated by  $\text{SR1\_TD\_MODE}_T$ :
  - $\text{SR1\_BRAT\_TD}_S = \text{SR1\_BRAT\_TD}_T$ ;
  - $\text{SR1\_CRAT\_TD}_S = \text{SR1\_CRAT\_TD}_T$ ;
  - $\text{BCCH\_CODE\_CHAN\_TD}_S = \text{SR1\_BCCH\_CODE\_CHAN\_TD}_T$ .
- If the mobile station supports the Transmit Diversity,  $\text{SR1\_BCCH\_NON\_TD\_INCL}_T$  is equal to '1', and  $\text{SR1\_TD\_INCL}_T$  is equal to '0':
  - $\text{SR1\_BRAT\_TD}_S = \text{SR1\_BRAT\_NON\_TD}_T$ ;
  - $\text{SR1\_CRAT\_TD}_S = \text{SR1\_CRAT\_NON\_TD}_T$ ;
  - $\text{BCCH\_CODE\_CHAN\_TD}_S = \text{SR1\_BCCH\_CODE\_CHAN\_NON\_TD}_T$ .
- SR3 support indicator ( $\text{SR3\_INCL}_S = \text{SR3\_INCL}_T$ )

The mobile station shall ignore any fields at the end of the *Sync Channel Message* that are not defined according to the protocol revision level ( $\text{MOB\_P\_REV}_P$  of the current band class) being used by the mobile station.

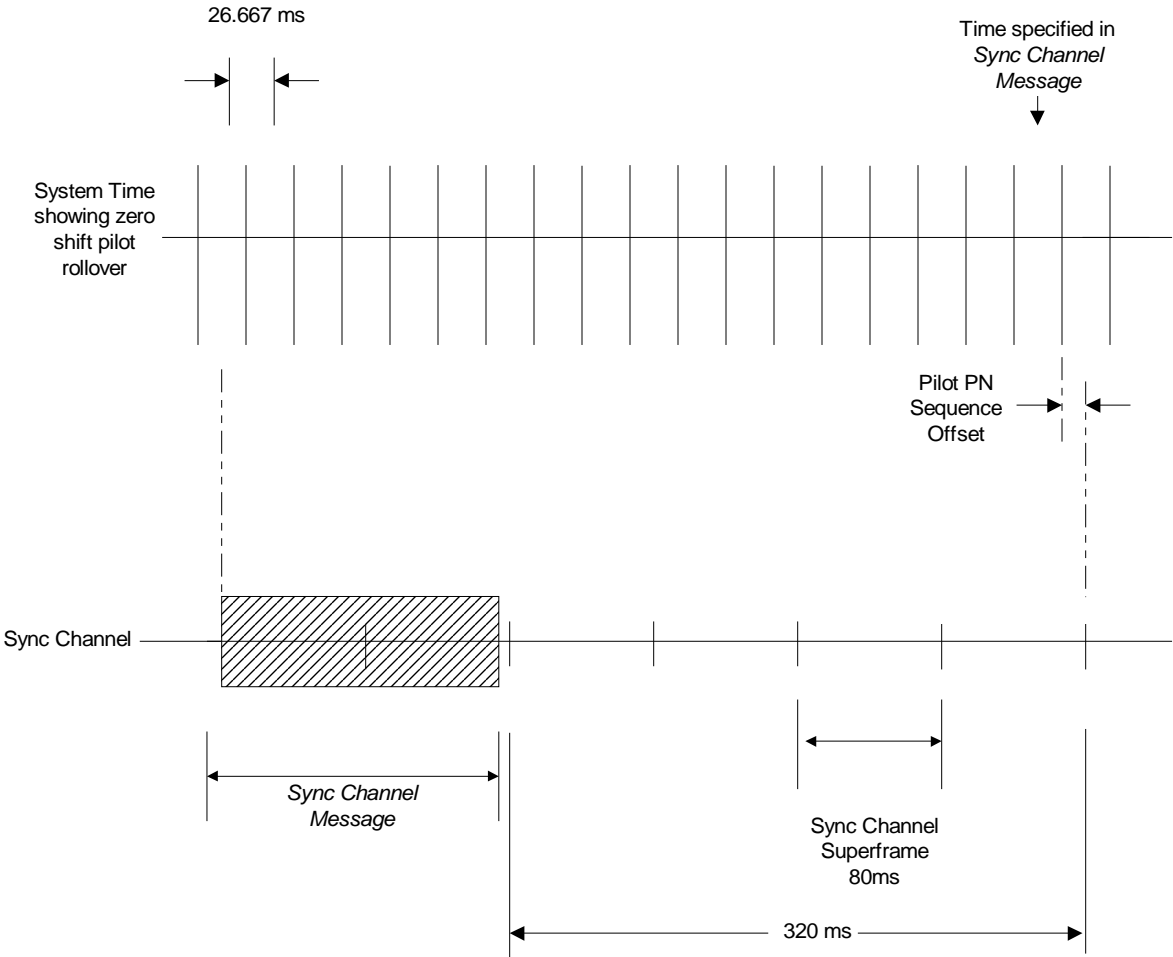
The mobile station may store the following information from the message:

- 1       • Number of leap seconds that have occurred since the start of System Time  
2       (LP\_SEC<sub>S</sub> = LP\_SEC<sub>T</sub>)
- 3       • Offset of local time from System Time (LTM\_OFF<sub>S</sub> = LTM\_OFF<sub>T</sub>)
- 4       • Daylight savings time indicator (DAYLT<sub>S</sub> = DAYLT<sub>T</sub>)
- 5 If REDIRECTION<sub>S</sub> and NDSS\_ORIG<sub>S</sub> are equal to disabled, the mobile station may enter  
6 the *System Determination Substate* with a reselection indication (see 2.6.1.1).
- 7 If REDIRECTION<sub>S</sub> is equal to enabled, the EXPECTED\_SID field of REDIRECT\_REC<sub>S</sub> is not  
8 equal to 0, and SID<sub>T</sub> is not equal to EXPECTED\_SID, the mobile station shall enter the  
9 *System Determination Substate* with a wrong system indication (see 2.6.1.1). If  
10 REDIRECTION<sub>S</sub> is equal to enabled, the EXPECTED\_NID field of REDIRECT\_REC<sub>S</sub> is not  
11 equal to 65535, and NID<sub>T</sub> is not equal to EXPECTED\_NID, the mobile station shall enter  
12 the *System Determination Substate* with a wrong network indication.
- 13 If P\_REV\_IN\_USE<sub>S</sub> is less than 6, the mobile station shall set POTENTIAL\_CDMACH<sub>S</sub> to  
14 CDMA\_FREQ<sub>T</sub>.
- 15 If P\_REV\_IN\_USE<sub>S</sub> is equal to six, the mobile station shall perform the following:
- 16       • If the mobile station supports the Quick Paging Channel or any radio configuration  
17       in the Radio Configuration Class 2 or 3 (see 1.1.1), the mobile station shall set  
18       POTENTIAL\_CDMACH<sub>S</sub> equal to EXT\_CDMA\_FREQ<sub>T</sub>; otherwise, the mobile station  
19       shall set POTENTIAL\_CDMACH<sub>S</sub> equal to CDMA\_FREQ<sub>T</sub>.
- 20 If P\_REV\_IN\_USE<sub>S</sub> is greater than six, the mobile station shall perform the following:
- 21       • If the mobile station supports Spreading Rate 3 on the common channels and  
22       SR3\_INCL<sub>S</sub> is equal to '1', the mobile station shall set:
  - 23       – BRAT<sub>S</sub> = SR3\_BRAT<sub>T</sub>;
  - 24       – BCCH\_CODE\_RATE<sub>S</sub> = 1/3;
  - 25       – BCCH<sub>S</sub> = SR3\_BCCH\_CODE\_CHAN<sub>T</sub>;
  - 26       – SR3\_PRIMARY\_PILOT<sub>S</sub> = SR3\_PRIMARY\_PILOT<sub>T</sub>;
  - 27       – SR3\_PILOT\_POWER1<sub>S</sub> = SR3\_PILOT\_POWER1<sub>T</sub>;
  - 28       – SR3\_PILOT\_POWER2<sub>S</sub> = SR3\_PILOT\_POWER2<sub>T</sub>;
  - 29       – If SR3\_CENTER\_FREQ\_INCL<sub>T</sub> is equal to '1', POTENTIAL\_CDMACH<sub>S</sub> =  
30       SR3\_CENTER\_FREQ<sub>T</sub>; otherwise, POTENTIAL\_CDMACH<sub>S</sub> = EXT\_CDMA\_FREQ<sub>T</sub>.
- 31       • If the mobile station does not support Spreading Rate 3 on the common channel or  
32       if SR3\_INCL<sub>S</sub> is equal to '0', the mobile station shall perform the following:
  - 33       – If SR1\_TD\_INCL<sub>T</sub> is equal to '1' and the mobile station supports the Transmit  
34       Diversity mode specified by SR1\_TD\_MODE<sub>T</sub>, the mobile station shall set:
    - 35       + SR1\_TD\_MODE<sub>S</sub> = SR1\_TD\_MODE<sub>T</sub>
    - 36       + SR1\_TD\_POWER\_LEVEL<sub>S</sub> = SR1\_TD\_POWER\_LEVEL<sub>T</sub>
    - 37       + BRAT<sub>S</sub> = SR1\_BRAT\_TD<sub>T</sub>



- 1           + BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_TD<sub>r</sub>,
- 2           + BCCH<sub>S</sub> = SR1\_BCCH\_CODE\_CHAN\_TD<sub>r</sub>,
- 3           + POTENTIAL\_CDMACH<sub>S</sub> = SR1\_CDMA\_FREQ\_TD<sub>r</sub>
- 4       – Otherwise, if SR1\_BCCH\_NON\_TD\_INCL<sub>r</sub> is equal to '1', the mobile station shall
- 5       set:
- 6           + BRAT<sub>S</sub> = SR1\_BRAT\_NON\_TD<sub>r</sub>
- 7           + BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_NON\_TD<sub>r</sub>,
- 8           + BCCH<sub>S</sub> = SR1\_BCCH\_CODE\_CHAN\_NON\_TD<sub>r</sub>,
- 9           + If SR1\_NON\_TD\_FREQ\_INCL<sub>r</sub> is equal to '1', POTENTIAL\_CDMACH<sub>S</sub> =
- 10          SR1\_CDMA\_FREQ\_NON\_TD<sub>r</sub>; otherwise, POTENTIAL\_CDMACH<sub>S</sub> =
- 11          EXT\_CDMA\_FREQ<sub>r</sub>
- 12       – Otherwise, the mobile station shall perform the following:
- 13           + If the mobile station supports the Quick Paging Channel or any radio
- 14           configuration in the Radio Configuration Class 2 or 3 (see 1.1.1), the mobile
- 15           station shall set POTENTIAL\_CDMACH<sub>S</sub> = EXT\_CDMA\_FREQ<sub>r</sub>; otherwise,
- 16           the mobile station shall set POTENTIAL\_CDMACH<sub>S</sub> = CDMA\_FREQ<sub>r</sub>.
- 17   If POTENTIAL\_CDMACH<sub>S</sub> is different from CDMACH<sub>S</sub>, the mobile station shall set
- 18   CDMACH<sub>S</sub> = POTENTIAL\_CDMACH<sub>S</sub> and then tune to the CDMA Channel (CDMACH<sub>S</sub>).
- 19   The mobile station shall enter the *Timing Change Substate*.
- 20   2.6.1.4 Timing Change Substate
- 21   Figure 2.6.1.4-1 illustrates the mobile station timing changes that occur in this substate.
- 22   The mobile station synchronizes its long code timing and system timing to those of the
- 23   CDMA system, using the PILOT\_PN<sub>S</sub>, LC\_STATE<sub>S</sub>, and SYS\_TIME<sub>S</sub> values obtained from
- 24   the received *Sync Channel Message*. SYS\_TIME<sub>S</sub> is equal to the System Time (see [2])
- 25   corresponding to 320 ms past the end of the last 80 ms superframe (see [2]) of the received
- 26   *Sync Channel Message* minus the pilot PN sequence offset. LC\_STATE<sub>S</sub> is equal to the
- 27   system long code state (see [2]) corresponding to SYS\_TIME<sub>S</sub>.
- 28   In the *Timing Change Substate*, the mobile station shall synchronize its long code timing to
- 29   the CDMA system long code timing derived from LC\_STATE<sub>S</sub>, and synchronize its system
- 30   timing to the CDMA system timing derived from SYS\_TIME<sub>S</sub>.
- 31   The mobile station shall perform the following:
- 32       • If SR1\_BCCH\_NON\_TD\_INCL<sub>S</sub> is equal to '1', or if SR1\_TD\_INCL<sub>S</sub> is equal to '1' and
- 33       the mobile supports the transmit diversity mode specified by SR1\_TD\_MODE<sub>S</sub>, or if
- 34       the mobile station supports Spreading Rate 3 on the common channel and
- 35       SR3\_INCL<sub>S</sub> is equal to '1', the mobile station shall:

- 1       – Set the stored message sequence numbers CONFIG\_MSG\_SEQ<sub>S</sub>,  
2       A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, ACC\_MSG\_SEQ<sub>S</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>,  
3       UNI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>,  
4       EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
5       USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub> and PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> variables to  
6       NULL (see 2.6.2.2);
- 7       – Set the index number of the Primary Broadcast Control Channel (BCN) to 1;
- 8       – Set IMSI\_11\_12<sub>S</sub>, IMSI\_10<sub>S</sub> and MCC<sub>S</sub> to NULL;
- 9       – Perform registration initialization as specified in 2.6.5.5.1.3; and
- 10      – If the bits of TMSI\_CODE<sub>S-p</sub> are not all equal to '1' and if SYS\_TIME<sub>S</sub> exceeds  
11      TMSI\_EXP\_TIME<sub>S-p</sub> × 2<sup>12</sup>, the mobile station shall set all the bits of  
12      TMSI\_CODE<sub>S-p</sub> to '1'.
- 13      • Otherwise, the mobile station shall:
  - 14       – Set PAGECH<sub>S</sub> to the Primary Paging Channel (see [2]);
  - 15       – Set PAGE\_CHAN<sub>S</sub> to '1';
  - 16       – Set the stored message sequence numbers CONFIG\_MSG\_SEQ<sub>S</sub>,  
17       SYS\_PAR\_MSG\_SEQ<sub>S</sub>, ACC\_MSG\_SEQ<sub>S</sub>, NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
18       GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
19       CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
20       GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>,  
21       EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
22       USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub> and PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> variables to  
23       NULL (see 2.6.2.2);
  - 24       – Set IMSI\_11\_12<sub>S</sub>, IMSI\_10<sub>S</sub> and MCC<sub>S</sub> to NULL;
  - 25       – Perform registration initialization as specified in 2.6.5.5.1.3; and
  - 26       – If the bits of TMSI\_CODE<sub>S-p</sub> are not all equal to '1' and if SYS\_TIME<sub>S</sub> exceeds  
27       TMSI\_EXP\_TIME<sub>S-p</sub> × 2<sup>12</sup>, the mobile station shall set all the bits of  
28       TMSI\_CODE<sub>S-p</sub> to '1'.
- 29      The mobile station shall enter the *Mobile Station Idle State*.



1  
2  
3  
4  
5

**Figure 2.6.1.4-1. Mobile Station Internal Timing**

## 2.6.2 Mobile Station Idle State

In this state, the mobile station monitors the Paging Channel or the Quick Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel. The mobile station can receive messages, receive an incoming call (mobile station terminated call), initiate a call (mobile station originated call), cancel a PACA call, initiate a registration, or initiate a message transmission.

The mobile station may monitor the Quick Paging Channel to determine if it should receive messages from the Paging Channel or Forward Common Control Channel.

Upon entering the *Mobile Station Idle State*, the mobile station shall perform the following if RSC\_MODE\_ENABLED is equal to NO:

- Set SLOTTED<sub>S</sub> to YES if T\_SLOTTED<sub>S</sub> is equal to 0 or if the mobile station does not support the slotted timer; otherwise, enable the T<sub>MS\_Slotted</sub> timer with the duration specified by T\_SLOTTED<sub>S</sub> if it is not already enabled, and set SLOTTED<sub>S</sub> to NO.

Upon entering the *Mobile Station Idle State* from the *Mobile Station Initialization State*, the mobile station shall perform the following:

- If SR1\_BCCH\_NON\_TD\_INCL<sub>S</sub> is equal to '1', or if SR1\_TD\_INCL<sub>S</sub> is equal to '1' and the mobile station supports the transmit diversity mode specified by SR1\_TD\_MODE<sub>S</sub>, or if the mobile station supports Spreading Rate 3 on the common channel and SR3\_INCL<sub>S</sub> is equal to '1', the mobile station shall perform the following:
  - Set its Primary Broadcast Control Channel code channel to BCCH<sub>S</sub>,
  - Set the Primary Broadcast Control Channel data rate as determined by BRAT<sub>S</sub>,
  - Set the Primary Broadcast Control Channel code rate as determined by BCCH\_CODE\_RATE<sub>S</sub>, and
  - Perform common channel supervision as specified in 2.6.2.1.1.4.
- Otherwise, the mobile station shall perform the following:
  - Set its code channel to PAGECH<sub>S</sub>,
  - Set the Paging Channel data rate as determined by PRAT<sub>S</sub>, and
  - Perform Paging Channel supervision as specified in 2.6.2.1.1.4.

Upon entering the *Mobile Station Idle State* from the *Mobile Station Control on the Traffic Channel State*, the mobile station shall perform all of the following:

- Perform common channel supervision as specified in 2.6.2.1.1.4.

If REDIRECTION<sub>S</sub>, PACA<sub>S</sub>, and NDSS\_ORIG<sub>S</sub> are equal to disabled, the mobile station may exit the *Mobile Station Idle State* at any time and enter the *System Determination Substate* of the *Mobile Station Initialization State* with a reselection indication (see 2.6.1.1).

While in the *Mobile Station Idle State*, the mobile station shall perform the following procedures:

- 1 • The mobile station shall perform Paging Channel or Forward Common Control  
2 Channel monitoring procedures as specified in 2.6.2.1.1.
- 3 • The mobile station shall perform message acknowledgment procedures as specified  
4 in [4].
- 5 • The mobile station shall perform registration procedures as specified in 2.6.2.1.3.
- 6 • The mobile station shall perform idle handoff procedures as specified in 2.6.2.1.4.
- 7 • The mobile station shall perform system reselection procedures as specified in  
8 2.6.2.1.6.
- 9 • The mobile station shall perform the *Response to Overhead Information Operation*  
10 as specified in 2.6.2.2 whenever the mobile station receives a system overhead  
11 message (*ANSI-41 System Parameters Message, Enhanced Access Parameters*  
12 *Message, Extended CDMA Channel List Message, MC-RR Parameters Message,*  
13 *Universal Neighbor List Message, ANSI-41 RAND Message, System Parameters*  
14 *Message, Access Point Identification Message, Access Point Identification Text*  
15 *Message, CDMA Channel List Message, Extended System Parameters Message,*  
16 *Neighbor List Message, Extended Neighbor List Message, General Neighbor List*  
17 *Message, Access Point Pilot Information Message, Global Service Redirection*  
18 *Message, Extended Global Service Redirection Message, User Zone Identification*  
19 *Message, Private Neighbor List Message, Access Parameters Message General*  
20 *Overhead Information Message, Flex Duplex CDMA Channel List Message or*  
21 *Alternative Technologies Information Message).*
- 22 • The mobile station shall perform the *Mobile Station Page Match Operation* as  
23 specified in 2.6.2.3 whenever it receives a mobile station-directed page.
- 24 • The mobile station shall perform the *Mobile Station Order and Message Processing*  
25 *Operation* as specified in 2.6.2.4 whenever a message or order directed to the  
26 mobile station is received other than a mobile station-directed page.
- 27 • The mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled if directed by the user to  
28 cancel the call origination.
- 29 • The mobile station shall perform the *Mobile Station Origination Operation* as  
30 specified in 2.6.2.5 if directed by the user to initiate a call, or if NDSS\_ORIG<sub>S</sub> is  
31 equal to enabled.
- 32 • If RETRY\_DELAY<sub>S</sub>[001] or RETRY\_DELAY<sub>S</sub>[101] is not set to 0:
  - 33 – The mobile station shall not send any *Origination Message* containing a packet  
34 data service option<sup>1</sup> or *Reconnect Message* (with ORIG\_IND set to '1') for  
35 connecting a packet data service option until the maximum of the system time  
36 stored in RETRY\_DELAY<sub>S</sub>[001] and RETRY\_DELAY<sub>S</sub>[101].

---

<sup>1</sup> Packet data service option refers to SO 60, SO 61 or any service option in Service Option Group 4 and 5 in [30]

- 1       – At the system time stored in RETRY\_DELAY<sub>S</sub>[001], the mobile station shall reset
- 2       RETRY\_DELAY<sub>S</sub>[001] to 0.
- 3       – At the system time stored in RETRY\_DELAY<sub>S</sub>[101], the mobile station shall reset
- 4       RETRY\_DELAY<sub>S</sub>[101] to 0.
- 5       • The mobile station shall perform the *Mobile Station PACA Cancel Operation* as
- 6       specified in 2.6.2.8, if PACA<sub>S</sub> is equal to enabled and any one of the following
- 7       conditions is met:
  - 8       – PACA\_CANCEL is equal to '1'; or
  - 9       – The mobile station is directed by the user to cancel the PACA call.
- 10      • If the PACA state timer expires, the mobile station shall perform the following:
  - 11      – The mobile station should enter the *Update Overhead Information Substate* of
  - 12      the *System Access State* (see 2.6.3) with an origination indication within T<sub>33m</sub>
  - 13      seconds to re-originate the PACA call.
  - 14      – Otherwise, the mobile station shall perform the *Mobile Station PACA Cancel*
  - 15      *Operation* as specified in 2.6.2.8.
- 16      • If the mobile station supports *Data Burst Message* transmission, it shall perform
- 17      the *Mobile Station Message Transmission Operation* as specified in 2.6.2.6 if
- 18      directed by the user to transmit a message.
- 19      • If the mobile station supports BCMC operation, it shall perform the procedures as
- 20      specified in 2.6.13.
- 21      • If RETRY\_DELAY<sub>S</sub>[100] or RETRY\_DELAY<sub>S</sub>[101] is not set to 0:
  - 22      – The mobile station shall not send any Short Data Burst (see [30], [42]) until the
  - 23      maximum of the system time stored in RETRY\_DELAY<sub>S</sub>[100] and
  - 24      RETRY\_DELAY<sub>S</sub>[101].
  - 25      – At the system time stored in RETRY\_DELAY<sub>S</sub>[100], the mobile station shall reset
  - 26      RETRY\_DELAY<sub>S</sub>[100] to 0.
  - 27      – At the system time stored in RETRY\_DELAY<sub>S</sub>[101], the mobile station shall reset
  - 28      RETRY\_DELAY<sub>S</sub>[101] to 0.
- 29      • If the mobile station supports the *Device Information Message* on the r-csch,
- 30      AUTO\_MSG\_SUPPORTED<sub>S</sub> is equal to '1', and the mobile station has detected a
- 31      change in hook status since the last time when the mobile station sent hook status
- 32      information, the mobile station shall perform the following:
  - 33      – If the autonomous message timer has expired or is disabled, the mobile station
  - 34      shall perform the *Mobile Station Message Transmission Operation* as specified in
  - 35      2.6.2.6.
  - 36      – If the autonomous message timer has not expired, the mobile station shall set
  - 37      the autonomous message timer equal to AUTO\_MSG\_INTERVAL<sub>S</sub> and shall
  - 38      restart the timer.

- 1 • If the mobile station supports the *Fast Call Setup Order* with ORDQ equal to  
2 '00000000' on the r-csch, AUTO\_FCSO\_ALLOWED<sub>s</sub> is equal to '1',  
3 RSC\_MODE\_ENABLED is equal to NO, SLOTTED<sub>s</sub> is equal to YES, and the mobile  
4 station would like to request operation in reduced slot cycle mode, it shall perform  
5 the *Mobile Station Message Transmission Operation* as specified in 2.6.2.6.
- 6 • The mobile station shall perform the *Mobile Station Power-Down Operation* as  
7 specified in 2.6.2.7 if directed by the user to power down.
- 8 • If the bits of TMSI\_CODE<sub>s-p</sub> are not all equal to '1' and if System Time (in 80 ms  
9 units) exceeds TMSI\_EXP\_TIME<sub>s-p</sub> × 2<sup>12</sup>, the mobile station shall set all the bits of  
10 TMSI\_CODE<sub>s-p</sub> to '1' within T<sub>66m</sub> seconds.
- 11 • If the full-TMSI timer expires or has expired, the mobile station shall set all the bits  
12 of TMSI\_CODE<sub>s-p</sub> to '1'. The mobile station shall update the registration variables  
13 as described in 2.6.5.5.2.5.
- 14 • If the key setup timer expires or has expired and mobile station determines that it  
15 is not originating an emergency call, the mobile station may set  
16 REG\_SECURITY\_RESYNC<sup>2</sup> to YES and go to the *System Determination Substate*  
17 with an encryption/message integrity failure indication (see 2.3.12.5 for details).
- 18 • If TKZ\_MODE\_ENABLED is set to YES, the mobile station shall perform the  
19 following:
  - 20 – If TKZ\_ID<sub>s</sub> is not equal to any entry in TKZ\_LIST, TKZ\_SID<sub>s</sub> is equal to SID<sub>s</sub>,  
21 TKZ\_NID<sub>s</sub> is equal to NID<sub>s</sub>, and TKZ\_MODE\_SUPPORTED<sub>s</sub> is equal to '1', the  
22 mobile station shall send a *Radio Environment Message* by performing the  
23 *Mobile Station Message Transmission Operation* as specified in 2.6.2.6.
  - 24 – If the TKZ timer of any entry in TKZ\_LIST has expired, the mobile station shall  
25 delete that entry.
  - 26 – If the tracking zone update timer expires, the mobile station shall disable the  
27 tracking zone update timer and set TKZ\_MODE\_ENABLED to NO.
- 28 • If P\_REV\_IN\_USE<sub>s</sub> is less than 11 after the mobile station performs an idle handoff,  
29 the mobile station shall set TBR\_RAND\_SUPPR\_ENABLE<sub>s</sub> to '0', and shall set  
30 TBR\_RAND\_WINDOW<sub>s</sub> to '11'.

### 31 2.6.2.1 Idle Procedures

#### 32 2.6.2.1.1 Forward Channel Monitoring Procedures

##### 33 2.6.2.1.1.1 General Overview

34 The Paging Channel is divided into 80 ms slots called Paging Channel slots. Paging and  
35 control messages for a mobile station operating in the non-slotted mode can be received in

---

<sup>2</sup> REG\_SECURITY\_RESYNC was formerly called REG\_ENCRYPT\_RESYNC.

any of the Paging Channel slots; therefore, the non-slotted mode of operation requires the mobile station to monitor all slots.

The Forward Common Control Channel is divided into 80 ms slots called Forward Common Control Channel slots. Paging and mobile directed messages for a mobile station operating in the non-slotted mode can be received in any of the Forward Common Control Channel slots. The overhead messages can be received on the Primary Broadcast Control Channel. Therefore, the non-slotted mode of operation requires the mobile station to continuously monitor the Forward Common Control Channel/Primary Broadcast Control Channel.

#### 2.6.2.1.1.1.1 General Overview for Individually Addressed Messages

The Paging Channel or the Forward Common Control Channel protocol provides for scheduling the transmission of messages for a specific mobile station in certain assigned slots. Support of this feature is optional and may be enabled by each mobile station. A mobile station that monitors the Paging Channel or the Forward Common Control Channel only during certain assigned slots is referred to as operating in the slotted mode. During the slots in which the Paging Channel or the Forward Common Control Channel is not being monitored, the mobile station can stop or reduce its processing for power conservation. A mobile station may not operate in the slotted mode in any state except the *Mobile Station Idle State*.

A mobile station operating in the slotted mode generally monitors the Paging Channel or the Forward Common Control Channel for one or two slots per slot cycle. The mobile station can specify its preferred slot cycle using the SLOT\_CYCLE\_INDEX and SIGN\_SLOT\_CYCLE\_INDEX fields in the *Registration Message*, *Origination Message*, or *Page Response Message*. The mobile station can also specify a reduced slot cycle using the RSCI field of the *Fast Call Setup Order*, *Release Order* (ORDQ = '00000011') or *Extended Release Response Message*, which enables the mobile station to operate in the reduced slot cycle mode. The length of the slot cycle, T, in units of 1.28 seconds,<sup>3</sup> is given by

$$T = 2^i,$$

where i is the selected slot cycle index (see 2.6.2.1.1.3) which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, and 7.

Using the Terminal Information record of the *Status Response Message* or the *Extended Status Response Message*,

- if P\_REV\_IN\_USE<sub>S</sub> is less than eleven, the mobile station reports max (0, SLOT\_CYCLE\_INDEX\_REG) with the SLOT\_CYCLE\_INDEX field.

---

<sup>3</sup> When SIGN\_SLOT\_CYCLE\_INDEX is equal to '1', the minimum length slot cycle consists of 16 slots of 80 ms each, hence 1.28 seconds. When SIGN\_SLOT\_CYCLE\_INDEX is equal to '0', the minimum length slot cycle consists of one slot of 80 ms, hence 80 ms. When operating in the reduced slot cycle mode, the minimum length slot cycle is also 80 ms.



- 1       • if P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to eleven, the mobile station reports its  
2       last registered slot cycle, SLOT\_CYCLE\_INDEX\_REG with the SLOT\_CYCLE\_INDEX  
3       and SIGN\_SLOT\_CYCLE\_INDEX fields.

4       Using the Extended Terminal Information record of the *Extended Status Response Message*  
5       the mobile station reports its last registered slot cycle, SLOT\_CYCLE\_INDEX\_REG with the  
6       SLOT\_CYCLE\_INDEX and SIGN\_SLOT\_CYCLE\_INDEX fields.

7       When in the *Mobile Station Control on the Traffic Channel State*, using the Terminal  
8       Information record of the *Status Response Message* or the *Status Message*,

- 9       • if P\_REV\_IN\_USE<sub>S</sub> is less than eleven, the mobile station reports max (0,  
10       SLOT\_CYCLE\_INDEX\_REG) with the SLOT\_CYCLE\_INDEX field.
- 11       • if P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to eleven, the mobile station reports its  
12       last registered slot cycle, SLOT\_CYCLE\_INDEX\_REG with the SLOT\_CYCLE\_INDEX  
13       and SIGN\_SLOT\_CYCLE\_INDEX fields.

14       When in the *Mobile Station Control on the Traffic Channel State*, using the Extended  
15       Terminal Information record of the *Status Response Message*, the mobile station reports its  
16       last registered slot cycle, SLOT\_CYCLE\_INDEX\_REG with the SLOT\_CYCLE\_INDEX and  
17       SIGN\_SLOT\_CYCLE\_INDEX fields.

18       A mobile station operating in the slotted mode may optionally monitor additional slots to  
19       receive broadcast messages and/or broadcast pages (see 2.6.2.1.1.3.3 and 2.6.2.1.1.3.4).

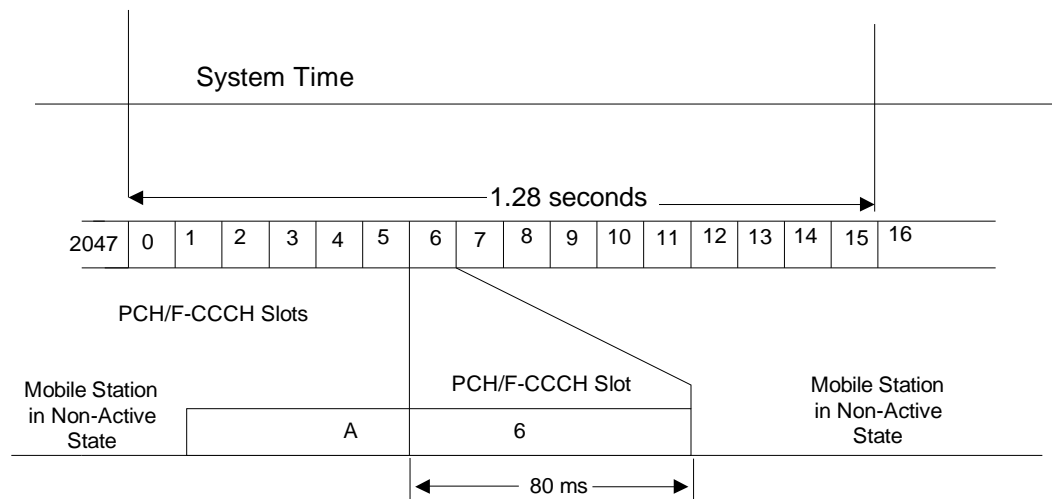
20       There are  $16 \times T$  slots in a slot cycle.

21       SLOT\_NUM is the Paging Channel or the Forward Common Control Channel slot number,  
22       modulo the maximum length slot cycle (2048 slots). That is, the value of SLOT\_NUM is

$$23 \quad \text{SLOT\_NUM} = \lfloor t/4 \rfloor \bmod 2048,$$

24       where  $t$  is the System Time in 20ms frames. For each mobile station, the starting times of  
25       its slot cycles are offset from the slot in which SLOT\_NUM equals zero by a fixed, randomly  
26       selected number of slots as specified in 2.6.2.1.1.3.

27       Figure 2.6.2.1.1.1-1 shows an example for a slot cycle length of 1.28 seconds, in which the  
28       computed value of PGSLOT (see 2.6.2.1.1.3) is equal to 6, so that one of the mobile  
29       station's slot cycles begins when SLOT\_NUM equals 6. The mobile station begins  
30       monitoring the Paging Channel or the Forward Common Control Channel at the start of  
31       the slot in which SLOT\_NUM equals 6. The next slot in which the mobile station must  
32       begin monitoring the Paging Channel or the Forward Common Control Channel is 16 slots  
33       later, i.e., the slot in which SLOT\_NUM is 22.



A - Reacquisition of CDMA System

6 - Mobile Station's Assigned PCH/F-CCCH Slot

**Figure 2.6.2.1.1.1-1. Mobile Station Idle Slotted Mode Structure Example**

#### 2.6.2.1.1.1.1 Overview of Stopping Monitoring via the General Page Message

Layer 3 determines when a mobile station operating in the slotted mode may stop monitoring the Paging Channel or the Forward Common Control Channel based upon indications received from Layer 2 (see [4]). When the *General Page Message* is used, Layer 2 determines whether there is an address mismatch or a broadcast address mismatch, based upon the address information received in the *General Page Message*. Based upon the address mismatch and broadcast address mismatch indications received from Layer 2, Layer 3 can determine when no further messages or records addressed to an individual mobile station will be present in the slot.

A *General Page Message* contains four fields: CLASS\_0\_DONE, CLASS\_1\_DONE, TMSI\_DONE, and ORDERED\_TMSIS, which indicate when a mobile station operating in the slotted mode may stop monitoring the Paging Channel or the Forward Common Control Channel.

When CLASS\_0\_DONE is set to '1' during a mobile station's assigned slot and the mobile station is operating in the slotted mode, no further messages or records addressed by a class 0 IMSI will be directed to the mobile station during the current slot. When CLASS\_1\_DONE is set to '1' during a mobile station's assigned slot and the mobile station is operating in the slotted mode, no further messages or records addressed by a class 1 IMSI will be directed to the mobile station during the current slot. Similarly, when TMSI\_DONE is set to '1' during a mobile station's assigned slot and the mobile station is operating in the slotted mode, no further messages or records addressed by a TMSI will be directed to the mobile station during the current slot.

1 The field ORDERED\_TMSIS, when set to '1' during a mobile station's assigned slot,  
 2 indicates that the base station has ordered TMSI page records directed to mobile stations  
 3 operating in the slotted mode so that the resulting TMSI\_CODE values are in ascending  
 4 order in the *General Page Messages* in the slot.

5 A mobile station which is operating in the slotted mode, has a class 0 IMSI assigned, and  
 6 does not have a TMSI assigned (all the bits of TMSI\_CODE<sub>s-p</sub> are equal to '1'), may stop  
 7 monitoring the Paging Channel or the Forward Common Control Channel after processing  
 8 a *General Page Message* containing CLASS\_0\_DONE equal to '1'. Similarly, a mobile  
 9 station which is operating in the slotted mode, has a class 1 IMSI assigned, and does not  
 10 have a TMSI assigned (all the bits of TMSI\_CODE<sub>s-p</sub> are equal to '1'), may stop monitoring  
 11 the Paging Channel or the Forward Common Control Channel after processing a *General*  
 12 *Page Message* containing CLASS\_1\_DONE equal to '1'.

13 A mobile station which is operating in the slotted mode, has a class 0 IMSI assigned, and  
 14 has a TMSI assigned (the bits of TMSI\_CODE<sub>s-p</sub> are not all equal to '1'), may stop  
 15 monitoring the Paging Channel or the Forward Common Control Channel after processing  
 16 a *General Page Message* containing both CLASS\_0\_DONE equal to '1' and TMSI\_DONE  
 17 equal to '1'. Similarly, a mobile station which is operating in the slotted mode, has a class  
 18 1 IMSI assigned, and has a TMSI assigned (the bits of TMSI\_CODE<sub>s-p</sub> are not all equal to  
 19 '1'), may stop monitoring the Paging Channel or the Forward Common Control Channel  
 20 after processing a *General Page Message* containing both CLASS\_1\_DONE equal to '1' and  
 21 TMSI\_DONE equal to '1'.

22 If ORDERED\_TMSIS is equal to '1' and CLASS\_0\_DONE is equal to '1', a mobile station  
 23 which has a class 0 IMSI assigned, is operating in the slotted mode, and has a TMSI  
 24 assigned (the bits of TMSI\_CODE<sub>s-p</sub> are not all equal to '1'), may stop monitoring the  
 25 Paging Channel or the Forward Common Control Channel after processing a page record  
 26 with a TMSI\_CODE value of higher numerical value than TMSI\_CODE<sub>s-p</sub>.

27 If ORDERED\_TMSIS is equal to '1' and CLASS\_1\_DONE is equal to '1', a mobile station  
 28 which has a class 1 IMSI assigned, is operating in the slotted mode, and has a TMSI  
 29 assigned (the bits of TMSI\_CODE<sub>s-p</sub> are not all equal to '1'), may stop monitoring the  
 30 Paging Channel or the Forward Common Control Channel after processing a page record  
 31 with a TMSI\_CODE value of higher numerical value than TMSI\_CODE<sub>s-p</sub>.

32 The mobile station continues to monitor the Paging Channel or the Forward Common  
 33 Control Channel for one additional slot unless, within its assigned slot, the mobile station  
 34 receives a *General Page Message* containing the appropriate indicator permitting it to stop  
 35 monitoring the Paging Channel or the Forward Common Control Channel  
 36 (CLASS\_0\_DONE, CLASS\_1\_DONE, TMSI\_DONE, or ORDERED\_TMSIS equal to '1',  
 37 whichever is appropriate). This allows the base station to carry over a message begun in  
 38 the assigned slot into the following slot, if necessary.

#### 2.6.2.1.1.1.2 Overview of Stopping Monitoring via the Universal Page Message

Layer 3 determines when a mobile station operating in the slotted mode may stop monitoring the Forward Common Control Channel based upon indications from Layer 2 (see [4]). When the *Universal Page Message* is used on the Forward Common Control Channel, Layer 2 determines whether there is an address mismatch or a broadcast address mismatch, based upon the address information received in the *Universal Page Message*. Based upon the address mismatch and broadcast address mismatch indications received from Layer 2, Layer 3 can determine when no further messages or records addressed to an individual mobile station will be present in the slot.

The *Universal Page Message* contains the READ\_NEXT\_SLOT field, which, when equal to '1' and received in an assigned slot, indicates to a mobile station that it is to monitor the Forward Common Control Channel in time to receive the first bit of the slot following the assigned slot. This allows the base station to use both an assigned slot and the following slot for pages if all of the pages for an assigned slot cannot be fit into the assigned slot. The *Universal Page Message* also contains the READ\_NEXT\_SLOT\_BCAST field, which, when equal to '1' and received in an assigned slot or broadcast slot, indicates to a mobile station configured to receive broadcast messages that it is to monitor the Forward Common Control Channel in time to receive the first bit of the subsequent slot. This allows the base station to use the subsequent slot for enhanced broadcast pages if all of the enhanced broadcast pages for an assigned slot or broadcast slot cannot be fit into the slot.

#### 2.6.2.1.1.1.2 Overview of Broadcast Messages on Paging Channel

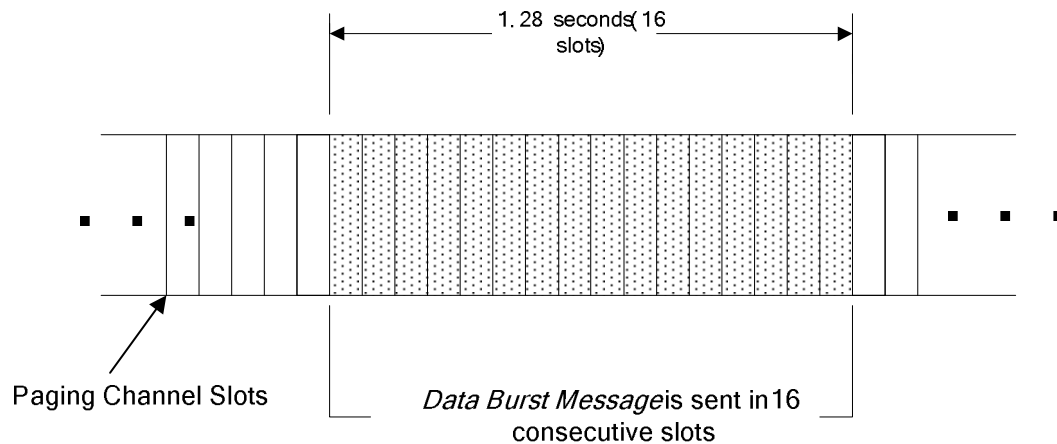
The Paging Channel protocol provides two methods for the transmission of broadcast messages. Each method enables mobile stations operating in the slotted mode or in the non-slotted mode to receive broadcast messages. A broadcast message on the Paging Channel is a *Data Burst Message* that has a broadcast address type. A mobile station operating in the slotted mode has assigned slots that it monitors to receive Paging Channel messages (see 2.6.2.1.1.1). A broadcast page is a record within a *General Page Message* that has a broadcast address type. A base station may transmit a broadcast page in an assigned slot to inform mobile stations monitoring that slot that a broadcast message will be transmitted in a predetermined subsequent slot. A slot that a mobile station monitors in order to receive either a broadcast page or a broadcast message is referred to as a broadcast slot.

##### 2.6.2.1.1.1.2.1 Method 1: Multi-Slot Broadcast Message Transmission

According to this method, a broadcast message is sent in a sufficient number of assigned slots such that it may be received by all mobile stations that are operating in the slotted mode.

Figure 2.6.2.1.1.2.1-1 shows an example for the case when the maximum slot cycle index is equal to 0. In this example, the broadcast message fits in a single slot. The *Data Burst Message* is transmitted in 16 consecutive slots.

1



2

3 **Figure 2.6.2.1.1.2.1-1. Multi-Slot Broadcast Message Transmission Example**4 **2.6.2.1.1.2.2 Method 2: Periodic Broadcast Paging**

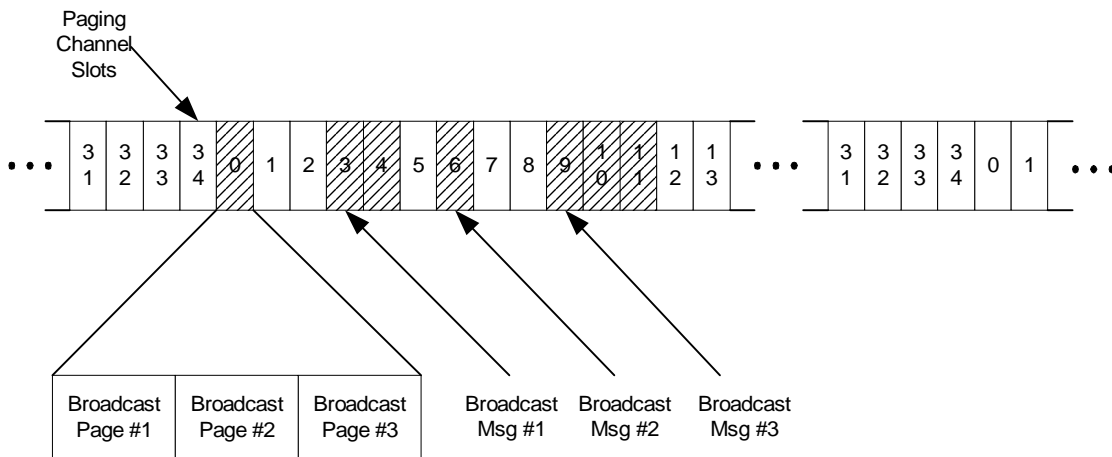
5 According to this method, mobile stations configured to receive broadcast messages  
 6 monitor a specific broadcast slot (the first slot of a broadcast paging cycle; see  
 7 2.6.2.1.1.3.3). There are two methods of sending broadcast messages used with Periodic  
 8 Broadcast Paging.

9 If all of the broadcast messages to be transmitted fit within the first slot of a broadcast  
 10 paging cycle, they may all be transmitted in this broadcast slot. If there is a single  
 11 broadcast message to be transmitted, it may be transmitted beginning in this broadcast  
 12 slot.

13 Alternately, one or more broadcast pages may be transmitted in the first slot of a broadcast  
 14 paging cycle. Each broadcast page is associated with a subsequent broadcast slot. For  
 15 each broadcast page, an associated broadcast message may be transmitted in the  
 16 associated subsequent broadcast slot. The broadcast slot for the associated broadcast  
 17 message is determined according to the position of the broadcast page within the *General*  
 18 *Page Message* transmitted in the first slot of the broadcast paging cycle.

19 Figure 2.6.2.1.1.2.2-1 shows an example of Periodic Broadcast Paging when the  
 20 broadcast index is set to 1. A *General Page Message* containing three broadcast pages is  
 21 transmitted in the first slot of the broadcast paging cycle. For each of the three broadcast  
 22 pages, a *Data Burst Message* is transmitted in a subsequent slot.

23



**Figure 2.6.2.1.1.2.2-1. Periodic Broadcast Paging Example**

### 2.6.2.1.1.3 Overview of Broadcast Messages on Broadcast Control Channel

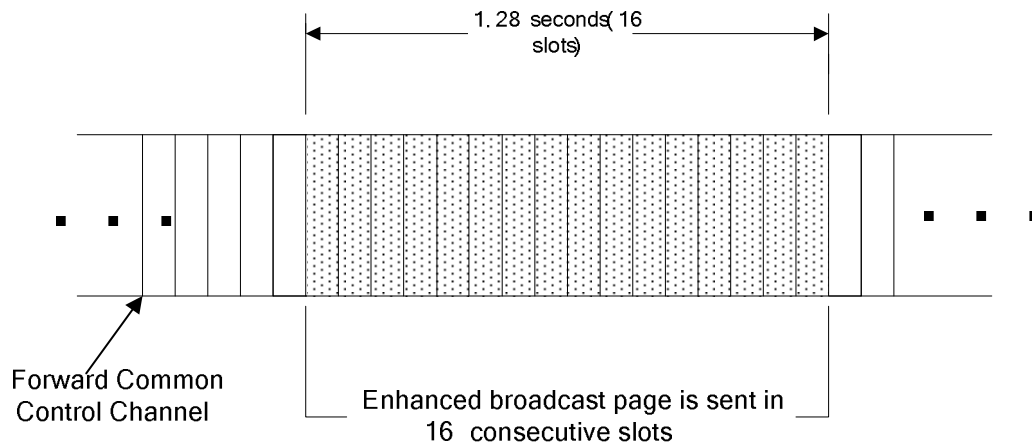
The Broadcast Control Channel/Forward Common Control Channel protocol provides two methods for the transmission of broadcast messages. Each method enables mobile stations operating in the slotted mode or in the non-slotted mode to receive broadcast messages on the Broadcast Control Channel when  $NUM\_BCCH\_BCAST_s$  is not equal to '000'. A broadcast message on the Broadcast Control Channel is a *Data Burst Message* that has a broadcast address type. A mobile station operating in the slotted mode has assigned Forward Common Control Channel slots that it monitors to receive Forward Common Control Channel messages (see 2.6.2.1.1.1). A mobile station operating in the slotted mode and configured to receive broadcast messages may also have special assigned Forward Common Control Channel slots, called broadcast slots, that it monitors to receive enhanced broadcast pages. An enhanced broadcast page is a record within a *General Page Message* or a *Universal Page Message* that has a broadcast address type and that includes broadcast message scheduling information. A base station may transmit an enhanced broadcast page in an assigned Forward Common Control Channel slot, or in a broadcast slot, to inform mobile stations that a broadcast message will be transmitted in a specified Broadcast Control Channel slot. The enhanced broadcast page identifies the Broadcast Control Channel and the slot the mobile station is to monitor to receive the broadcast message.

#### 2.6.2.1.1.3.1 Method 1: Multi-Slot Enhanced Broadcast Paging

According to this method, an enhanced broadcast page is sent in a sufficient number of assigned slots on the Forward Common Control Channel such that it may be received by all mobile stations that are operating in the slotted mode.

Figure 2.6.2.1.1.3.1-1 shows an example for the case when the maximum slot cycle index is equal to 0. The enhanced broadcast page is transmitted in 16 consecutive slots.

1



2

3 **Figure 2.6.2.1.1.3.1-1. Multi-Slot Enhanced Broadcast Paging Example**

4

5 **2.6.2.1.1.3.2 Method 2: Periodic Enhanced Broadcast Paging**

6 According to this method, mobile stations configured to receive broadcast messages  
 7 monitor a specific broadcast slot (the first slot of a broadcast paging cycle).

8 One or more enhanced broadcast pages may be transmitted in the first slot of a broadcast  
 9 paging cycle and/or in the subsequent slot. Each enhanced broadcast page is associated  
 10 with a subsequent broadcast slot. The broadcast slot for the associated broadcast  
 11 message is determined according to a time offset specified in the enhanced broadcast page.  
 12 In addition, a broadcast slot for a repeat of the broadcast message can be specified via a  
 13 time offset from the slot of the first broadcast message.

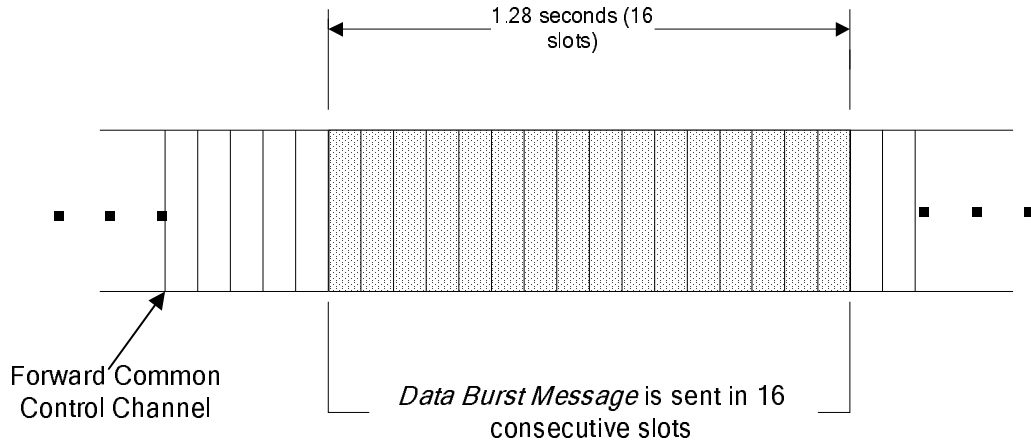
14 **2.6.2.1.1.4 Overview of Broadcast Messages on Forward Common Control Channel**

15 The Forward Common Control Channel protocol provides two methods for the  
 16 transmission of broadcast messages. Each method enables mobile stations operating in  
 17 the slotted mode or in the non-slotted mode to receive broadcast messages on the Forward  
 18 Common Control Channel when NUM\_BCCH\_BCAST<sub>s</sub> equals '000'. A broadcast message  
 19 on the Forward Common Control Channel is a *Data Burst Message* that has a broadcast  
 20 address type. A mobile station operating in the slotted mode has assigned Forward  
 21 Common Control Channel slots that it monitors to receive Forward Common Control  
 22 Channel messages (see 2.6.2.1.1.1). An enhanced broadcast page is a record within a  
 23 *General Page Message* or a *Universal Page Message* that has a broadcast address type. A  
 24 base station may transmit an enhanced broadcast page in an assigned slot to inform  
 25 mobile stations monitoring that slot that a broadcast message will be transmitted in the  
 26 same F-CCCH where the enhanced broadcast page is received. A slot that a mobile station  
 27 monitors in order to receive either an enhanced broadcast page or a broadcast message is  
 28 referred to as a broadcast slot.

#### 2.6.2.1.1.4.1 Method 1: Multi-Slot Broadcast Message Transmission

According to this method, a broadcast message is sent in a sufficient number of assigned slots on the Forward Common Control Channel such that it may be received by all mobile stations that are operating in the slotted mode.

Figure 2.6.2.1.1.4.1-1 shows an example for the case when the maximum slot cycle index is equal to 0. In this example, the broadcast message fits in a single slot. The *Data Burst Message* is transmitted in 16 consecutive slots.



**Figure 2.6.2.1.1.4.1-1. Multi-Slot Broadcast Message Transmission Example**

#### 2.6.2.1.1.4.2 Method 2: Periodic Enhanced Broadcast Paging

According to this method, mobile stations configured to receive broadcast messages monitor a specific broadcast slot (the first slot of a broadcast paging cycle). There are two methods of sending broadcast messages used with Periodic Enhanced Broadcast Paging.

If all of the broadcast messages to be transmitted fit within the first slot of a broadcast paging cycle, they may all be transmitted in this broadcast slot. If there is a single broadcast message to be transmitted, it may be transmitted beginning in this broadcast slot.

Alternately, one or more enhanced broadcast pages may be transmitted in the first slot of a broadcast paging cycle. Each enhanced broadcast page is associated with a subsequent broadcast slot. For each enhanced broadcast page, an associated broadcast message may be transmitted in the associated subsequent broadcast slot. The broadcast slot for the associated broadcast message is determined according to a time offset specified in the enhanced broadcast page. In addition, a broadcast slot for a repeat of the broadcast message can be specified via a time offset from the slot of the first broadcast message.

#### 2.6.2.1.1.2 Non-Slotted Mode Requirements

A mobile station operating in the non-slotted mode shall monitor the Paging Channel or the Forward Common Control Channel/Primary Broadcast Control Channel at all times. If the mobile station declares a loss of the Paging Channel or the Forward Common Control



Channel/Primary Broadcast Control Channel (see 2.6.2.1.1.4), the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

When a mobile station monitors the Paging Channel or the Forward Common Control Channel in any state other than the *Mobile Station Idle State*, it shall operate in the non-slotted mode.

A mobile station monitoring the Paging Channel shall operate in the non-slotted mode when  $PACA_S$  is equal to enabled.

A mobile station monitoring the Paging Channel shall operate in the non-slotted mode when  $SLOTTED_S$  is equal to NO.

#### 2.6.2.1.1.3 Slotted Mode Requirements

A mobile station monitoring the Paging Channel shall not operate in the slotted mode if any of the following conditions are true:

- $SLOTTED_S$  is equal to NO,
- Bit 5 of the station class mark is set to '0' (see 2.3.3),
- $PACA_S$  is equal to enabled, or
- The mobile station's configuration parameters are not current (see 2.6.2.2).

A mobile station monitoring the Forward Common Control Channel shall not operate in the slotted mode if either of the following conditions is true:

- Bit 5 of the station class mark is set to '0' (see 2.3.3), or
- The mobile station's configuration parameters are not current (see 2.6.2.2).

A mobile station monitoring the Forward Common Control Channel with bit 5 of the station class mark set to '1' shall monitor all Forward Common Control Channel slots (see 2.6.2.1.1.3.1) if either of the following conditions is true:

- $SLOTTED_S$  is equal to NO, or
- $PACA_S$  is equal to enabled.

During operation in the slotted mode, the mobile station shall ensure that its stored configuration parameter values are current (see 2.6.2.2).

If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel/Primary Broadcast Control Channel (see 2.6.2.1.1.4), the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

#### 2.6.2.1.1.3.1 Monitoring Assigned Slots

The mobile station shall monitor the Paging Channel or the Forward Common Control Channel in each of its assigned slots, if any of the following conditions is true:

- The mobile station does not support Quick Paging Channel operation, or

- 1 • QPCH\_SUPPORTED<sub>s</sub> is equal to '0', or
- 2 • RSC\_MODE\_ENABLED is equal to YES, IGNORE\_QPCH<sub>s</sub> is equal to '1', and RSCI<sub>s</sub>
- 3 is equal to -3 or -4.

4 If none of the above conditions is true, then for each of its assigned slots, the mobile  
5 station shall perform the following:

- 6 • The mobile station should check its assigned paging indicators in the complete
- 7 Quick Paging Channel slot immediately preceding its assigned Paging Channel or
- 8 Forward Common Control Channel slot, as specified in 2.6.2.1.2.1; the mobile
- 9 station shall monitor the assigned Paging Channel or Forward Common Control
- 10 Channel slot if the paging indicators meet the conditions specified in 2.6.2.1.2.2.
- 11 • If the mobile station does not check its assigned paging indicators, the mobile
- 12 station shall monitor its assigned Paging Channel or Forward Common Control
- 13 Channel slot.

14 If the mobile station supports Quick Paging Channel operation, the mobile station is  
15 configured to receive broadcast messages, BCAST\_INDEX<sub>s</sub> is not equal to '000', and  
16 QPCH\_BI\_SUPPORTED<sub>s</sub> equals '1', then for each of its assigned broadcast slots on the  
17 Forward Common Control Channel or Paging Channel, the mobile station shall perform  
18 the following:

- 19 • The mobile station should check the broadcast indicators in the complete Quick
- 20 Paging Channel broadcast slot immediately preceding its assigned broadcast slot,
- 21 as specified in 2.6.2.1.1.3.3.
- 22 • The mobile station should receive its assigned broadcast slot on the Forward
- 23 Common Control Channel or Paging Channel if the broadcast indicators meet the
- 24 conditions specified in 2.6.2.1.2.1.

25 The mobile station shall monitor each slot following an assigned slot in which the mobile  
26 station received a *Universal Page Message* with READ\_NEXT\_SLOT equal to '1', and shall  
27 begin monitoring the Forward Common Control Channel in time to receive the first bit of  
28 the slot. If the mobile station is configured to receive broadcast messages, it shall monitor  
29 each slot following an assigned slot in which the mobile station received a *Universal Page*  
30 *Message* with READ\_NEXT\_SLOT\_BCAST equal to '1', and shall begin monitoring the  
31 Forward Common Control Channel in time to receive the first bit of the slot.

32 If SLOTTED<sub>s</sub> is equal to NO or PACA<sub>s</sub> is equal to enabled, the mobile station may stop  
33 monitoring a Forward Common Control Channel slot when Layer 3 receives an address  
34 mismatch indication from Layer 2. When the mobile station stops monitoring a Forward  
35 Common Control Channel slot when SLOTTED<sub>s</sub> is equal to NO or PACA<sub>s</sub> is equal to  
36 enabled, the mobile station shall begin monitoring the subsequent Forward Common  
37 Control Channel slot in time to receive the first bit of the slot.

38 If the mobile station monitors a Paging Channel or Forward Common Control Channel slot,  
39 it shall begin monitoring the Paging Channel or the Forward Common Control Channel in  
40 time to receive the first bit of the slot. If the mobile station is not configured to receive  
41 broadcast addresses, the mobile station shall continue to monitor the Paging Channel or  
42 the Forward Common Control Channel until one of the following conditions is satisfied:

- 1       • Layer 3 receives an address mismatch indication from Layer 2 (see [4]); or
- 2       • The mobile station monitors the assigned slot and the slot following the assigned
- 3       slot, and the mobile station receives at least one valid message (see [4]).

4 If the mobile station is configured to receive broadcast addresses and the mobile station is  
 5 monitoring a Paging Channel, the mobile station shall continue to monitor the Paging  
 6 Channel until one of the preceding conditions is satisfied and should monitor the Paging  
 7 Channel until Layer 3 receives a broadcast address mismatch indication from Layer 2 (see  
 8 [4]).

9 If the mobile station is configured to receive broadcast addresses and the mobile station is  
 10 monitoring a Forward Common Control Channel, the mobile station shall continue to  
 11 monitor the Forward Common Control Channel until one of the preceding conditions is  
 12 satisfied and should monitor the Forward Common Control Channel until Layer 3 receives  
 13 a broadcast address mismatch indication from Layer 2 (see [4]).

14 The mobile station shall monitor each slot following a broadcast slot in which the mobile  
 15 station received a *Universal Page Message* with READ\_NEXT\_SLOT\_BCAST equal to '1',  
 16 and shall begin monitoring the Forward Common Control Channel in time to receive the  
 17 first bit of the slot.

18 For each broadcast slot monitored to receive broadcast pages or broadcast messages that  
 19 is not one of its assigned slots, the mobile station should begin monitoring the Paging  
 20 Channel or the Forward Common Control Channel in the first bit of the broadcast slot.  
 21 The mobile station should continue to monitor the Paging Channel or the Forward  
 22 Common Control Channel until one of the following conditions is satisfied:

- 23       • Layer 3 receives a broadcast address mismatch indication from Layer 2; or
- 24       • The mobile station monitors the Paging Channel or the Forward Common Control
- 25       Channel to receive all messages beginning in the broadcast slot and in the slot
- 26       following the broadcast slot, and the mobile station receives at least one valid
- 27       message (see [4]).

28 To determine its assigned slots, the mobile station shall use the hash function specified in  
 29 2.6.7.1 to select a number, PGSLOT, in the range 0 to 2047 (spanning the maximum slot  
 30 cycle length, which is 163.84 seconds). The mobile station's assigned slots shall be those  
 31 slots in which

$$32 \quad (\lfloor t/4 \rfloor - \text{PGSLOT}) \bmod (16 \times T) = 0,$$

33 where  $t$  is the System Time in 20ms frames and  $T$  is the slot cycle length in units of 1.28  
 34 seconds given by

$$35 \quad T = 2^i,$$

36 where  $i$  is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6,  
 37 and 7.

38 For each slot on the Broadcast Control Channel monitored to receive broadcast messages,  
 39 the mobile station should begin monitoring the Broadcast Control Channel in the first bit  
 40 of the slot. The mobile station should continue to monitor the Broadcast Control Channel

until one of the following conditions is satisfied:

- The mobile station has monitored all frames of a Broadcast Control Channel slot and the frame quality for all of the frames of the slot was insufficient; or
- The mobile station monitors the Broadcast Control Channel slot specified by the enhanced broadcast page and the slot did not contain an SCI bit set to '1' (see [4]).
- The mobile station has received a broadcast *Data Burst Message* having the same BURST\_TYPE and broadcast address as the enhanced broadcast page which announced the *Data Burst Message*.

#### 2.6.2.1.1.3.2 Determination of the Slot Cycle Index

When the SID and NID of the current base station (SID<sub>s</sub> and NID<sub>s</sub>, as stored from the *System Parameters Message* or *ANSI-41 System Parameters Message*) do not match any entry of SID\_NID\_LIST<sub>s</sub>, the mobile station shall use a slot cycle index no greater than the smaller of MAX\_SLOT\_CYCLE\_INDEX<sub>s</sub> and 1; otherwise:

- If RSC\_MODE\_ENABLED is equal to YES, the mobile station shall use a slot cycle index no greater than min(RSCI<sub>s</sub>, SLOT\_CYCLE\_INDEX<sub>s</sub>).
- Otherwise, the mobile station shall use a slot cycle index no greater than SLOT\_CYCLE\_INDEX<sub>s</sub> (see 2.6.2.2.1.6).

If the mobile station is directed by the user to modify the preferred slot cycle index (SLOT\_CYCLE\_INDEX<sub>p</sub>), the mobile station shall perform parameter-change registration (see 2.6.5.1.6).

#### 2.6.2.1.1.3.3 Slot Cycles for Broadcast Message Transmission

##### 2.6.2.1.1.3.3.1 Slot Cycles for Broadcast Message Transmission on the Paging Channel

Distribution of broadcast messages relies on specially defined Paging Channel slot cycles. The definitions are as follows:

*Maximum paging cycle:* On the Paging Channel, a maximum paging cycle is a Paging Channel slot cycle (see 2.6.2.1.1.3.1) having a duration of M slots such that:

$$M = 2^i \times 16, 0 \leq i \leq 7$$

where  $i = \text{MAX\_SLOT\_CYCLE\_INDEX}_s$  as received in the *System Parameters Message*.

The first slot of each maximum paging cycle is any Paging Channel slot in which

$$\lfloor t/4 \rfloor \bmod M = 0,$$

where t represents system time in 20ms frames.

*Broadcast paging cycle:* On the Paging Channel, a broadcast paging cycle is a Paging Channel slot cycle (see 2.6.2.1.1.3.1) having a duration of B + 3 slots where:

$$B = 2^i \times 16, 1 \leq i \leq 7$$

where  $i = \text{BCAST\_INDEX}_S$  as received in the *Extended System Parameters Message*, or set by default when the *Extended System Parameters Message* is not sent.

The first slot of each broadcast paging cycle is any Paging Channel slot in which

$$\lfloor t/4 \rfloor \bmod (B + 3) = 0,$$

where  $t$  represents system time in 20ms frames.

#### 2.6.2.1.1.3.3.2 Slot Cycles for Broadcast Message Transmission on the Forward Common Control Channel

Distribution of broadcast messages relies on specially defined Forward Common Control Channel slot cycles. The definitions are as follows:

*Maximum paging cycle:* On the Forward Common Control Channel, a maximum paging cycle is a Forward Common Channel slot cycle (see 2.6.2.1.1.3.1) having a duration of  $M$  slots such that:

$$M = 2^i \times 16, 0 \leq i \leq 7$$

where  $i = \text{MAX\_SLOT\_CYCLE\_INDEX}_S$  as received in the *MC-RR Parameters Message*.

The first slot of each maximum paging cycle is any Forward Common Control Channel slot in which

$$\lfloor t/4 \rfloor \bmod M = 0,$$

where  $t$  represents system time in 20ms frames.

*Broadcast paging cycle:* On the Forward Common Control Channel, a broadcast paging cycle is a Forward Common Control Channel slot cycle (see 2.6.2.1.1.3.1) having a duration of  $B + 7$  slots where:

$$B = 2^{1+i} \times 16, 1 \leq i \leq 7$$

where  $i = \text{BCAST\_INDEX}_S$  as received in the *MC-RR Parameters Message*.

The first slot of each broadcast paging cycle is any Forward Common Control Channel slot in which

$$\lfloor t/4 \rfloor \bmod (B + 7) = 0,$$

where  $t$  represents system time in 20ms frames.

#### 2.6.2.1.1.3.4 Monitoring Paging Channel Broadcasts

The following requirements apply to mobile stations monitoring the Paging Channel and supporting the reception of broadcast messages.

- 1 If  $BCAST\_INDEX_S$  is equal to '000', the mobile station shall monitor only its assigned  
2 Paging Channel slots (see 2.6.2.1.1.3.1).
- 3 If  $BCAST\_INDEX_S$  is not equal to '000', and the mobile station is configured to receive  
4 messages addressed to broadcast addresses, the mobile station should also monitor the  
5 Paging Channel beginning with the first slot of each broadcast paging cycle (see  
6 2.6.2.1.1.3.3).
- 7 If the mobile station receives a broadcast page containing a burst type and broadcast  
8 address for a *Data Burst Message* that the mobile station has been configured to receive  
9 (see 2.6.2.3), the mobile station should monitor the slot in which the corresponding  
10 broadcast Paging Channel message will be sent, determined as follows:
  - 11 • The mobile station shall consider a broadcast page to have been received in the  
12 paging slot in which the *General Page Message* containing the broadcast page  
13 began.
  - 14 • If  $BCAST\_INDEX_S$  is not equal to '000', the paging slot containing the broadcast  
15 page is defined as the reference slot.
  - 16 • Let  $n$  represent the ordinal number of the broadcast page relative to other  
17 broadcast pages that are contained in the same *General Page Message* ( $n = 1, 2,$   
18  $3, \dots$ ). The mobile station should monitor the Paging Channel slot that occurs  $n \times 3$   
19 paging slots after the reference slot.
- 20 After receiving a broadcast message or a broadcast page for a *Data Burst Message* and a  
21 corresponding broadcast Paging Channel message when  $BCAST\_INDEX_S$  is not equal to  
22 '000', the mobile station should discard all further broadcast pages and all further  
23 broadcast Paging Channel messages containing the same  $BURST\_TYPE$  and  $BC\_ADDR$   
24 fields that are received within  $4 \times (B + 3)$  paging slots of the first paging slot in the  
25 broadcast paging cycle in which the broadcast page or broadcast message was first  
26 received. ( $B + 3$  is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).
- 27 After receiving a broadcast message or a broadcast page for a *Data Burst Message* and a  
28 corresponding broadcast Paging Channel message when  $BCAST\_INDEX_S$  is equal to '000',  
29 the mobile station should discard all further broadcast pages and all further broadcast  
30 Paging Channel messages containing the same  $BURST\_TYPE$  and  $BC\_ADDR$  fields that are  
31 received within  $16 \times 2^{MAX\_SLOT\_CYLCE\_INDEX_S}$  slots of the paging slot in which the  
32 broadcast page or broadcast message was first received.
- 33 If the mobile station receives a broadcast page containing a burst type and broadcast  
34 address for BCMC that the mobile station has been configured to receive (see 2.6.2.3), the  
35 mobile station shall do the following:

- 1 • If the burst type and broadcast address<sup>4</sup> indicates that response to the broadcast  
2 page is required, then the mobile station shall enter the *Update Overhead*  
3 *Information Substate* of the *System Access State* (see 2.6.3.2) with a page response  
4 indication within T<sub>33m</sub> seconds after the page message is received.
- 5 • If the burst type and broadcast address indicates to monitor broadcast messages,  
6 then the mobile station shall continue to monitor the paging channel for a *BCMC*  
7 *Service Parameters Message* containing the BCMC\_FLOW\_ID in the broadcast  
8 address as follows:
  - 9 – The mobile station shall monitor the F-PCH for the duration of four F-PCH slots  
10 from the slot in which the broadcast page was received or until the *BCMC*  
11 *Service Parameters Message* containing the BCMC\_FLOW\_ID is received; if the  
12 mobile station detects the start of the *BCMC Service Parameters Message*, the  
13 mobile station shall monitor the F-PCH until the entire *BCMC Service*  
14 *Parameters Message* is received.

#### 15 2.6.2.1.1.3.5 Support of Broadcast Delivery Options on the Paging Channel

16 A mobile station configured to receive broadcast messages shall support reception of  
17 broadcast messages transmitted using Multi-Slot Broadcast Message Transmission (see  
18 3.6.2.4.1.1.2.1.1).

19 A mobile station configured to receive broadcast messages shall support reception of  
20 broadcast messages transmitted using Periodic Broadcast Paging (see 3.6.2.4.1.1.2.1.2).

#### 21 2.6.2.1.1.3.6 Monitoring the Forward Common Control Channel for the Enhanced 22 Broadcast Page

23 The following requirements apply to mobile stations monitoring the Forward Common  
24 Control Channel and supporting the reception of broadcast messages.

25 If BCAST\_INDEX<sub>S</sub> is equal to '000', the mobile station shall monitor only its assigned  
26 Quick Paging Channel slots or its assigned Forward Common Control Channel slots (see  
27 2.6.2.1.2) for enhanced broadcast pages.

28 If BCAST\_INDEX<sub>S</sub> is not equal to '000', and the mobile station is configured to receive  
29 messages addressed to broadcast addresses, the mobile station should also monitor the  
30 Quick Paging Channel broadcast slots or the Forward Common Control Channel broadcast  
31 slots (see 2.6.2.1.2) beginning with the first slot of each broadcast paging cycle.

32 If the mobile station receives an enhanced broadcast page containing a burst type and  
33 broadcast address for a *Data Burst Message* that the mobile station has been configured to  
34 receive and NUM\_BCCH\_BCAST<sub>S</sub> does not equal '000', the mobile station should monitor  
35 at least one Broadcast Control Channel slot in which the corresponding broadcast  
36 message will be sent, determined as follows:

---

<sup>4</sup> Format of broadcast address for BCMC is defined in BCMC service document (see [30]).

- The mobile station shall monitor the Broadcast Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$  later than the beginning of the slot in which the message containing the enhanced broadcast page began or the Broadcast Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$  later than the Broadcast Control Channel slot in which the first transmission began.

If the mobile station receives an enhanced broadcast page containing a burst type and broadcast address for a *Data Burst Message* that the mobile station has been configured to receive and  $\text{NUM\_BCCH\_BCAST}_s$  equals '000', the mobile station should monitor the slot in which the corresponding broadcast Forward Common Control Channel message will be sent, determined as follows:

- The mobile station shall consider an enhanced broadcast page to have been received in the Forward Common Control Channel slot in which the *General Page Message* or the *Universal Page Message* containing the enhanced broadcast page began.
- When  $\text{NUM\_BCCH\_BCAST}_s$  equals 0, the mobile station shall monitor the Forward Common Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$  later than the beginning of the slot in which the message containing the enhanced broadcast page began or the Forward Common Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$  later than the Forward Common Control Channel slot in which the first transmission began.

After receiving an enhanced broadcast page for a *Data Burst Message* and a corresponding broadcast message when  $\text{BCAST\_INDEX}_s$  is not equal to '000', the mobile station should discard all further enhanced broadcast pages containing the same  $\text{BURST\_TYPE}$  and having the same broadcast address that are received within  $4 \times (B + 7)$  slots of the first slot in the broadcast paging cycle in which the enhanced broadcast page was received. ( $B + 7$  is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3.1). The mobile station should ignore broadcast messages for which a corresponding enhanced broadcast page was not received.

After receiving an enhanced broadcast page for a *Data Burst Message* and a corresponding broadcast message when  $\text{BCAST\_INDEX}_s$  is equal to '000', the mobile station should discard all further enhanced broadcast pages containing the same  $\text{BURST\_TYPE}$  and having the same broadcast address that are received within  $16 \times 2^{\text{MAX\_SLOT\_CYLCE\_INDEX}_s}$  slots of the slot in which the enhanced broadcast page was received. The mobile station should ignore broadcast messages for which a corresponding enhanced broadcast page was not received.

If the mobile station received an enhanced broadcast page for a *Data Burst Message* and a corresponding broadcast message, and the broadcast message announced by a pending enhanced broadcast page containing the same  $\text{BURST\_TYPE}$  and having the same broadcast address has not yet been received, the mobile station shall ignore the pending enhanced broadcast page.

If the mobile station receives a broadcast page containing a burst type and broadcast address for BCMC that the mobile station has been configured to receive (see 2.6.2.3), the mobile station shall do the following:



- If the burst type and broadcast address indicates that response to the broadcast page is required, then the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a page response indication within  $T_{33m}$  seconds after the page message is received.

- If the burst type and broadcast address indicates to monitor broadcast messages, then the mobile station shall monitor the Primary Broadcast Control Channel slot for a *BCMC Service Parameters Message* containing the BCMC\_FLOW\_ID in the broadcast address, determined as follows:

- The mobile station shall start monitoring the Primary Broadcast Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$  later than the beginning of the slot in which the message containing the enhanced broadcast page began or the Primary Broadcast Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$  later than the Primary Broadcast Control Channel slot in which the first transmission began.
- The mobile station shall continue to monitor the Primary Broadcast Control Channel for the duration of four F-BCCH slots or until the *BCMC Service Parameters Message* containing the BCMC\_FLOW\_ID is received; if the mobile station detects the start of the *BCMC Service Parameters Message*, the mobile station shall monitor the F-BCCH until the entire *BCMC Service Parameters Message* is received.

#### 2.6.2.1.1.3.7 Support of Broadcast Delivery Options on the Forward Common Control Channel/Broadcast Control Channel when NUM\_BCCH\_BCAST<sub>s</sub> does not equal '000'

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Multi-Slot Enhanced Broadcast Paging (see 2.6.2.1.1.1.3.1).

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Periodic Enhanced Broadcast Paging (see 2.6.2.1.1.1.3.2).

#### 2.6.2.1.1.3.7.1 Support of Broadcast Delivery Options on the Forward Common Control Channel when NUM\_BCCH\_BCAST<sub>s</sub> equals '000'

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Multi-Slot Enhanced Broadcast Message Transmission (see 2.6.2.1.1.1.4.1).

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Periodic Enhanced Broadcast Paging (see 2.6.2.1.1.1.4.2).

### 2.6.2.1.1.3.8 Slot Cycles for BSPM Transmission

#### 2.6.2.1.1.3.8.1 BSPM Slot Cycle on the Paging Channel

On the Paging Channel, a BSPM slot cycle is a Paging Channel slot cycle having a duration of  $B + 1$  slots where:

$$B = 2^i \times 16, 0 \leq i \leq 15$$

where  $i = \text{BSPM\_PERIOD\_INDEX}_S$  as received in the *Extended System Parameters Message*.

The first slot of each BSPM slot cycle is any Paging Channel slot in which

$$\lfloor t/4 \rfloor \bmod (B + 1) = 0,$$

where  $t$  represents system time in 20ms frames.

#### 2.6.2.1.1.3.8.2 BSPM Slot Cycle on the Primary Broadcast Control Channel

On the Primary Broadcast Control Channel, a BSPM slot cycle is a Primary Broadcast Control Channel slot cycle having a duration of  $B + 1$  slots where:

$$B = 2^i \times 16, 0 \leq i \leq 15$$

where  $i = \text{BSPM\_PERIOD\_INDEX}_S$  as received in the *MC-RR Parameters Message*.

The first slot of each BSPM slot cycle is any Primary Broadcast Control Channel slot in which

$$\lfloor t/2 \rfloor \bmod (B + 1) = 0, (40\text{ms})$$

$$\lfloor t/4 \rfloor \bmod (B + 1) = 0, (80\text{ms})$$

$$\lfloor t/8 \rfloor \bmod (B + 1) = 0, (160\text{ms})$$

where  $t$  represents system time in 20ms frames and the number in the parenthesis represents the duration of the Primary Broadcast Control Channel slot (see [2]).

#### 2.6.2.1.1.4 Common Channel Supervision

The mobile station shall monitor the Paging Channel, the Forward Common Control Channel, or the Primary Broadcast Control Channel as specified in 2.6.2.1.1. The mobile station shall set a timer for  $T_{30m}$  seconds whenever it begins to monitor the Paging Channel, the Forward Common Control Channel, or the Primary Broadcast Control Channel. The mobile station shall reset the timer for  $T_{30m}$  seconds whenever it gets an indication that a valid message was received on the Paging Channel, the Forward Common

Control Channel, or the Primary Broadcast Control Channel, whether addressed to the mobile station or not (see [4]). The mobile station shall disable the timer when it is not monitoring the Paging Channel, the Forward Common Control Channel, or the Primary Broadcast Control Channel. If the timer expires, the mobile station shall declare a loss of the Paging Channel, the Forward Common Control Channel, or the Primary Broadcast Control Channel.

#### 2.6.2.1.2 Quick Paging Channel Monitoring Procedures

##### 2.6.2.1.2.1 Overview

The Quick Paging Channel is divided into 80 ms slots called Quick Paging Channel slots.

The Quick Paging Channel protocol provides for scheduling the transmission of paging indicators for a mobile station in Quick Paging Channel slots assigned to the mobile station. Support of this feature is optional.

The Quick Paging Channel protocol provides for scheduling the transmission of configuration change indicators for mobile stations in Quick Paging Channel slots. Support of this feature is optional.

The Quick Paging Channel protocol provides for scheduling the transmission of broadcast indicators for mobile stations in Quick Paging Channel broadcast slots. Support of this feature is optional.

If the mobile station is operating in the slotted mode and it supports the Quick Paging Channel, and QPCH\_SUPPORTED<sub>S</sub> is equal to '1', the mobile station monitors paging indicators on the Quick Paging Channel<sup>5</sup> as follows:

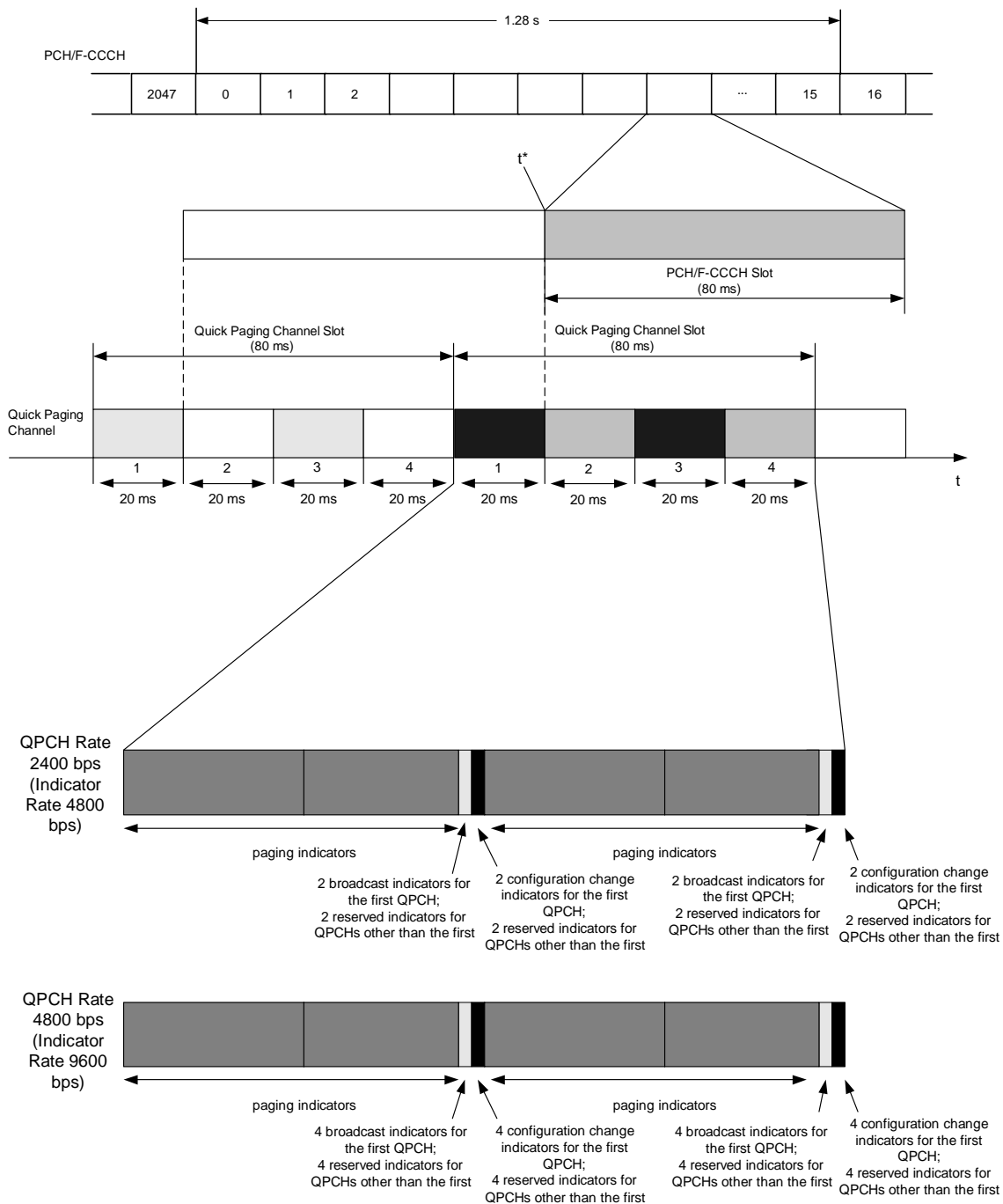
The mobile station's assigned Quick Paging Channel slots are offset from its assigned Paging Channel slots or its assigned Forward Common Control Channel slots by 100 ms, as shown in Figure 2.6.2.1.2.1-1. Two paging indicators are assigned to a mobile station in its assigned Quick Paging Channel slot. In the following,  $t^*$  is the start time of the mobile station's assigned Paging Channel or Forward Common Control Channel slot. According to the hash function specified in 2.6.7.1, paging indicators are assigned as follows:

- The first paging indicator for the mobile station is assigned between  $(t^*-100)$  ms and  $(t^*-80)$  ms (marked as 1 in Figure 2.6.2.1.2.1-1) and the second paging indicator is assigned between  $(t^*-60)$  ms and  $(t^*-40)$  ms (marked as 3 in the figure); or
- The first paging indicator for the mobile station is assigned between  $(t^*-80)$  ms and  $(t^*-60)$  ms (marked as 2 in the figure) and the second paging indicator is assigned between  $(t^*-40)$  ms and  $(t^*-20)$  ms (marked as 4 in the figure).

---

<sup>5</sup> One exception is if the mobile station is operating in the reduced slot cycle mode with a reduced slot cycle index of -3 or -4, and IGNORE\_QPCH<sub>S</sub> is equal to '1'.

- 1 If the mobile station is operating in the slotted mode and it supports the Quick Paging  
2 Channel, the mobile station can, when performing an idle handoff to a base station whose  
3 Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel  
4 has recently been monitored, monitor one or more configuration change indicators.  
5 Configuration change indicators are scheduled every 40 ms on the first Quick Paging  
6 Channel.
- 7 If the mobile station is operating in the slotted mode, is configured to receive the broadcast  
8 messages, supports the Quick Paging Channel,  $BCAST\_INDEX_S$  is not equal to '000',  
9  $QPCH\_SUPPORTED_S$  is equal to '1', and  $QPCH\_BI\_SUPPORTED_S$  is equal to '1', the mobile  
10 station monitors broadcast indicators on the Quick Paging Channel as follows:
- 11 • The mobile station's assigned Quick Paging Channel broadcast slots are offset from  
12 its assigned Forward Common Control Channel or Paging Channel broadcast slots  
13 by 100 ms, as shown in Figure 2.6.2.1.2.1-1.
  - 14 • The mobile station monitors one or more broadcast indicators in an assigned Quick  
15 Paging Channel broadcast slot.



**Figure 2.6.2.1.2.1-1. Quick Paging Channel Timeline**

### 2.6.2.1.2.2 Requirements

A mobile station operating in the slotted mode should monitor the paging indicators in the mobile station's assigned Quick Paging Channel slot if all of the following conditions hold:

- The mobile station supports the Quick Paging Channel;
- QPCH\_SUPPORTED<sub>S</sub> = '1'; and
- The mobile station is not monitoring the Paging Channel or the Forward Common Control Channel.

The mobile station's assigned Quick Paging Channel slots shall be those slots in which

$$(\lfloor (t+5)/4 \rfloor - \text{PGSLOT}) \bmod (16 \times T) = 0.$$

where  $t$  is the System Time in 20ms frames, PGSLOT is selected in the range 0 to 2047 by using the hash function specified in 2.6.7.1, and  $T$  is the slot cycle length in units of 1.28 seconds such that

$$T = 2^i,$$

and  $i$  is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, and 7.

To determine the position of the mobile station's two assigned paging indicators relative to the beginning of the mobile station's assigned Quick Paging Channel slot, the mobile station shall use the hash function specified in 2.6.7.1. The R1 and R2 outputs of the hashing algorithm correspond to an indicator bit position relative to the beginning of the Quick Paging Channel slot. The hashing algorithm is so devised that two paging indicators (R1 and R2) for a mobile station will be in the first and third quarter slot or the second and fourth quarter slot.

If the mobile station checks assigned paging indicators, the mobile station shall perform the following:

- If the mobile station detects that one of the paging indicators is set to "OFF", the mobile station need not detect another paging indicator.
- If the mobile station does not detect that at least one of the paging indicators is set to "OFF", the mobile station shall monitor its assigned Paging Channel or Forward Common Control Channel slot immediately following its assigned Quick Paging Channel slot.<sup>6</sup>

When performing an idle handoff to a base station whose Paging Channel or Forward Common Control Channel was previously monitored, a mobile station operating in the

---

<sup>6</sup> A case for which the mobile station may not be able to detect that at least one of the paging indicators is set to "OFF" is for a mobile station that misses a part of or its entire Quick Paging Channel slot during overhead information update. In this case, the mobile station monitors its assigned Paging Channel slot.

1 slotted mode should monitor one or more configuration change indicators on the first  
2 Quick Paging Channel for the new base station if all of the following conditions hold:

- 3 • The mobile station supports the Quick Paging Channel;
- 4 • The mobile station has knowledge that the new base station supports the Quick  
5 Paging Channel;
- 6 • The mobile station has knowledge that the new base station supports configuration  
7 change indicators,
- 8 • The mobile station is not monitoring the Paging Channel or the Forward Common  
9 Control Channel; and
- 10 • No more than  $T_{31m}$  seconds have elapsed since the mobile station last received a  
11 valid message on the new Paging Channel or the new Forward Common Control  
12 Channel.

13 Before monitoring a configuration change indicator, the mobile station shall perform the  
14 following:

- 15 • The mobile station shall set  $ASSIGNED\_QPAGECH_S$  equal to  $QPAGECH_S$ , and
- 16 • The mobile station shall set  $QPAGECH_S$  equal to 1.

17 Before monitoring a paging indicator subsequent to monitoring a configuration change  
18 indicator, the mobile station shall set  $QPAGECH_S$  equal to  $ASSIGNED\_QPAGECH_S$ .

19 If the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the bit  
20 positions of the mobile station's first pair of configuration change indicators shall be the  
21 last two bits in the first 40 ms half of a Quick Paging Channel slot. The bit positions of the  
22 mobile station's second pair of configuration change indicators shall be the last two bits in  
23 a Quick Paging Channel slot.

24 If the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the bit  
25 positions of the mobile station's first four configuration change indicators shall be the last  
26 four bits in the first 40 ms half of a Quick Paging Channel slot. The bit positions of the  
27 mobile station's second four configuration change indicators shall be the last four bits in a  
28 Quick Paging Channel slot.

29 If the mobile station monitors a configuration change indicator and determines that it is  
30 set to "OFF", the mobile station can enter or remain in the slotted mode after an idle  
31 handoff (see 2.6.2.1.4.2).

32 If a mobile station is operating in the slotted mode and is configured to receive broadcast  
33 messages, it should monitor the broadcast indicators in the mobile station's assigned  
34 Quick Paging Channel broadcast slot if all of the following conditions hold:

- 35 • The mobile station supports the Quick Paging Channel;
- 36 •  $BCAST\_INDEX_S$  is not equal to '000'
- 37 •  $QPCH\_BI\_SUPPORTED_S = '1'$ ; and
- 38 • The mobile station is not monitoring the Forward Common Control Channel, the  
39 Primary Broadcast Control Channel, or the Paging Channel.

The mobile station's assigned Quick Paging Channel broadcast slots shall be those slots in which

$$\lfloor (t+5)/4 \rfloor \bmod (B + 7) = 0.$$

where  $t$  is the System Time in 20ms frames, and  $B$  is the broadcast paging cycle such that  $B = 2^{1+i} \times 16$ ,  $1 \leq i \leq 7$  and  $i = \text{BCAST\_INDEX}_s$  as received in the *MC-RR Parameters Message*.

The mobile station's assigned Quick Paging Channel broadcast slots shall be those slots in which

$$\lfloor (t+5)/4 \rfloor \bmod (B + 3) = 0.$$

where  $t$  is the System Time in 20ms frames, and  $B$  is the broadcast paging cycle such that  $B = 2^i \times 16$ ,  $1 \leq i \leq 7$  and  $i = \text{BCAST\_INDEX}_s$  as received in the *Extended System Parameters Message*.

The mobile station should monitor one or more broadcast indicators on the Quick Paging Channel. If the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the bit positions of the mobile station's first pair of broadcast indicators shall be the two bits prior to the last two bits in the first 40 ms half of a Quick Paging Channel slot. The bit positions of the mobile station's second pair of broadcast indicators shall be the two bits prior to the last two bits in a Quick Paging Channel slot.

If the Quick Paging Channel data rate 4800 bps (indicator rate is 9600 bps), the bit positions of the mobile station's first four broadcast indicators shall be the four bits prior to the last four bits in the first 40 ms half of a Quick Paging Channel slot. The bit positions of the mobile station's second four broadcast indicators shall be the four bits prior to the last four bits in a Quick Paging Channel slot.

If the mobile station monitors broadcast indicators and determines that they are not set to "OFF", the mobile station should perform the following:

- The mobile station should receive its assigned broadcast slot on the Forward Common Control Channel or Paging Channel immediately following its assigned Quick Paging Channel broadcast slot.

#### 2.6.2.1.3 Registration

While in the *Mobile Station Idle State*, the mobile station shall perform the registration procedures specified in 2.6.5.5.2.1.

#### 2.6.2.1.4 Idle Handoff

##### 2.6.2.1.4.1 Pilot Search

An idle handoff occurs when a mobile station has moved from the coverage area of one base station into the coverage area of another base station during the *Mobile Station Idle State*. If the mobile station detects a Pilot Channel signal from another base station that is sufficiently stronger than that of the current base station, the mobile station determines that an idle handoff should occur.



If both AP\_IDT\_MSG\_SEQ<sub>s</sub> and INTRA\_FREQ\_HO\_HYS<sub>s</sub> are not set to NULL, the mobile station shall only perform idle handoff to another pilot on the same frequency as the current base station when the following condition is satisfied:

Target Pilot Ec/Io (dB) > (INTRA\_FREQ\_HO\_SLOPE<sub>s</sub>/8) × Current Pilot Ec/Io (dB) + INTRA\_FREQ\_HO\_HYS<sub>s</sub> (dB).

If both AP\_IDT\_MSG\_SEQ<sub>s</sub> and INTER\_FREQ\_HO\_HYS<sub>s</sub> are not set to NULL, the mobile station shall only perform idle handoff to another pilot on a different frequency than that of the current base station when the following condition is satisfied:

Target Pilot Ec/Io (dB) > (INTER\_FREQ\_HO\_SLOPE<sub>s</sub>/8) × Current Pilot Ec/Io (dB) + INTER\_FREQ\_HO\_HYS<sub>s</sub> (dB).

When multiple idle handoff candidates are available, the mobile station should select, if any, a candidate which supports Primary Broadcast Control Channel.

Pilot Channels are identified by their offsets relative to the zero offset pilot PN sequence (see 3.1.3.2.1). Pilot offsets are grouped into sets describing their status with regard to pilot searching.

The following sets of pilot offsets are defined for a mobile station in the *Mobile Station Idle State*. Each pilot offset is a member of only one set.

- Active Set: The pilot offset of the Forward CDMA Channel whose Paging Channel or Forward Common Control Channel is being monitored.
- Neighbor Set: The offsets of the Pilot Channels that are likely candidates for idle handoff. The members of the Neighbor Set are specified in the *Neighbor List Message*, *Extended Neighbor List Message*, and the *General Neighbor List Message* on the Paging Channel, and the *Universal Neighbor List Message* on the Primary Broadcast Control Channel.
- Remaining Set: The set of all possible pilot offsets in the current system (integer multiples of PILOT\_INC<sub>s</sub>) on the current CDMA Frequency Assignment, excluding the pilots in the Neighbor Set and the Active Set.
- Private Neighbor Set: The offsets of the Pilot Channels for the private systems that are likely candidates for idle handoff. The members of the Private Neighbor Set are specified in the *Private Neighbor List Message*.

The mobile station shall support a Neighbor Set size of at least Ng<sub>m</sub> pilots (see Annex D).

In the *Mobile Station Idle State*, the mobile station shall continuously search for the strongest Pilot Channel signal on the corresponding CDMA Frequency Assignment whenever it monitors the Paging Channel or the Forward Common Control Channel.

The mobile station may search other frequencies and band classes. For example, if a pilot in the Neighbor Set or in the Private Neighbor Set is on a different Frequency Assignment than that of the mobile station, this frequency should be included in the search criteria. Search performance criteria are defined in [11]. If both AP\_IDT\_MSG\_SEQ<sub>s</sub> and INTER\_FREQ\_SRCH\_TH<sub>s</sub> are not set to NULL, the MS shall only start searching on

different frequencies than that of the current pilot when its current pilot  $E_c/I_o$  is below  $INTER\_FREQ\_SRCH\_TH_S$ .

This search should be governed by the following:

- **Active Set:** The search window size for the pilot in the Active Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to  $SRCH\_WIN\_A_S$ . The mobile station should center the search window for the pilot of the Active Set around the earliest arriving usable multipath component of the pilot. If the mobile station receives a value greater than or equal to 13 for  $SRCH\_WIN\_A_R$ , it may store and use the value 13 in  $SRCH\_WIN\_A_S$ .
- **Neighbor Set:** The search window size for each pilot in the Neighbor Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to  $SRCH\_WIN\_NGHBR_S$  field of the  $NGHBR\_REC$  for the pilot. The mobile station should center the search window for each pilot in the Neighbor Set around the pilot's PN sequence offset plus the corresponding  $SRCH\_OFFSET\_NGHBR_S$  (see Table 2.6.6.2.1-2) using timing defined by the mobile station's time reference (see [2]). The mobile station should use the  $SEARCH\_PRIORITY$  field of the  $NGHBR\_REC$  for the corresponding pilot to schedule its neighbor search. If  $ADD\_PILOT\_REC\_INCL$  field of the  $NGHBR\_REC$  for the corresponding pilot is equal to '1', the mobile station shall use the information included in the  $NGHBR\_PILOT\_REC$  field for searching the neighbor.  
If the mobile station supports hopping pilot beacons and the  $TIMING\_INCL$  field of the  $NGHBR\_REC$  for the corresponding pilot is equal to '1', then the mobile station shall use the information included in the  $NGHBR\_TX\_OFFSET$ ,  $NGHBR\_TX\_DURATION$ , and  $NGHBR\_TX\_PERIOD$  fields of the  $NGHBR\_REC$  for the corresponding pilot to schedule the time for searching the neighbor.
- **Remaining Set:** The search window size for each pilot in the Remaining Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to  $SRCH\_WIN\_R_S$ . The mobile station should center the search window for each pilot in the Remaining Set around the pilot's PN sequence offset using timing defined by the mobile station's time reference (see [2]). The mobile station should only search for Remaining Set pilots whose pilot PN sequence offset indices are equal to integer multiples of  $PILOT\_INC_S$ .
- **Private Neighbor Set:** The search window size for each pilot in the Private Neighbor Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to  $SRCH\_WIN\_PRI\_NGHBR_S$  field of the  $PRI\_NGHBR\_REC$  for the pilot. The mobile station should center the search window for each pilot in the Private Neighbor Set around the pilot's PN sequence offset using timing defined by the mobile station's time reference (see [2]).

If the mobile station determines that one of the Neighbor Set, Private Neighbor Set or Remaining Set Pilot Channel signals is sufficiently stronger (see [11]) than the Pilot Channel of the Active Set, the mobile station should perform an idle handoff as follows:

- If the mobile station is currently monitoring a Forward Supplemental Channel, the mobile station shall perform an idle handoff as specified in 2.6.13.4;

- 1       • Otherwise, the mobile station shall perform an idle handoff as specified in  
2       2.6.2.1.4.2.

3       If RER\_MODE\_ENABLED is equal to YES, the mobile station performs idle handoff to a  
4       Pilot Channel that is not in RER\_PILOT\_LIST (see 2.6.4.4.2 and [4]), RER\_SID<sub>s</sub> is equal to  
5       SID<sub>s</sub>, RER\_NID<sub>s</sub> is equal to NID<sub>s</sub>, and RER\_MODE\_SUPPORTED<sub>s</sub> is equal to '1', the mobile  
6       station shall send a *Radio Environment Message* by performing the *Mobile Station Message*  
7       *Transmission Operation* as specified in 2.6.2.6.

8       A mobile station operating in slotted mode, which is successfully demodulating the Paging  
9       Channel or the Forward Common Control Channel, should not perform an idle handoff  
10      while it is required to monitor its assigned slot (see 2.6.2.1.1.3.1).

#### 11      2.6.2.1.4.2 Idle Handoff Procedures

12      While performing an idle handoff, the mobile station should not begin operating in non-  
13      slotted mode after the idle handoff if all of the following conditions hold:

- 14      • The mobile station supports the Quick Paging Channel;
- 15      • The mobile station has knowledge that the new base station supports configuration  
16      change indicators;
- 17      • The mobile station determines that the Quick Paging Channel configuration change  
18      indicator for the new Quick Paging Channel is set to "OFF" (see 2.6.2.1.2.1); and
- 19      • No more than T<sub>31m</sub> seconds have elapsed since the mobile station last received a  
20      valid message on the new Paging Channel or Forward Common Control  
21      Channel/Primary Broadcast Control Channel.

22      Otherwise, the mobile station shall operate in non-slotted mode until the mobile station  
23      has received at least one valid configuration message or mobile station-addressed page on  
24      the new Paging Channel or Forward Common Control Channel/Primary Broadcast Control  
25      Channel. Following the reception of this message the mobile station may resume slotted  
26      mode operation in accordance with 2.6.2.1.1.3. After performing an idle handoff, the  
27      mobile station shall discard all unprocessed messages received on the old Paging Channel  
28      or Forward Common Control Channel/Primary Broadcast Control Channel.

29      If the new base station is listed in NGHBR\_REC\_LIST for the old base station (see  
30      2.6.2.2.3, 2.6.2.2.7, and 2.6.2.1.4.1), the mobile station shall use the corresponding 3-bit  
31      NGHBR\_CONFIG field to determine the actions required to transition to the new base  
32      station. If the new base station is not listed in NGHBR\_REC\_LIST for the old base station,  
33      the mobile station shall perform the handoff operation using the same procedure as for a  
34      pilot in NGHBR\_REC\_LIST with the NGHBR\_CONFIG field set to '011'.

35      If the mobile station is currently monitoring the Paging Channel and selected a neighbor  
36      base station for idle handoff which supports Primary Broadcast Control Channel, the  
37      mobile station shall perform the following:

- 38      – The mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
39      *Initialization State* with a new system indication, upon performing idle handoff to this  
40      neighbor base station.

- 1    – The mobile station shall not perform any of the remaining procedures in this section.
- 2    If the NGHBR\_CONFIG field is '000', the mobile station shall perform the following:
- 3       • The mobile station shall set ACC\_MSG\_SEQ<sub>s</sub> and CURR\_ACC\_MSG\_SEQ to NULL  
4       (see 2.6.2.2) and shall set PILOT\_PN<sub>s</sub> to the pilot offset index of the base station  
5       transmitting the new Paging Channel or Forward Common Control  
6       Channel/Primary Broadcast Control Channel.
  - 7       • If the mobile station has not stored configuration parameters for the new Paging  
8       Channel or Forward Common Control Channel and Primary Broadcast Control  
9       Channel, or if the stored information is not current, the mobile station shall  
10      perform the following:
    - 11       – If the mobile station has monitored the Paging Channel before the idle handoff,  
12       the mobile station shall set CONFIG\_MSG\_SEQ<sub>s</sub>, SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
13       NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
14       GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
15       EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>,  
16       EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
17       FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, and  
18       PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> to NULL.
    - 19       – If the mobile station has monitored the Forward Common Control  
20       Channel/Primary Broadcast Control Channel before the idle handoff, the mobile  
21       station shall set CONFIG\_MSG\_SEQ<sub>s</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
22       UNI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>,  
23       EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
24       FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, and  
25       PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> to NULL.
  - 26      • If the stored information for the new Paging Channel or the Forward Common  
27      Control Channel and Primary Broadcast Control Channel is current, the mobile  
28      station shall set CONFIG\_MSG\_SEQ<sub>s</sub> to the stored information for the new Paging  
29      Channel or Forward Common Control Channel and Primary Broadcast Control  
30      Channel, and the mobile station shall set NGHBR\_REC\_LIST to the stored  
31      information for the new Paging Channel or the new Forward Common Control  
32      Channel and Primary Broadcast Control Channel.
  - 33      • If the associated NGHBR\_BAND<sub>s</sub> or NGHBR\_FREQ<sub>s</sub> of the new base station in  
34      NGHBR\_REC\_LIST of the old base station is not equal to CDMABAND<sub>s</sub> and  
35      CDMACH<sub>s</sub> respectively, the mobile station shall set CDMABAND<sub>s</sub> to  
36      NGHBR\_BAND<sub>s</sub>, CDMACH<sub>s</sub> to NGHBR\_FREQ<sub>s</sub>, and tune to the new CDMA  
37      Channel. The mobile station shall begin monitoring the Paging Channel or the  
38      Forward Common Control Channel/Primary Broadcast Control Channel of the new  
39      base station, using the same rate, code rate, and code channel, as applicable.

- 1       • If  $PACA_S$  is equal to enabled, the mobile station shall enter the *Update Overhead*  
2       *Information Substate* of the *System Access State* (see 2.6.3) with an origination  
3       indication within  $T_{33m}$  seconds to re-originate the PACA call using the new base  
4       station.
- 5       If the NGHBR\_CONFIG field is '001', the mobile station shall perform the following:
  - 6       • The mobile station shall set  $ACC\_MSG\_SEQ_S$  and  $CURR\_ACC\_MSG\_SEQ$  to NULL  
7       and shall set  $PILOT\_PN_S$  to the pilot offset index of the base station transmitting  
8       the new Paging Channel.
  - 9       • If the stored information for Primary Paging Channel or any of the Paging Channels  
10       on the associated NGHBR\_FREQ<sub>S</sub> of the new base station in NGHBR\_REC\_LIST of  
11       the old base station is current, the mobile station shall perform the following:
    - 12       - The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a  
13       new Paging Channel number in the range 1 to  $PAGE\_CHAN_S$ , where  
14        $PAGE\_CHAN_S$  is the value stored for the Paging Channel whose stored  
15       information is current. The mobile station shall store the new Paging Channel  
16       number as  $PAGECH_S$ . The mobile station shall perform the following:
      - 17       + If the mobile station has not stored configuration parameters for the new  
18       Paging Channel, or if the stored parameters are not current (see 2.6.2.2), the  
19       mobile station shall set  $CONFIG\_MSG\_SEQ_S$ ,  $SYS\_PAR\_MSG\_SEQ_S$ ,  
20        $NGHBR\_LST\_MSG\_SEQ_S$ ,  $EXT\_NGHBR\_LST\_MSG\_SEQ_S$ ,  
21        $GEN\_NGHBR\_LST\_MSG\_SEQ_S$ ,  $CHAN\_LST\_MSG\_SEQ_S$ ,  
22        $EXT\_SYS\_PAR\_MSG\_SEQ_S$ ,  $USER\_ZONE\_ID\_MSG\_SEQ_S$ ,  
23        $PRI\_NGHBR\_LST\_MSG\_SEQ_S$ , and  $EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ_S$ ,  
24        $EXT\_CHAN\_LST\_MSG\_SEQ_S$ ,  $FD\_CHAN\_LST\_MSG\_SEQ_S$ , and  
25        $GLOB\_SERV\_REDIR\_MSG\_SEQ_S$  to NULL.
      - 26       + If the stored information for the new Paging Channel is current, the mobile  
27       station shall set  $CONFIG\_MSG\_SEQ_S$  to the stored information for the new  
28       Paging Channel and set NGHBR\_REC\_LIST to the stored information for the  
29       new Paging Channel.
    - 30       - If the mobile station has monitored the Forward Common Control  
31       Channel/Primary Broadcast Control Channel before the idle handoff, the mobile  
32       station shall set Paging Channel data rate,  $PRAT_S = '00'$ .
    - 33       - If the associated NGHBR\_BAND<sub>S</sub> or NGHBR\_FREQ<sub>S</sub> of the new base station in  
34       NGHBR\_REC\_LIST of the old base station is not equal to  $CDMABAND_S$  and  
35        $CDMACH_S$  respectively, the mobile station shall set  $CDMABAND_S$  to  
36        $NGHBR\_BAND_S$ ,  $CDMACH_S$  to  $NGHBR\_FREQ_S$ , and tune to the new CDMA  
37       Channel. The mobile station shall begin monitoring the new Paging Channel of  
38       the new base station.

- 1       • If none of the Paging Channel stored information on the associated NGHBR\_FREQ<sub>s</sub>  
2       of the new base station in NGHBR\_REC\_LIST of the old base station are current,  
3       the mobile station shall perform the following:
  - 4       - The mobile station shall set CONFIG\_MSG\_SEQ<sub>s</sub>, SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
5       NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
6       GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
7       EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>,  
8       EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
9       FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, and  
10       PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> to NULL.
  - 11       - If the mobile station has monitored the Forward Common Control  
12       Channel/Primary Broadcast Control Channel before the idle handoff, the mobile  
13       station shall set Paging Channel data rate, PRAT<sub>s</sub> = '00'.
  - 14       - The mobile station shall set PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the Primary  
15       Paging Channel. If the associated NGHBR\_BAND<sub>s</sub> or NGHBR\_FREQ<sub>s</sub> of the new  
16       base station in NGHBR\_REC\_LIST of the old base station is not equal to  
17       CDMABAND<sub>s</sub> and CDMACH<sub>s</sub> respectively, the mobile station shall set  
18       CDMABAND<sub>s</sub> to NGHBR\_BAND<sub>s</sub>, CDMACH<sub>s</sub> to NGHBR\_FREQ<sub>s</sub>, and tune to the  
19       new CDMA Channel. The mobile station shall begin monitoring the Primary  
20       Paging Channel of the new base station.
- 21       • If PACA<sub>s</sub> is equal to enabled, the mobile station shall enter the *Update Overhead*  
22       *Information Substate* of the *System Access State* (see 2.6.3) with an origination  
23       indication within T<sub>33m</sub> seconds to re-originate the PACA call using the new base  
24       station.

25 If the NGHBR\_CONFIG field is '010', the mobile station shall perform the following:

- 26       • The mobile station shall set ACC\_MSG\_SEQ<sub>s</sub> and CURR\_ACC\_MSG\_SEQ to NULL  
27       and shall set PILOT\_PN<sub>s</sub> to the pilot offset index of the base station transmitting  
28       the new Paging Channel or Forward Common Control Channel/Primary Broadcast  
29       Control Channel.
- 30       • If the mobile station has monitored the Paging Channel before the idle handoff, the  
31       mobile station shall perform the following:
  - 32       - If the stored information for Primary Paging Channel or any of the Paging  
33       Channels on the target frequency or any of the frequencies of the new base  
34       station is current, the mobile station shall perform the following:
    - 35       + The mobile station shall use the hash algorithm specified in 2.6.7.1 and the  
36       stored value of the number of CDMA channels to determine the new CDMA  
37       Channel and shall set FREQ\_NEW to this new CDMA Channel. The mobile  
38       station shall perform the following:

- o If the stored information for any of the Paging Channels on the CDMA channel specified by `FREQ_NEW` is current, the mobile station shall perform the following:
  - ◇ The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Paging Channel number in the range 1 to `PAGE_CHANS`, where `PAGE_CHANS` is the value stored for the Paging Channel whose stored information is current. The mobile station shall store the new Paging Channel number as `PAGECHS`. The mobile station shall perform the following:
    - If the mobile station has not stored configuration parameters for the new Paging Channel, or if the stored parameters are not current (see 2.6.2.2), the mobile station shall set `CONFIG_MSG_SEQS`, `SYS_PAR_MSG_SEQS`, `NGHBR_LST_MSG_SEQS`, `EXT_NGHBR_LST_MSG_SEQS`, `GEN_NGHBR_LST_MSG_SEQS`, `CHAN_LST_MSG_SEQS`, `EXT_SYS_PAR_MSG_SEQS`, `USER_ZONE_ID_MSG_SEQS`, `PRI_NGHBR_LST_MSG_SEQS`, and `EXT_GLOB_SERV_REDIR_MSG_SEQS`, `EXT_CHAN_LST_MSG_SEQS`, `FD_CHAN_LST_MSG_SEQS`, and `GLOB_SERV_REDIR_MSG_SEQS` to NULL.
    - If the stored information for the new Paging Channel is current, the mobile station shall set `CONFIG_MSG_SEQS` to the stored information for the new Paging Channel and set `NGHBR_REC_LIST` to the stored information for the new Paging Channel.
  - ◇ If the band class corresponding to `FREQ_NEW` is not equal to `CDMABANDS` of the old base station or `FREQ_NEW` is not equal to `CDMACHS` of the old base station, the mobile station shall set `CDMABANDS` to band class corresponding to `FREQ_NEW` and shall set `CDMACHS` to `FREQ_NEW`, and tune to the new CDMA Channel. The mobile station shall begin monitoring the new Paging Channel of the new base station.
- o If none of the Paging Channel stored information on the CDMA channel specified by `FREQ_NEW` are current, the mobile station shall perform the following:
  - ◇ The mobile station shall set `CONFIG_MSG_SEQS`, `SYS_PAR_MSG_SEQS`, `NGHBR_LST_MSG_SEQS`, `EXT_NGHBR_LST_MSG_SEQS`, `GEN_NGHBR_LST_MSG_SEQS`, `CHAN_LST_MSG_SEQS`, `EXT_SYS_PAR_MSG_SEQS`, `GLOB_SERV_REDIR_MSG_SEQS`, `EXT_GLOB_SERV_REDIR_MSG_SEQS`, `EXT_CHAN_LST_MSG_SEQS`, `FD_CHAN_LST_MSG_SEQS`, `USER_ZONE_ID_MSG_SEQS`, and `PRI_NGHBR_LST_MSG_SEQS` to NULL.

- 1                   ◇ The mobile station shall set PAGE\_CHAN<sub>S</sub> to '1' and PAGECH<sub>S</sub> to the  
2                   Primary Paging Channel. If the band class corresponding to  
3                   FREQ\_NEW is not equal to CDMABAND<sub>S</sub> of the old base station or  
4                   FREQ\_NEW is not equal to CDMACH<sub>S</sub> of the old base station, the  
5                   mobile station shall set CDMABAND<sub>S</sub> to band class corresponding to  
6                   FREQ\_NEW and shall set CDMACH<sub>S</sub> to FREQ\_NEW, and tune to the  
7                   new CDMA Channel. The mobile station shall begin monitoring the  
8                   Primary Paging Channel of the new base station.
- 9                   - If none of the Paging Channel stored information on any of the frequencies of  
10                  the new base station are current, the mobile station shall perform the following:
- 11               + The mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub>, SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
12               NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
13               GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
14               EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>,  
15               EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
16               FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and  
17               PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> to NULL.
- 18               + The mobile station shall set PAGE\_CHAN<sub>S</sub> to '1' and PAGECH<sub>S</sub> to the  
19               Primary Paging Channel. If the associated NGHBR\_BAND<sub>S</sub> or  
20               NGHBR\_FREQ<sub>S</sub> of the new base station in NGHBR\_REC\_LIST of the old base  
21               station is not equal to CDMABAND<sub>S</sub> and CDMACH<sub>S</sub> of the old base station  
22               respectively, the mobile station shall set CDMABAND<sub>S</sub> to NGHBR\_BAND<sub>S</sub>,  
23               and CDMACH<sub>S</sub> to NGHBR\_FREQ<sub>S</sub>; otherwise, the mobile station shall set  
24               CDMACH<sub>S</sub> as follows:
- 25               o If the *Extended CDMA Channel List Message* is being sent on the old  
26               base station, set CDMACH<sub>S</sub> to the first CDMA Channel given in the  
27               *Extended CDMA Channel List Message* for the old base station.
- 28               o Otherwise, set CDMACH<sub>S</sub> to the first CDMA Channel given in the *CDMA*  
29               *Channel List Message* for the old base station.
- 30               Then the mobile station shall tune to the new CDMA channel and begin  
31               monitoring the Primary Paging Channel of the new base station.
- 32               • If the mobile station has monitored the Forward Common Control Channel/Primary  
33               Broadcast Control Channel before the idle handoff, the mobile station shall perform  
34               the following:
- 35               – If the stored information for any of the Forward Common Control Channels and  
36               Primary Broadcast Control Channel on any of the frequencies of the new base  
37               station is current, the mobile station shall perform the following:



- 1           + The mobile station shall use the hash algorithm specified in 2.6.7.1 and the
- 2           stored value of the number of CDMA channels to determine the new CDMA
- 3           Channel and shall set `FREQ_NEW` to this new CDMA Channel. The mobile
- 4           station shall perform the following
- 5           o If the stored information for any of the Forward Common Control
- 6           Channels and Primary Broadcast Control Channel on the CDMA
- 7           channel specified by `FREQ_NEW` is current, the mobile station shall
- 8           perform the following:
- 9           ◇ The mobile station shall use the hash algorithm specified in 2.6.7.1
- 10          to select a new Forward Common Control Channel number in the
- 11          range 1 to `NUM_FCCCHS`, where `NUM_FCCCHS` is the stored value.
- 12          The mobile station shall store the new Forward Common Control
- 13          Channel number as `FCCCH_IDS`.
- 14          ◇ If the stored information for this new Forward Common Control
- 15          Channel and Primary Broadcast Control Channel is current, the
- 16          mobile station shall perform the following:
- 17          – The mobile station shall set `CONFIG_MSG_SEQS` to the stored
- 18          information for this new Forward Common Control Channel and
- 19          Primary Broadcast Control Channel and the mobile station shall
- 20          set `NGHBR_REC_LIST` to the stored information for this new
- 21          Forward Common Control Channel and Primary Broadcast
- 22          Control Channel.
- 23          – If the band class corresponding to `FREQ_NEW` is not equal to
- 24          `CDMABANDS` of the old base station or `FREQ_NEW` is not equal
- 25          to `CDMACHS` of the old base station, the mobile station shall set
- 26          `CDMABANDS` to band class corresponding to `FREQ_NEW` and
- 27          shall set `CDMACHS` to `FREQ_NEW`, and tune to the new CDMA
- 28          Channel. The mobile station shall begin monitoring the new
- 29          Forward Common Control Channel/Primary Broadcast Control
- 30          Channel of the new base station.
- 31          ◇ If the stored information for this new Forward Common Control
- 32          Channel and Primary Broadcast Control Channel is not current, the
- 33          mobile station shall perform the following:
- 34          – The mobile station shall set `CONFIG_MSG_SEQS`,
- 35          `A41_SYS_PAR_MSG_SEQS`, `UNI_NGHBR_LST_MSG_SEQS`,
- 36          `MC_RR_PAR_MSG_SEQS`, `EXT_GLOB_SERV_REDIR_MSG_SEQS`,
- 37          `EXT_CHAN_LST_MSG_SEQS`, `FD_CHAN_LST_MSG_SEQS`,
- 38          `USER_ZONE_ID_MSG_SEQS`, and `PRI_NGHBR_LST_MSG_SEQS`
- 39          to NULL.

- 1                               – If the band class corresponding to `FREQ_NEW` is not equal to  
2                               `CDMABANDS` of the old base station or `FREQ_NEW` is not equal  
3                               to `CDMACHS` of the old base station, the mobile station shall set  
4                               `CDMABANDS` to band class corresponding to `FREQ_NEW` and  
5                               shall set `CDMACHS` to `FREQ_NEW`, and tune to the new CDMA  
6                               Channel. The mobile station shall begin monitoring the Primary  
7                               Broadcast Control Channel of the new base station.
- 8                               o If none of the Forward Common Control Channel and Primary Broadcast  
9                               Control Channel stored information on the CDMA channel specified by  
10                              `FREQ_NEW` are current, the mobile station shall perform the following:
  - 11                            ◇ The mobile station shall set `CONFIG_MSG_SEQS`,  
12                            `A41_SYS_PAR_MSG_SEQS`, `UNI_NGHBR_LST_MSG_SEQS`,  
13                            `MC_RR_PAR_MSG_SEQS`, `EXT_GLOB_SERV_REDIR_MSG_SEQS`,  
14                            `EXT_CHAN_LST_MSG_SEQS`, `FD_CHAN_LST_MSG_SEQS`,  
15                            `USER_ZONE_ID_MSG_SEQS`, and `PRI_NGHBR_LST_MSG_SEQS` to  
16                            NULL.
  - 17                            ◇ If the associated `NGHBR_BANDS` of the new base station in  
18                            `NGHBR_REC_LIST` of the old base station is not equal to  
19                            `CDMABANDS` or the associated `NGHBR_FREQS` of the new base  
20                            station in `NGHBR_REC_LIST` of the old base station is not equal to  
21                            `CDMACHS` of the old base station, the mobile station shall set  
22                            `CDMABANDS` to `NGHBR_BANDS`, `CDMACHS` to `NGHBR_FREQS`, and  
23                            tune to the new CDMA Channel. Otherwise, the mobile station shall  
24                            set `CDMACHS` to the first CDMA Channel given in the *Extended*  
25                            *CDMA Channel List Message* for the old base station and tune to the  
26                            new CDMA channel.
  - 27                            ◇ Then the mobile station shall begin monitoring the Primary  
28                            Broadcast Control Channel of the new base station, using the same  
29                            rate, code rate, and code channel.
- 30                            – If none of the Forward Common Control Channel and Primary Broadcast  
31                            Control Channel stored information on any of the frequencies of the new base  
32                            station are current, the mobile station shall perform the following:
  - 33                            + The mobile station shall set `CONFIG_MSG_SEQS`,  
34                            `A41_SYS_PAR_MSG_SEQS`, `UNI_NGHBR_LST_MSG_SEQS`,  
35                            `MC_RR_PAR_MSG_SEQS`, `EXT_GLOB_SERV_REDIR_MSG_SEQS`,  
36                            `EXT_CHAN_LST_MSG_SEQS`, `FD_CHAN_LST_MSG_SEQS`,  
37                            `USER_ZONE_ID_MSG_SEQS`, and `PRI_NGHBR_LST_MSG_SEQS` to NULL.

- 1           + If the associated NGHBR\_BAND<sub>s</sub> or NGHBR\_FREQ<sub>s</sub> of the new base station  
2           in NGHBR\_REC\_LIST of the old base station is not equal to CDMABAND<sub>s</sub>  
3           and CDMACH<sub>s</sub> of the old base station respectively, the mobile station shall  
4           set CDMABAND<sub>s</sub> to NGHBR\_BAND<sub>s</sub>, CDMACH<sub>s</sub> to NGHBR\_FREQ<sub>s</sub>, and  
5           tune to the new CDMA Channel. Otherwise, the mobile station shall set  
6           CDMACH<sub>s</sub> to the first CDMA Channel given in the *Extended CDMA Channel*  
7           *List Message* for the old base station and tune to the new CDMA channel.
- 8           + Then the mobile station shall begin monitoring the Primary Broadcast  
9           Control Channel of the new base station, using the same rate, code rate,  
10          and code channel.
- 11          • If PACA<sub>s</sub> is equal to enabled, the mobile station shall enter the *Update Overhead*  
12          *Information Substate* of the *System Access State* (see 2.6.3) with an origination  
13          indication within T<sub>33m</sub> seconds to re-originate the PACA call using the new base  
14          station.
- 15    If the NGHBR\_CONFIG field is '011', the mobile station shall perform the following:
- 16          • Enter the *System Determination Substate* of the *Mobile Station Initialization State*  
17          with a new system indication (see 2.6.1.1).
- 18    If the NGHBR\_CONFIG field is '100', the mobile station shall perform the following:
- 19          • The mobile station shall set ACC\_MSG\_SEQ<sub>s</sub> and CURR\_ACC\_MSG\_SEQ to NULL  
20          (see 2.6.2.2) and shall set PILOT\_PN<sub>s</sub> to the pilot offset index of the base station  
21          transmitting the new Forward Common Control Channel/Primary Broadcast  
22          Control Channel.
- 23          • If the stored information for any of the Forward Common Control Channels and  
24          Primary Broadcast Control Channel on the associated NGHBR\_FREQ<sub>s</sub> of the new  
25          base station in NGHBR\_REC\_LIST of the old base station is current, the mobile  
26          station shall perform the following:
- 27               – The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a  
28               new Forward Common Control Channel number in the range 1 to  
29               NUM\_FCCCH<sub>s</sub>, where NUM\_FCCCH<sub>s</sub> is the stored value. The mobile station  
30               shall store the new Forward Common Control Channel number as FCCCH\_ID<sub>s</sub>.
- 31               – If the mobile station has not stored configuration parameters for this new  
32               Forward Common Control Channel and Primary Broadcast Control Channel, or  
33               if the stored information is not current, the mobile station shall perform the  
34               following:
- 35                   + The mobile station shall set CONFIG\_MSG\_SEQ<sub>s</sub>,  
36                   A41\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, UNI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
37                   MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>, EXT\_GLOB\_SERV\_REDIRECT\_MSG\_SEQ<sub>s</sub>,  
38                   EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
39                   USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, and PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> to NULL.

- 1           + If the associated NGHBR\_BAND<sub>S</sub> or NGHBR\_FREQ<sub>S</sub> of the new base station  
2           in NGHBR\_REC\_LIST of the old base station is not equal to CDMABAND<sub>S</sub>  
3           and CDMACH<sub>S</sub> respectively, the mobile station shall set CDMABAND<sub>S</sub> to  
4           NGHBR\_BAND<sub>S</sub>, CDMACH<sub>S</sub> to NGHBR\_FREQ<sub>S</sub>, and tune to the new CDMA  
5           Channel.
- 6           + Then the mobile station shall begin monitoring the Primary Broadcast  
7           Control Channel of the new base station, using the same rate, code rate,  
8           and code channel.
- 9           - If the stored information for this new Forward Common Control Channel and  
10          Primary Broadcast Control Channel is current, the mobile station shall perform  
11          the following:
  - 12         + The mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub> to the stored information  
13         for this new Forward Common Control Channel and Primary Broadcast  
14         Control Channel and the mobile station shall set NGHBR\_REC\_LIST to the  
15         stored information for this new Forward Common Control Channel and  
16         Primary Broadcast Control Channel.
  - 17         + If the associated NGHBR\_BAND<sub>S</sub> or NGHBR\_FREQ<sub>S</sub> of the new base station  
18         in NGHBR\_REC\_LIST of the old base station is not equal to CDMABAND<sub>S</sub>  
19         and CDMACH<sub>S</sub> respectively, the mobile station shall set CDMABAND<sub>S</sub> to  
20         NGHBR\_BAND<sub>S</sub>, CDMACH<sub>S</sub> to NGHBR\_FREQ<sub>S</sub>, and tune to the new CDMA  
21         Channel. The mobile station shall begin monitoring the new Forward  
22         Common Control Channel/Primary Broadcast Control Channel of the new  
23         base station.
- 24          • If none of the Forward Common Control Channel and Primary Broadcast Control  
25          Channel stored information on the associated NGHBR\_FREQ<sub>S</sub> of the new base  
26          station in NGHBR\_REC\_LIST of the old base station are current, the mobile station  
27          shall perform the following:
  - 28         - The mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
29         UNI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>,  
30         EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
31         FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and  
32         PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> to NULL.
  - 33         - If the associated NGHBR\_BAND<sub>S</sub> or NGHBR\_FREQ<sub>S</sub> of the new base station in  
34         NGHBR\_REC\_LIST of the old base station is not equal to CDMABAND<sub>S</sub> and  
35         CDMACH<sub>S</sub> respectively, the mobile station shall set CDMABAND<sub>S</sub> to  
36         NGHBR\_BAND<sub>S</sub>, CDMACH<sub>S</sub> to NGHBR\_FREQ<sub>S</sub>, and tune to the new CDMA  
37         Channel.

- 1           – The mobile station shall begin monitoring the Primary Broadcast Control
- 2           Channel of the new base station, using the same rate, code rate, and code
- 3           channel.
- 4           • If  $PACA_S$  is equal to enabled, the mobile station shall enter the *Update Overhead*
- 5           *Information Substate* of the *System Access State* (see 2.6.3) with an origination
- 6           indication within  $T_{33m}$  seconds to re-originate the PACA call using the new base
- 7           station.

#### 8   2.6.2.1.5 Primary Broadcast Control Channel Monitoring

##### 9   2.6.2.1.5.1 General Overview

10 The Broadcast Control Channel is divided into 40, 80, or 160 ms slots called the Broadcast  
 11 Control Channel slots (see 3.1.3.5 in [2]). The Primary Broadcast Control Channel will be  
 12 used for control messages. Support for the Primary Broadcast Control Channel is  
 13 mandatory for mobile stations. The Primary Broadcast Control Channel will operate with  
 14 the Forward Common Control Channels and the Quick Paging Channels, or only with the  
 15 Forward Common Control Channels.

16 After a mobile station acquires and synchronizes with a new base station that supports a  
 17 Primary Broadcast Control Channel, the mobile station monitors the Primary Broadcast  
 18 Control Channel to receive overhead information. Once the mobile station has received  
 19 the updated overhead information from the Primary Broadcast Control Channel, the  
 20 mobile station may begin to monitor a Forward Common Control Channel or a Quick  
 21 Paging Channel, if it is supported.

##### 22 2.6.2.1.5.2 Requirements

23 If the base station supports the Primary Broadcast Control Channel, the mobile station  
 24 shall monitor the Primary Broadcast Control Channel for overhead messages. If the mobile  
 25 station determines that the CONFIG\_MSG\_SEQ has changed, the mobile station shall  
 26 monitor the Primary Broadcast Control Channel to receive updated overhead messages.

##### 27 2.6.2.1.6 System Reselection Procedures

28 If the mobile station supports more than one operating mode or the Remaining  
 29 Set/Neighbor Set contains pilots on frequencies different from the current frequency, the  
 30 mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
 31 *Initialization State* with a system reselection indication (see 2.6.1.1) if all of the following  
 32 are true:

- 33           • RESELECT\_INCLUDED<sub>S</sub> is equal to '1';
- 34           • The following inequality is satisfied:
- 35            $-20 \times \log_{10} (E_c/I_0) > EC\_IO\_THRESH_S$
- 36           where  $E_c/I_0$  is the measured  $E_c/I_0$  of the active pilot; and
- 37           • The following inequality is satisfied:

1  $pilot\_power < EC\_THRESH_S - 115$

2 where  $pilot\_power$  (dBm/1.23 MHz) =  $10 \times \log_{10} (PS)$  (dB) + mean input power  
 3 (dBm/1.23 MHz) and PS is the strength of the active pilot, as specified in 2.6.6.2.2.

#### 4 2.6.2.1.7 Slotted Timer Expiration

5 Upon expiration of the slotted  $T_{MS}$  Slotted timer, the mobile station shall disable the timer,  
 6 set  $T\_SLOTTED_S$  to  $T_{74m}$ , and set  $SLOTTED_S$  to YES.

#### 7 2.6.2.1.8 Exiting the Reduced Slot Cycle Mode

8 If  $RSC\_MODE\_ENABLED$  is equal to YES, then at the system time specified by  
 9  $RSC\_END\_TIME$ , the mobile station shall set  $RSC\_MODE\_ENABLED$  to NO and set  
 10  $SLOTTED_S$  to YES.

#### 11 2.6.2.1.9 Radio Environment Report Timer Expiration

12 Upon expiration of the radio environment report timer, the mobile station shall disable the  
 13 timer and set  $RER\_MODE\_ENABLED$  to NO. If  $TKZ\_MODE\_PENDING$  is equal to YES, then  
 14 the mobile station shall perform the following:

- 15 • Set  $TKZ\_MODE\_ENABLED$  to YES and  $TKZ\_MODE\_PENDING$  to NO.
- 16 • Initialize the tracking zone list ( $TKZ\_LIST$ ) to NULL.
- 17 • Enable the tracking zone update timer with an initial value of infinity if  
 18  $TKZ\_UPDATE\_PRD_S$  is equal to '1111'; otherwise, the mobile station shall enable  
 19 the tracking zone update timer with an initial value of  $2^{TKZ\_UPDATE\_PRD_S} + 6$  seconds.

#### 20 2.6.2.2 Response to Overhead Information Operation

21 The overhead messages on the Primary Broadcast Control Channel are:

- 22 • *ANSI-41 System Parameters Message*
- 23 • *MC-RR Parameters Message*
- 24 • *Enhanced Access Parameters Message*
- 25 • *Universal Neighbor List Message*
- 26 • *User Zone Identification Message*
- 27 • *Private Neighbor List Message*
- 28 • *Extended Global Service Redirection Message*
- 29 • *Extended CDMA Channel List Message*
- 30 • *ANSI-41 RAND Message*
- 31 • *BCMC Service Parameters Message*
- 32 • *Access Point Identification Message*
- 33 • *Access Point Identification Text Message*
- 34 • *Access Point Pilot Information Message*

- 1       • *General Overhead Information Message*
- 2       • *Flex Duplex CDMA Channel List Message*
- 3       • *Alternative Technologies Information Message*

4   The overhead messages on the Paging Channel are:

- 5       • *System Parameters Message*
- 6       • *Access Parameters Message*
- 7       • *Neighbor List Message*
- 8       • *CDMA Channel List Message*
- 9       • *Extended System Parameters Message*
- 10      • *Global Service Redirection Message*
- 11      • *Extended Neighbor List Message*
- 12      • *General Neighbor List Message*
- 13      • *User Zone Identification Message*
- 14      • *Private Neighbor List Message*
- 15      • *Extended Global Service Redirection Message*
- 16      • *Extended CDMA Channel List Message*
- 17      • *Access Point Identification Message*
- 18      • *Access Point Identification Text Message*
- 19      • *Access Point Pilot Information Message*
- 20      • *General Overhead Information Message*
- 21      • *Flex Duplex CDMA Channel List Message*
- 22      • *Alternative Technologies Information Message*

23   The *Response to Overhead Information Operation* is performed whenever the mobile station  
 24   receives an overhead message. The mobile station updates internally stored information  
 25   from the received message's data fields.

26   Configuration parameters and access parameters are received in the configuration  
 27   messages and the *Access Parameters Message* or the *Enhanced Access Parameters*  
 28   *Message*.

29   The configuration messages on the Primary Broadcast Control Channel are:

- 30      • *ANSI-41 System Parameters Message*
- 31      • *MC-RR Parameters Message*
- 32      • *Universal Neighbor List Message*
- 33      • *User Zone Identification Message*
- 34      • *Private Neighbor List Message*

- 1 • *Extended Global Service Redirection Message*
- 2 • *Extended CDMA Channel List Message*
- 3 • *Access Point Identification Message*
- 4 • *Access Point Identification Text Message*
- 5 • *Access Point Pilot Information Message*
- 6 • *General Overhead Information Message*
- 7 • *Flex Duplex CDMA Channel List Message*
- 8 • *Alternative Technologies Information Message*

9 The configuration messages on the Paging Channel are:

- 10 • *System Parameters Message*
- 11 • *Neighbor List Message*
- 12 • *CDMA Channel List Message*
- 13 • *Extended System Parameters Message*
- 14 • *Global Service Redirection Message*
- 15 • *Extended Neighbor List Message*
- 16 • *General Neighbor List Message*
- 17 • *User Zone Identification Message*
- 18 • *Private Neighbor List Message*
- 19 • *Extended Global Service Redirection Message*
- 20 • *Extended CDMA Channel List Message*
- 21 • *Access Point Identification Message*
- 22 • *Access Point Identification Text Message*
- 23 • *Access Point Pilot Information Message*
- 24 • *General Overhead Information Message*
- 25 • *Flex Duplex CDMA Channel List Message*
- 26 • *Alternative Technologies Information Message*

27 Associated with the set of configuration messages sent on each Paging Channel or Primary  
 28 Broadcast Control Channel is a configuration message sequence number  
 29 (CONFIG\_MSG\_SEQ). When the contents of one or more of the configuration messages  
 30 change, the configuration message sequence number is incremented. For each of the  
 31 configuration messages received, the mobile station stores the configuration message  
 32 sequence number contained in the configuration message (A41\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
 33 MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>, SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
 34 AP\_PILOT\_INFO\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
 35 GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, UNI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>,



1 EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>,  
2 USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
3 EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, AP\_IDT\_MSG\_SEQ<sub>s</sub>,  
4 AP\_ID\_TEXT\_MSG\_SEQ<sub>s</sub>, GOI\_MSG\_SEQ<sub>s</sub> or ATIM\_MSG\_SEQ<sub>s</sub>). The mobile station also  
5 stores the most recently received configuration message sequence number  
6 (CONFIG\_MSG\_SEQ<sub>s</sub>) contained in any message (see 2.6.2.2.1, 2.6.2.2.3, 2.6.2.2.4,  
7 2.6.2.2.5, 2.6.2.2.6, 2.6.2.2.7, 2.6.2.2.8, 2.6.2.2.9, 2.6.2.2.10, 2.6.2.2.11, 2.6.2.2.12,  
8 2.6.2.2.13, 2.6.2.2.14, 2.6.2.2.17, 2.6.2.2.19, 2.6.2.2.20, 2.6.2.2.21, 2.6.2.2.22, 2.6.2.2.23,  
9 2.6.2.2.24 and 2.6.2.3). The mobile station examines the stored values of the  
10 configuration message sequence numbers to determine whether the configuration  
11 parameters stored by the mobile station are current.

12 The field EXT\_SYS\_PARAMETER in the *System Parameters Message*, when set equal to '0',  
13 indicates that the base station is not sending the *Extended System Parameters Message*.  
14 When the mobile station receives the *System Parameters Message* with the  
15 EXT\_SYS\_PARAMETER field set equal to '0', the mobile station shall set  
16 EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub> to CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the *Extended System*  
17 *Parameters Message* is current.

18 The field EXT\_CHAN\_LST in the *System Parameters Message*, when set equal to '0',  
19 indicates that the base station is not sending the *Extended CDMA Channel List Message*.  
20 When the mobile station receives the *System Parameters Message* with the  
21 EXT\_CHAN\_LST field set equal to '0', the mobile station shall set  
22 EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub> to CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the *Extended CDMA*  
23 *Channel List Message* is current.

24 The field GEN\_NGHBR\_LST in the *System Parameters Message*, when set equal to '0',  
25 indicates that the base station is not sending the *General Neighbor List Message*. When  
26 the mobile station receives the *System Parameters Message* with the GEN\_NGHBR\_LST  
27 field set equal to '0', the mobile station shall set the GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> to  
28 CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the *General Neighbor List Message* is current.

29 The field EXT\_NGHBR\_LST in the *System Parameters Message*, when set equal to '0',  
30 indicates that the base station is not sending the *Extended Neighbor List Message*. When  
31 the mobile station receives the *System Parameters Message* with the EXT\_NGHBR\_LST  
32 field set equal to '0', the mobile station shall set EXT\_NGHBR\_LIST\_MSG\_SEQ<sub>s</sub> to  
33 CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the *Extended Neighbor List Message* is current.

34 The field GLOBAL\_REDIRECT in the *System Parameters Message*, when set equal to '0',  
35 indicates that the base station is not sending the *Global Service Redirection Message*.  
36 When the mobile station receives the *System Parameters Message* with the  
37 GLOBAL\_REDIRECT field set equal to '0', the mobile station shall set  
38 GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the *Global Service*  
39 *Redirection Message* is current.

40 The field EXT\_GLOBAL\_REDIRECT in the *System Parameters Message* or *MC-RR*  
41 *Parameters Message*, when set equal to '0', indicates that the base station is not sending  
42 the *Extended Global Service Redirection Message*. When the mobile station receives the  
43 *System Parameters Message* or *MC-RR Parameters Message* with the

- 1 EXT\_GLOBAL\_REDIRECT field set equal to '0', the mobile station shall set  
 2 EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub> to indicate that the  
 3 *Extended Global Service Redirection Message* is current.
- 4 The field USER\_ZONE\_ID in the *System Parameters Message* or *MC-RR Parameters*  
 5 *Message*, when set equal to '0', indicates that the base station is not sending the *User Zone*  
 6 *Identification Message*. When the mobile station receives the *System Parameters Message*  
 7 or *MC-RR Parameters Message* with the USER\_ZONE\_ID field set equal to '0', the mobile  
 8 station shall set USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub> to indicate that the  
 9 *User Zone Identification Message* is current.
- 10 The field PRI\_NGHBR\_LST in the *System Parameters Message* or *MC-RR Parameters*  
 11 *Message*, when set equal to '0', indicates that the base station is not sending the *Private*  
 12 *Neighbor List Message*. When the mobile station receives the *System Parameters Message*  
 13 or *MC-RR Parameters Message* with the PRI\_NGHBR\_LST field set equal to '0', the mobile  
 14 station shall set PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub> to indicate that the  
 15 *Private Neighbor List Message* is current.
- 16 The field ATIM\_IND in the *System Parameters Message* or *MC-RR Parameters Message*,  
 17 when set equal to '0' or if ATIM\_IND is omitted, indicates that the base station is not  
 18 sending the *Alternative Technologies Information Message*. When the mobile station receives  
 19 the *System Parameters Message* or *MC-RR Parameters Message* with the ATIM\_IND field set  
 20 equal to '0', or if the ATIM\_IND field is omitted in the *System Parameters Message* or *MC-RR*  
 21 *Parameters Message*, the mobile station shall set ATIM\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub>  
 22 to indicate that the *Alternative Technologies Information Message* is current.
- 23 The field AP\_PILOT\_INFO in the *System Parameters Message* or *MC-RR Parameters*  
 24 *Message*, when set equal to '0' or if AP\_PILOT\_INFO is omitted, indicates that the base  
 25 station is not sending the *Access Point Pilot Information Message*. When the mobile station  
 26 receives the *System Parameters Message* or *MC-RR Parameters Message* with the  
 27 AP\_PILOT\_INFO field set equal to '0', or if the AP\_PILOT\_INFO field is omitted in the *System*  
 28 *Parameters Message* or *MC-RR Parameters Message*, the mobile station shall set  
 29 AP\_PILOT\_INFO\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub> to indicate that the *Access Point Pilot*  
 30 *Information Message* is current.
- 31 The field AP\_IDT in the *System Parameters Message* or *MC-RR Parameters Message*, when  
 32 set equal to '0' or if AP\_IDT is omitted, indicates that the base station is not sending the  
 33 *Access Point Identification Message*. When the mobile station receives the *System*  
 34 *Parameters Message* or *MC-RR Parameters Message* with the AP\_IDT field set equal to '0',  
 35 or if the field AP\_IDT is omitted in the *System Parameters Message* or *MC-RR Parameters*  
 36 *Message*, the mobile station shall set AP\_IDT\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub> to  
 37 indicate that the *Access Point Identification Message* is current.
- 38 The field AP\_ID\_TEXT in the *System Parameters Message* or *MC-RR Parameters Message*,  
 39 when set equal to '0' or if AP\_ID\_TEXT is omitted, indicates that the base station is sending  
 40 the *Access Point Identification Text Message*. When the mobile station receives the *System*  
 41 *Parameters Message* or *MC-RR Parameters Message* with the AP\_ID\_TEXT field set equal to  
 42 '0', or if the field AP\_ID\_TEXT is omitted in the *System Parameters Message* or *MC-RR*  
 43 *Parameters Message*, the mobile station shall set AP\_ID\_TEXT\_MSG\_SEQ<sub>S</sub> to

1 CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the *Access Point Identification Text Message* is  
2 current.

3 The field GEN\_OVHD\_INF\_IND in the *System Parameters Message* or *MC-RR Parameters*  
4 *Message*, when set equal to '0' or if GEN\_OVHD\_INF\_IND is omitted, indicates that the base  
5 station is not sending the *General Overhead Information Message*. When the mobile station  
6 receives the *System Parameters Message* or *MC-RR Parameters Message* with the  
7 GEN\_OVHD\_INF\_IND field set equal to '0', or if the GEN\_OVHD\_INF\_IND field is omitted in the  
8 *System Parameters Message* or *MC-RR Parameters Message*, the mobile station shall set  
9 GOI\_MSG\_SEQ<sub>s</sub> to CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the *General Overhead Information*  
10 *Message* is current.

11 The field FD\_CHAN\_LST\_IND in the *System Parameters Message* or *MC-RR Parameters*  
12 *Message*, when set equal to '0' or if FD\_CHAN\_LST\_IND is omitted, indicates that the base  
13 station is not sending the *Flex Duplex CDMA Channel List Message*. When the mobile  
14 station receives the *System Parameters Message* or *MC-RR Parameters Message* with the  
15 FD\_CHAN\_LST\_IND field set equal to '0', or if the FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub> field is  
16 omitted in the *System Parameters Message* or *MC-RR Parameters Message*, the mobile  
17 station shall set FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub> to CONFIG\_MSG\_SEQ<sub>s</sub> to indicate that the  
18 *Flex Duplex CDMA Channel List Message* is current.

19 The configuration message sequence number is also included in the *General Page Message*  
20 and the *Universal Page Message*. This allows the mobile station to determine whether the  
21 stored configuration parameters are current without waiting for a configuration message.

22 *Access Parameters Messages* or *Enhanced Access Parameters Messages* are independently  
23 sequence-numbered by the ACC\_MSG\_SEQ field. The mobile station stores the most  
24 recently received *Access Parameters Message* or *Enhanced Access Parameters Messages*  
25 sequence number (ACC\_MSG\_SEQ<sub>s</sub>).

26 Paging Channels, Broadcast Control Channels, and Forward Common Control Channels  
27 shall be considered different if they are transmitted by different base stations, if they are  
28 transmitted on different code channels, or if they are transmitted on different CDMA  
29 Channels. Configuration and access parameters from one Paging Channel or Primary  
30 Broadcast Control Channel shall not be used while monitoring a different Paging Channel  
31 or Primary Broadcast Control Channel/Forward Common Control Channel except for  
32 registration and authentication parameters while the mobile station is performing an  
33 access probe handoff or access handoff. The mobile station shall ignore any overhead  
34 message whose PILOT\_PN<sub>r</sub> field is not equal to the pilot offset index (PILOT\_PN<sub>s</sub>) of the  
35 base station whose Paging Channel or Primary Broadcast Control Channel is being  
36 monitored.

37 The mobile station may store the configuration parameters from Paging Channels or  
38 Primary Broadcast Control Channel it has recently monitored. When a mobile station  
39 starts monitoring a Paging Channel or a Primary Broadcast Control Channel/Forward  
40 Common Control Channel that it has recently monitored, the mobile station can determine  
41 whether the stored parameters are current by examining the CONFIG\_MSG\_SEQ<sub>s</sub> in a  
42 configuration message or a page message.

The mobile station shall use a special value, NULL, to be stored in place of sequence numbers for messages that have not been received or are marked as not current. The special value NULL shall be unequal to any valid message sequence number.

The mobile station shall consider the stored configuration parameters to be current only if all of the following conditions are true:

- If the mobile station is monitoring the Paging Channel, the following stored configuration message sequence numbers (SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, AP\_IDT\_MSG\_SEQ<sub>s</sub>, AP\_ID\_TEXT\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> and GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>) are equal to CONFIG\_MSG\_SEQ<sub>s</sub>; and
- If the mobile station is monitoring the Forward Common Control Channel/ Primary Broadcast Control Channel, the following stored configuration message sequence numbers (A41\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>, UNI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, AP\_IDT\_MSG\_SEQ<sub>s</sub>, AP\_ID\_TEXT\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, and EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>) are equal to CONFIG\_MSG\_SEQ<sub>s</sub>; and
- If the mobile station supports flexible spacing between forward and reverse channels, stored configuration message sequence number FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub> is equal to CONFIG\_MSG\_SEQ<sub>s</sub>; and
- CONFIG\_MSG\_SEQ<sub>s</sub> is not equal to NULL; and
- No more than T<sub>31m</sub> seconds (see Annex D) have elapsed since the mobile station last received a valid message on the Paging Channel or the Primary Broadcast Control Channel/Forward Common Control Channel for which the parameters were stored.

If the configuration parameters are not current, the mobile station shall process the stored parameters upon receipt of the configuration messages as described in 2.6.2.2.1, 2.6.2.2.3, 2.6.2.2.4, 2.6.2.2.5, 2.6.2.2.6, 2.6.2.2.7, 2.6.2.2.8, 2.6.2.2.9, 2.6.2.2.10, 2.6.2.2.11, 2.6.2.2.12, 2.6.2.2.13, 2.6.2.2.14, 2.6.2.2.17, 2.6.2.2.19, 2.6.2.2.20, 2.6.2.2.21, 2.6.2.2.22, 2.6.2.2.23 and 2.6.2.2.24.

#### 2.6.2.2.1 System Parameters Message

Whenever a *System Parameters Message* is received on the Paging Channel, the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>r</sub>, shall be compared to that stored in SYS\_PAR\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as described in 2.6.2.2.1.1, 2.6.2.2.1.2, 2.6.2.2.1.3, 2.6.2.2.1.4, 2.6.2.2.1.5, 2.6.2.2.1.6, 2.6.2.2.1.7, 2.6.2.2.1.8, and 2.6.2.2.1.9.

If PAGE\_CHAN, REG\_PRD, BASE\_LAT, BASE\_LONG, or PWR\_REP\_THRESH are not within the valid ranges specified in 3.7.2.3.2.1, then the mobile station shall ignore the *System Parameters Message* that contains them.

If BAND\_CLASS is equal to '00001' and if EXT\_SYS\_PARAMETERS<sub>T</sub> is not equal to '1', the mobile station shall ignore the *System Parameters Message* containing these fields.

#### 2.6.2.2.1.1 Stored Parameters

The mobile station shall store the following parameters:

- Configuration message sequence number  
(CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>T</sub>,  
SYS\_PAR\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>T</sub>)
- Base station identification (BASE\_ID<sub>S</sub> = BASE\_ID<sub>T</sub>)
- Base station class (BASE\_CLASS<sub>S</sub> = BASE\_CLASS<sub>T</sub>)
- Maximum slot cycle index  
(MAX\_SLOT\_CYCLE\_INDEX<sub>S</sub> = MAX\_SLOT\_CYCLE\_INDEX<sub>T</sub>)
- Home registration indicator (HOME\_REG<sub>S</sub> = HOME\_REG<sub>T</sub>)
- SID roamer registration indicator (FOR\_SID\_REG<sub>S</sub> = FOR\_SID\_REG<sub>T</sub>)
- NID roamer registration indicator (FOR\_NID\_REG<sub>S</sub> = FOR\_NID\_REG<sub>T</sub>)
- Power-up registration indicator (POWER\_UP\_REG<sub>S</sub> = POWER\_UP\_REG<sub>T</sub>)
- Power-down registration indicator (POWER\_DOWN\_REG<sub>S</sub> = POWER\_DOWN\_REG<sub>T</sub>)
- Parameter-change registration indicator (PARAMETER\_REG<sub>S</sub> = PARAMETER\_REG<sub>T</sub>)
- Search window size for the Active Set and Candidate Set  
(SRCH\_WIN\_A<sub>S</sub> = SRCH\_WIN\_A<sub>T</sub>)
- Search window size for the Neighbor Set (SRCH\_WIN\_N<sub>S</sub> = SRCH\_WIN\_N<sub>T</sub>)
- Search window size for the Remaining Set (SRCH\_WIN\_R<sub>S</sub> = SRCH\_WIN\_R<sub>T</sub>)
- Maximum age for retention of Neighbor Set members  
(NGHBR\_MAX\_AGE<sub>S</sub> = NGHBR\_MAX\_AGE<sub>T</sub>)
- Power control reporting threshold (PWR\_REP\_THRESH<sub>S</sub> = PWR\_REP\_THRESH<sub>T</sub>)
- Power control reporting frame count (PWR\_REP\_FRAMES<sub>S</sub> = PWR\_REP\_FRAMES<sub>T</sub>)
- Threshold report mode indicator  
(PWR\_THRESH\_ENABLE<sub>S</sub> = PWR\_THRESH\_ENABLE<sub>T</sub>)
- Periodic report mode indicator (PWR\_PERIOD\_ENABLE<sub>S</sub> =  
PWR\_PERIOD\_ENABLE<sub>T</sub>).
- Power report delay (PWR\_REP\_DELAY<sub>S</sub> = PWR\_REP\_DELAY<sub>T</sub>)
- Pilot detection threshold (T\_ADD<sub>S</sub> = T\_ADD<sub>T</sub>)
- Pilot drop threshold (T\_DROP<sub>S</sub> = T\_DROP<sub>T</sub>)

- 1 • Active Set versus Candidate Set comparison threshold ( $T\_COMP_S = T\_COMP_T$ )
- 2 • Drop timer value ( $T\_TDROP_S = T\_TDROP_T$ )
- 3 • Drop timer range value ( $T\_TDROP\_RANGE_S = T\_TDROP\_RANGE_T$ ) if
- 4  $T\_TDROP\_RANGE\_INCL_T$  is equal to '1'; otherwise,  $T\_TDROP\_RANGE_S = '0000'$
- 5 • *Extended System Parameters Message* sent
- 6 ( $EXT\_SYS\_PARAMETER_S = EXT\_SYS\_PARAMETER_T$ )
- 7 • *Global Service Redirection Message* sent
- 8 ( $GLOBAL\_REDIRECT_S = GLOBAL\_REDIRECT_T$ )
- 9 • *Extended Global Service Redirection Message* sent
- 10 ( $EXT\_GLOBAL\_REDIRECT_S = EXT\_GLOBAL\_REDIRECT_T$ )
- 11 • *Extended Neighbor List Message* sent
- 12 ( $EXT\_NGHBR\_LST_S = EXT\_NGHBR\_LST_T$ )
- 13 • *General Neighbor List Message* sent
- 14 ( $GEN\_NGHBR\_LST_S = GEN\_NGHBR\_LST_T$ )
- 15 • *User Zone Identification Message* sent
- 16 ( $USER\_ZONE\_ID_S = USER\_ZONE\_ID_T$ )
- 17 • *Private Neighbor List Message* sent
- 18 ( $PRI\_NGHBR\_LST_S = PRI\_NGHBR\_LST_T$ )
- 19 • *Extended CDMA Channel List Message* sent
- 20 ( $EXT\_CHAN\_LST_S = EXT\_CHAN\_LST_T$ )
- 21 • If  $NEG\_SLOT\_CYCLE\_INDEX\_SUP_T$  is included and equal to '1', the mobile station
- 22 shall set  $MIN\_SLOT\_CYCLE\_INDEX$  to -4; otherwise, the mobile station shall set
- 23  $MIN\_SLOT\_CYCLE\_INDEX$  to 0.
- 24 • *Call Recovery Request Message* supported indicator
- 25 ( $CRRM\_MSG\_IND_S = CRRM\_MSG\_IND_T$ ).
- 26 The mobile station shall also store the following parameters:
  - 27 • If the mobile station is not in the *Origination Attempt Substate*, or *Page Response*
  - 28 *Substate*, the mobile station shall store the following prior to storing the remaining
  - 29 parameters:
    - 30 – Registered system identification ( $REG\_SID_S = SID_S$ ).
    - 31 – Registered network identification ( $REG\_NID_S = NID_S$ ).
    - 32 – Registered registration zone ( $REG\_REG\_ZONE_S = REG\_ZONE_S$ ).
    - 33 – Registered zone timer length ( $REG\_ZONE\_TIMER_S = ZONE\_TIMER_T$ ).
  - 34 • System identification ( $SID_S = SID_T$ )
  - 35 • Network identification ( $NID_S = NID_T$ )
  - 36 • Registration zone ( $REG\_ZONE_S = REG\_ZONE_T$ )
  - 37 • Number of registration zones to be retained ( $TOTAL\_ZONES_S = TOTAL\_ZONES_T$ )

- 1 • Zone timer length ( $\text{ZONE\_TIMER}_S = \text{ZONE\_TIMER}_T$ )
- 2 • Multiple SID storage indicator ( $\text{MULT\_SIDS}_S = \text{MULT\_SIDS}_T$ )
- 3 • Multiple NID storage indicator ( $\text{MULT\_NIDS}_S = \text{MULT\_NIDS}_T$ )
- 4 • Registration period ( $\text{REG\_PRD}_S = \text{REG\_PRD}_T$ )
- 5 • Base station latitude ( $\text{BASE\_LAT}_S = \text{BASE\_LAT}_T$ )
- 6 • Base station longitude ( $\text{BASE\_LONG}_S = \text{BASE\_LONG}_T$ )
- 7 • Registration distance ( $\text{REG\_DIST}_S = \text{REG\_DIST}_T$ )
- 8 • Base station horizontal location uncertainty ( $\text{LOC\_UNC\_H}_S = \text{LOC\_UNC\_H}_T$ )
- 9 • Base station height ( $\text{HEIGHT}_S = \text{HEIGHT}_T$ )
- 10 • Base station vertical location uncertainty ( $\text{LOC\_UNC\_V}_S = \text{LOC\_UNC\_V}_T$ )
- 11 If  $\text{EXT\_SYS\_PARAMETER}_S$  is equal to '0', then the mobile station shall perform the
- 12 following:
  - 13 • Set  $\text{EXT\_SYS\_PAR\_MSG\_SEQ}_S$  to  $\text{CONFIG\_MSG\_SEQ}_S$ ,
  - 14 • Set  $\text{BCAST\_INDEX}_S$  to  $\text{MAX\_SLOT\_CYCLE\_INDEX}_S$ ,
  - 15 • Set  $\text{IMSI\_O}$  to  $\text{IMSI\_M}$  by setting  $\text{IMSI\_O\_S}_S$  to  $\text{IMSI\_M\_S}_P$  (i.e., setting  $\text{IMSI\_O\_S1}_S$
  - 16 to  $\text{IMSI\_M\_S1}_P$  and  $\text{IMSI\_O\_S2}_S$  to  $\text{IMSI\_M\_S2}_P$ ),  $\text{MCC\_O}_S$  to  $\text{MCC\_M}_P$ ,
  - 17  $\text{IMSI\_O\_11\_12}_S$  to  $\text{IMSI\_M\_11\_12}_P$ , and  $\text{IMSI\_O\_ADDR\_NUM}_S$  to
  - 18  $\text{IMSI\_M\_ADDR\_NUM}_P$ ,
  - 19 • Set  $\text{RESELECT\_INCLUDED}_S$  to '0',
  - 20 • For Band Class 0, if the mobile station determines it is operating in Korea, set
  - 21  $\text{P\_REV}_S$  to '00000010'; otherwise, set  $\text{P\_REV}_S$  to '00000011'. For Band Class 3, set
  - 22  $\text{P\_REV}_S$  to '00000011'. For Band Class 1 and Band Class 4, set  $\text{P\_REV}_S$  to
  - 23 '00000001', and
  - 24 • Set  $\text{P\_REV\_IN\_USE}_S$  to the lesser value of  $\text{P\_REV}_S$  and  $\text{MOB\_P\_REV}_P$  of the current
  - 25 band class.
- 26 If  $\text{EXT\_CHAN\_LST}_S$  is equal to '0', then the mobile station shall set
- 27  $\text{EXT\_CHAN\_LST\_MSG\_SEQ}_S$  to  $\text{CONFIG\_MSG\_SEQ}_S$ .
- 28 If  $\text{GLOBAL\_REDIRECT}_S$  is equal to '0', then the mobile station shall set  $\text{GLOB\_SERV\_}$
- 29  $\text{REDIR\_MSG\_SEQ}_S$  to  $\text{CONFIG\_MSG\_SEQ}_S$ .
- 30 If  $\text{EXT\_GLOBAL\_REDIRECT}_S$  is equal to '0', then the mobile station shall set
- 31  $\text{EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ}_S$  to  $\text{CONFIG\_MSG\_SEQ}_S$ .
- 32 If  $\text{EXT\_NGHBR\_LST}_S$  is equal to '0', then the mobile station shall set
- 33  $\text{EXT\_NGHBR\_LST\_MSG\_SEQ}_S$  to  $\text{CONFIG\_MSG\_SEQ}_S$ .
- 34 If  $\text{GEN\_NGHBR\_LST}_S$  is equal to '0', then the mobile station shall perform the following:
  - 35 • Set  $\text{GEN\_NGHBR\_LST\_MSG\_SEQ}_S$  to  $\text{CONFIG\_MSG\_SEQ}_S$ .
  - 36 • Set the  $\text{SRCH\_WIN\_NGHBR}$  field of  $\text{NGHBR\_REC}$  to  $\text{SRCH\_WIN\_N}_S$  for all entries.

- 1       • Set the SRCH\_OFFSET\_NGHR field of NGHR\_REC to '000' for all entries.
- 2       • Set the TIMING\_INCL field of NGHR\_REC to '0' for all entries.
- 3       • Set RESQ\_ENABLED<sub>S</sub> to '0'.
- 4       • Set the NGHR\_RESQ\_CONFIGURED field of NGHR\_REC to '0' for all entries.
- 5       • If EXT\_NGHR\_LST<sub>S</sub> is equal to '0':
  - 6           – Set the SEARCH\_PRIORITY field of the NGHR\_REC to '10' (high) for all entries.
  - 7           – Set the NGHR\_BAND field of the NGHR\_REC to CDMABAND<sub>S</sub> for all entries.
  - 8           – Set the NGHR\_FREQ field of the NGHR\_REC to CDMACH<sub>S</sub> for all entries.
- 9 If GEN\_NGHR\_LST<sub>S</sub> is equal to '1', GEN\_NGHR\_LST\_MSG\_SEQ<sub>S</sub> is equal to  
10 CONFIG\_MSG\_SEQ<sub>S</sub>, and SETTING\_SEARCH\_WIN is equal to '1', the mobile station shall  
11 perform the following:
  - 12       • Set the SRCH\_WIN\_NGHR field of each NGHR\_REC to SEARCH\_WIN\_N<sub>S</sub> for all  
13       NGHR\_SET\_SIZE<sub>S</sub> entries.
  - 14       • Set SETTING\_SEARCH\_WIN to '0'.
- 15 If USER\_ZONE\_ID<sub>S</sub> is equal to '0', then the mobile station shall perform the following:
  - 16       • Set USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub>.
  - 17       • Set the UZID field of the UZ\_REC to '0000000000000000' for all entries.
  - 18       • Set the UZ\_REV field of the UZ\_REC to '0000' for all entries.
  - 19       • Set the TEMP\_SUB field of the UZ\_REC to '0' for all entries.
- 20 If USER\_ZONE\_ID<sub>S</sub> is equal to '1' and the mobile station does not support Tiered Services,  
21 then the mobile station shall set USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub>.
- 22 If PRI\_NGHR\_LST<sub>S</sub> is equal to '0', then the mobile station shall set  
23 PRI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub>.
- 24 If PRI\_NGHR\_LST<sub>S</sub> is equal to '1' and the mobile station does not support Tiered Services,  
25 then the mobile station shall set PRI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>S</sub>.
- 26 The mobile station shall also store the following parameters:
  - 27       • *Access Point Pilot Information Message* sent  
28       (AP\_PILOT\_INFO<sub>S</sub> = AP\_PILOT\_INFO<sub>r</sub>) if included; otherwise, AP\_PILOT\_INFO<sub>S</sub> = '0'  
29       If the APPIM\_PERIOD\_INDEX is included in the message APPIM\_PERIOD\_INDEX<sub>S</sub> =  
30       APPIM\_PERIOD\_INDEX<sub>r</sub>. Otherwise, APPIM\_PERIOD\_INDEX<sub>S</sub> = 0.
  - 31       • *Access Point Identification Message* sent  
32       (AP\_IDT<sub>S</sub> = AP\_IDT<sub>r</sub>) if included; otherwise, AP\_IDT<sub>S</sub> = '0'
  - 33       • *Access Point Identification Text Message* sent  
34       (AP\_ID\_TEXT<sub>S</sub> = AP\_ID\_TEXT<sub>r</sub>) if included; otherwise, AP\_ID\_TEXT<sub>S</sub> = '0'



- 1       • *General Overhead Information Message* sent  
2       (GEN\_OVHD\_INF\_IND<sub>S</sub> = GEN\_OVHD\_INF\_IND<sub>T</sub>) if included; otherwise,  
3       GEN\_OVHD\_INF\_IND<sub>S</sub> = '0'
- 4       If the GEN\_OVHD\_CYCLE\_INDEX is included in the message  
5       GEN\_OVHD\_CYCLE\_INDEX<sub>S</sub> = GEN\_OVHD\_CYCLE\_INDEX<sub>T</sub>. Otherwise,  
6       GEN\_OVHD\_CYCLE\_INDEX<sub>S</sub> = 0.
- 7       • *Flex Duplex CDMA Channel List Message* sent  
8       (FD\_CHAN\_LST\_IND<sub>S</sub> = FD\_CHAN\_LST\_IND<sub>T</sub>) if included; otherwise,  
9       FD\_CHAN\_LST\_IND<sub>S</sub> = '0'.
- 10       • *Alternative Technologies Information Message* sent  
11       (ATIM\_IND<sub>S</sub> = ATIM\_IND<sub>T</sub>) if included; otherwise, ATIM\_IND<sub>S</sub> = '0'
- 12       If the ATIM\_CYCLE\_INDEX is included in the message ATIM\_CYCLE\_INDEX<sub>S</sub> =  
13       ATIM\_CYCLE\_INDEX<sub>T</sub>. Otherwise, ATIM\_CYCLE\_INDEX<sub>S</sub> = 0.
- 14       The mobile station shall ignore any fields at the end of the *System Parameters Message*  
15       that are not defined according to the protocol revision level (MOB\_P\_REV<sub>P</sub> of the current  
16       band class) being used by the mobile station.

#### 17   2.6.2.2.1.2 Paging Channel Assignment Change

18   If the number of Paging Channels specified in the *System Parameters Message*  
19   (PAGE\_CHAN<sub>T</sub>) is different from PAGE\_CHAN<sub>S</sub>, the mobile station shall use the hash  
20   algorithm specified in 2.6.7.1 to select a new Paging Channel number in the range 1 to  
21   PAGE\_CHAN<sub>T</sub>. The mobile station shall store the new Paging Channel number as  
22   PAGECH<sub>S</sub>. The mobile station shall then set PAGE\_CHAN<sub>S</sub> to PAGE\_CHAN<sub>T</sub>. The mobile  
23   station shall set ACC\_MSG\_SEQ<sub>S</sub> to NULL. If the mobile station has not stored  
24   configuration parameters for the new Paging Channel, or if the stored parameters are not  
25   current (see 2.6.2.2), the mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub>, SYS\_PAR\_MSG-  
26   \_SEQ<sub>S</sub>, NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
27   GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
28   USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, and  
29   EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
30   FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, and GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to NULL. The mobile  
31   station shall then begin monitoring the new Paging Channel as specified in 2.6.2.1.1.

#### 32   2.6.2.2.1.3 RESCAN Parameter

33   If the RESCAN<sub>T</sub> field in the *System Parameters Message* equals '1', the mobile station shall  
34   enter the *System Determination Substate* of the *Mobile Station Initialization State* with a  
35   rescan indication (see 2.6.1.1).

#### 36   2.6.2.2.1.4 Roaming Status

37   The mobile station shall determine the roaming status for the mobile station (see 2.6.5.3).  
38   The mobile station should indicate to the user whether the mobile station is roaming.

## 2.6.2.2.1.5 Registration

The mobile station shall update stored variables and perform other registration procedures as specified in 2.6.5.5.2.2.

## 2.6.2.2.1.6 Slot Cycle Index

The mobile station shall set  $SLOT\_CYCLE\_INDEX_S$  to :

$$\max \left( \begin{array}{l} MIN\_SLOT\_CYCLE\_INDEX_S, \\ \min(SLOT\_CYCLE\_INDEX\_REG, MAX\_SLOT\_CYCLE\_INDEX_S) \end{array} \right).$$

Where,  $SLOT\_CYCLE\_INDEX\_REG$  is computed based on the slot cycle index value included in the last registration attempt (see 2.6.5.5.3.1 and 2.6.5.5.3.2).

If the mobile station is operating in the slotted mode, it shall set its slot cycle length as described in 2.6.2.1.1.3.

## 2.6.2.2.1.7 PACA Disable for SID Change

If  $PACA_S$  is equal to enabled, and  $SID_S$  is not equal to  $PACA\_SID_S$ , the mobile station shall set  $PACA_S$  to disabled and  $PACA\_CANCEL$  to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

## 2.6.2.2.1.8 Retry Delay Disable for Packet Zone ID or SID/NID Change

The mobile station shall set  $RETRY\_DELAY_S[RETRY\_TYPE]$  to 0 when the mobile station determines that the Packet Zone Identification or the System Identification/Network Identification (SID/NID pair) has been changed, where  $RETRY\_TYPE$  is equal to '001', '010', '011', '100', or '101'.

## 2.6.2.2.1.9 Encryption key reset for SID/NID Change

When the mobile station determines that the System Identification/Network Identification (SID/NID pair) has been changed, it shall perform the following:

- The mobile station shall disable the key setup timer if the timer is running.
- If there is an entry in the mobile station's  $SID\_NID\_LIST_S$  that matches the previous SID/NID pair, the mobile station shall perform the following:
  - The mobile station shall save the following encryption/integrity related parameters associated with previous SID/NID pair:
    - +  $KEY\_ID$ ,
    - +  $ENC\_KEY[KEY\_ID]$  and  $INT\_KEY[KEY\_ID]$ ,
    - +  $TX\_EXT\_SSEQ[0][KEY\_ID]$ ,  $TX\_EXT\_SSEQ[1][KEY\_ID]$ ,  
 $RX\_EXT\_SSEQ[0][KEY\_ID]$ , and  $RX\_EXT\_SSEQ[1][KEY\_ID]$  and
    - +  $C\_SIG\_ENCRYPT\_MODE_S$ .

- 1       – If there are more than one SID/NID pairs in the SID\_NID\_LIST<sub>S</sub> for which there
- 2       are associated encryption/integrity related parameters saved, the mobile station
- 3       may remove the parameters associated with the SID/NID pair that was visited
- 4       at the earliest time.
- 5       • If there is an entry in the mobile station's SID\_NID\_LIST<sub>S</sub> that matches the base
- 6       station's SID and NID and the following encryption/integrity related parameters
- 7       last used in that system (SID/NID pair) are stored in the mobile station, the mobile
- 8       station shall restore them:
  - 9       – KEY\_ID,
  - 10      – ENC\_KEY[KEY\_ID] and INT\_KEY[KEY\_ID],
  - 11      – TX\_EXT\_SSEQ[0][KEY\_ID], TX\_EXT\_SSEQ[1][KEY\_ID],
  - 12      RX\_EXT\_SSEQ[0][KEY\_ID], and RX\_EXT\_SSEQ[1][KEY\_ID] and
  - 13      – C\_SIG\_ENCRYPT\_MODE<sub>S</sub>.
- 14      • Otherwise, the mobile station shall set ENC\_KEY['00'], ENC\_KEY['01'],
- 15      INT\_KEY['00'], and INT\_KEY['01'] to NULL.

#### 16   2.6.2.2.2 Access Parameters Message

17   Whenever an *Access Parameters Message* is received on the Paging Channel, the sequence  
 18   number, ACC\_MSG\_SEQ<sub>R</sub>, shall be compared to ACC\_MSG\_SEQ<sub>S</sub>. If the comparison  
 19   results in a match, the mobile station may ignore the message. If the comparison results  
 20   in a mismatch, then the mobile station shall process the remaining fields in the message  
 21   as follows.

22   If PROBE\_PN\_RAN, MAX\_REQ\_SEQ, or MAX\_RSP\_SEQ are not within the valid ranges  
 23   specified in 3.7.2.3.2.2, then the mobile station shall ignore the *Access Parameters*  
 24   *Message* that contains them.

25   The mobile station shall store the following parameters:

- 26      • *Access Parameters Message* sequence number  
 27        (ACC\_MSG\_SEQ<sub>S</sub> = ACC\_MSG\_SEQ<sub>R</sub>)
- 28      • Number of Access Channels (ACC\_CHAN<sub>S</sub> = ACC\_CHAN<sub>R</sub>)
- 29      • Nominal transmit power offset (NOM\_PWR<sub>S</sub> = NOM\_PWR<sub>R</sub>)
- 30      • Initial power offset for access (INIT\_PWR<sub>S</sub> = INIT\_PWR<sub>R</sub>)
- 31      • Power increment (PWR\_STEP<sub>S</sub> = PWR\_STEP<sub>R</sub>)
- 32      • Number of access probes (NUM\_STEP<sub>S</sub> = NUM\_STEP<sub>R</sub>)
- 33      • Maximum Access Channel message capsule size (MAX\_CAP\_SZ<sub>S</sub> = MAX\_CAP\_SZ<sub>R</sub>)
- 34      • Access Channel preamble length (PAM\_SZ<sub>S</sub> = PAM\_SZ<sub>R</sub>)
- 35      • Persistence modifier for Access Channel attempts for registrations which are not
- 36        responses to the *Registration Request Order* (REG\_PSIST<sub>S</sub> = REG\_PSIST<sub>R</sub>)

- 1       • Persistence modifier for Access Channel attempts for message transmissions  
2       (MSG\_PSIST<sub>S</sub> = MSG\_PSIST<sub>R</sub>)
- 3       • If PSIST\_EMG\_INCL<sub>R</sub> is equal to '0', the mobile station shall set the persistence  
4       modifier for emergency calls from mobile stations in access overload classes 0 to 9  
5       (PSIST\_EMG<sub>S</sub>) to '000'; otherwise, the mobile station shall set PSIST\_EMG<sub>S</sub> equal  
6       to PSIST\_EMG<sub>R</sub>.
- 7       • Time randomization for Access Channel probes  
8       (PROBE\_PN\_RAN<sub>S</sub> = PROBE\_PN\_RAN<sub>R</sub>)
- 9       • Acknowledgment timeout (ACH\_ACC\_TMO<sub>S</sub> = ACC\_TMO<sub>R</sub>)
- 10      • Access Channel probe backoff range (PROBE\_BKOFF<sub>S</sub> = PROBE\_BKOFF<sub>R</sub>)
- 11      • Access Channel probe sequence backoff range (BKOFF<sub>S</sub> = BKOFF<sub>R</sub>)
- 12      • Maximum number of probe sequences for an Access Channel request  
13      (MAX\_REQ\_SEQ<sub>S</sub> = MAX\_REQ\_SEQ<sub>R</sub>)
- 14      • Maximum number of probe sequences for an Access Channel response  
15      (MAX\_RSP\_SEQ<sub>S</sub> = MAX\_RSP\_SEQ<sub>R</sub>)
- 16      • If CDMABAND<sub>S</sub> is equal to '0', the mobile station shall set extended nominal  
17      transmit power NOM\_PWR\_EXT<sub>S</sub> to '0'; otherwise, the mobile station shall store  
18      extended nominal transmit power (NOM\_PWR\_EXT<sub>S</sub> = NOM\_PWR\_EXT<sub>R</sub>).
- 19      • IC threshold (IC\_THRESH<sub>S</sub> = -7)
- 20      The mobile station shall also store the following parameters:
- 21      • Authentication mode (if AUTH<sub>R</sub> is equal to '00' or '01', then AUTH<sub>S</sub> = AUTH<sub>R</sub>;  
22      otherwise AUTH<sub>S</sub> = '01')
- 23      • Random challenge value (RAND<sub>S</sub> = RAND<sub>R</sub>)
- 24      The mobile station shall ignore any fields at the end of the *Access Parameters Message*  
25      which are not defined according to the protocol revision level (MOB\_P\_REV<sub>p</sub> of the current  
26      band class) being used by the mobile station.
- 27      The mobile station shall store the persistence parameter number according to the following  
28      rule: If the mobile station's access overload class is in the range 0-9, set PSIST<sub>S</sub> equal to  
29      PSIST(0-9)<sub>R</sub>; otherwise set PSIST<sub>S</sub> equal to PSIST(n)<sub>R</sub>, where n is equal to the mobile station  
30      access overload class.
- 31      The mobile station shall store the Access Control based on Call Type (ACCT) information  
32      as follows:
- 33      • Set ACCT\_SO\_LIST to NULL.
- 34      • Set ACCT\_SO\_GRP\_LIST to NULL.
- 35      • If ACCT\_INCL<sub>R</sub> is equal to '1' and ACCOLC<sub>p</sub> is in the range 0 to 9, then the mobile  
36      station shall perform the following:  
37      – Set ACCT\_INCL\_EMG<sub>S</sub> to ACCT\_INCL\_EMG<sub>R</sub>.

- 1       – If ACCT\_SO\_INCL<sub>r</sub> is equal to '1', then for each ACCT\_SO<sub>r</sub> included in this
- 2       message:
- 3       + If ACCT\_AOC\_BITMAP\_INCL<sub>r</sub> is equal to '0', or if ACCT\_AOC\_BITMAP\_INCL<sub>r</sub>
- 4       is equal to '1' and the bit in the associated ACCT\_AOC\_BITMAP1<sub>r</sub>
- 5       corresponding to the mobile station's ACCOLC<sub>p</sub> (see Table 3.7.2.3.2.2-1) is
- 6       equal to '1', then add ACCT\_SO<sub>r</sub> to ACCT\_SO\_LIST.
- 7       – If ACCT\_SO\_GRP\_INCL<sub>r</sub> is equal to '1', then for each ACCT\_SO\_GRP<sub>r</sub> included
- 8       in this message:
- 9       + If ACCT\_AOC\_BITMAP\_INCL<sub>r</sub> is equal to '0', or if ACCT\_AOC\_BITMAP\_INCL<sub>r</sub>
- 10      is equal to '1' and the bit in the associated ACCT\_AOC\_BITMAP2<sub>r</sub>
- 11      corresponding to the mobile station's ACCOLC<sub>p</sub> (see Table 3.7.2.3.2.2-1) is
- 12      equal to '1', then add ACCT\_SO\_GRP<sub>r</sub> to ACCT\_SO\_GRP\_LIST.

13 The mobile station shall set CURR\_ACC\_MSG\_SEQ equal to ACC\_MSG\_SEQ<sub>s</sub>.

#### 14 2.6.2.2.3 Neighbor List Message

15 Whenever a valid *Neighbor List Message* is received on the current Paging Channel  
 16 (PAGECH<sub>s</sub>), the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>r</sub>, shall be  
 17 compared to that stored in NGHBR\_LST\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match,  
 18 the mobile station may ignore the message. If the comparison results in a mismatch, then  
 19 the mobile station shall process the remaining fields in the message as follows.

20 If the PILOT\_INC field is not within the valid range specified in 3.7.2.3.2.3, then the mobile  
 21 station shall ignore the *Neighbor List Message* that contains it.

22 The mobile station shall store the following parameters:

- 23       • Configuration message sequence number
- 24       (CONFIG\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>,
- 25       NGHBR\_LST\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>)
- 26       • Pilot PN sequence offset increment (PILOT\_INC<sub>s</sub> = PILOT\_INC<sub>r</sub>)

27 The mobile station shall set NGHBR\_SET\_SIZE<sub>s</sub> to the number of neighboring base  
 28 stations contained in the *Neighbor List Message*.

29 For each of the neighboring base stations contained in the *Neighbor List Message*, the  
 30 mobile station shall perform the following:

- 31       • If the *i*<sup>th</sup> occurrence of NGHBR\_CONFIG<sub>r</sub> is equal to '000', '001', or '010', set the
- 32       NGHBR\_CONFIG field of NGHBR\_REC[i] to the *i*<sup>th</sup> occurrence of NGHBR\_CONFIG<sub>r</sub>;
- 33       otherwise, set the NGHBR\_CONFIG field of NGHBR\_REC [i] to '011'.
- 34       • Set the NGHBR\_PN field of NGHBR\_REC [i] to the *i*<sup>th</sup> occurrence of NGHBR\_PN<sub>r</sub>.

35 If GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> is not equal to CONFIG\_MSG\_SEQ<sub>s</sub>, the mobile station  
 36 shall perform the following:

- 37       • Set the SEARCH\_PRIORITY field of the NGHBR\_REC to '10' (high) for all
- 38       NGHBR\_SET\_SIZE<sub>s</sub> entries.

- 1       • Set the NGHBR\_BAND field of NGHBR\_REC to CDMABAND<sub>S</sub> for all
- 2       NGHBR\_SET\_SIZE<sub>S</sub> entries.
- 3       • If NGHBR\_CONFIG<sub>r</sub> equals '010', set the NGHBR\_FREQ field of NGHBR\_REC to the
- 4       first CDMA Channel listed in the *CDMA Channel List Message* or *Extended CDMA*
- 5       *Channel List Message* transmitted by the current base station for all
- 6       NGHBR\_SET\_SIZE<sub>S</sub> entries; otherwise, set the NGHBR\_FREQ field of NGHBR\_REC
- 7       to CDMACH<sub>S</sub> for all NGHBR\_SET\_SIZE<sub>S</sub> entries.
- 8       • Set the SRCH\_WIN\_NGHBR field of NGHBR\_REC to SRCH\_WIN\_N<sub>S</sub> for all
- 9       NGHBR\_SET\_SIZE<sub>S</sub> entries.
- 10      • Set the SRCH\_OFFSET\_NGHBR field of NGHBR\_REC to '000' for all entries.
- 11      The mobile station shall set the ACCESS\_ENTRY\_HO field of the NGHBR\_REC to '0' for all
- 12      NGHBR\_SET\_SIZE<sub>S</sub> entries if any of the following conditions are met:
- 13      • EXT\_SYS\_PARAMETER<sub>S</sub> is equal to '0',
- 14      • NGHBR\_SET\_ENTRY\_INFO<sub>S</sub> is equal to '0', or
- 15      • EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub> is not equal to CONFIG\_MSG\_SEQ<sub>S</sub>.
- 16      The mobile station shall set the ACCESS\_HO\_ALLOWED field of the NGHBR\_REC to '0' for
- 17      all NGHBR\_SET\_SIZE<sub>S</sub> entries if any of the following conditions are met:
- 18      • EXT\_SYS\_PARAMETER<sub>S</sub> is equal to '0',
- 19      • NGHBR\_SET\_ACCESS\_INFO<sub>S</sub> is equal to '0', or
- 20      • EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub> is not equal to CONFIG\_MSG\_SEQ<sub>S</sub>.
- 21      The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it
- 22      consists only of pilot offsets listed in the *Neighbor List Message*. If the *Neighbor List*
- 23      *Message* contains more pilot offsets than the mobile station can store, the mobile station
- 24      shall store the pilot offsets beginning at the start of the *Neighbor List Message*, up to the
- 25      limits of the mobile station's Neighbor Set storage capacity.
- 26      2.6.2.2.4 CDMA Channel List Message
- 27      Whenever a *CDMA Channel List Message* is received on the Paging Channel, the
- 28      configuration message sequence number, CONFIG\_MSG\_SEQ<sub>r</sub>, shall be compared to that
- 29      stored in CHAN\_LST\_MSG\_SEQ<sub>S</sub>. If the comparison results in a match, the mobile station
- 30      may ignore the message. If the comparison results in a mismatch, then the mobile station
- 31      shall process the remaining fields in the message as follows.
- 32      The mobile station shall store the following parameters:
- 33      • Configuration message sequence number
- 34        (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>,
- 35        CHAN\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>)
- 36      The mobile station shall perform the following:
- 37      • If SYS\_PAR\_MSG\_SEQ<sub>S</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, and
- 38      FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub> are current,

- 1       – If EXT\_CHAN\_LST<sub>s</sub> is equal to '1', the mobile station shall ignore this message.
- 2       – If EXT\_CHAN\_LST<sub>s</sub> is equal to '0', the mobile station shall process this message
- 3       as described below.
- 4       • Otherwise,
- 5       – if the mobile station does not support flexible spacing between forward and
- 6       reverse channels the mobile station shall process this message after
- 7       SYS\_PAR\_MSG\_SEQ<sub>s</sub> and EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub> are current.
- 8       – Otherwise, the mobile station shall process this message after
- 9       SYS\_PAR\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, and FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>
- 10      become current.

11 If the FD\_CHAN\_LST\_SEQ<sub>s</sub> is current and the mobile station supports at least one  
 12 bandclass listed by the base station in the *Flex Duplex CDMA Channel List Message*, the  
 13 mobile station shall ignore this message. Otherwise, mobile station shall process this  
 14 message as follows:

15 The mobile station shall use the hash algorithm specified in 2.6.7.1 and the number of  
 16 channels listed in the *CDMA Channel List Message* to determine the CDMA Channel  
 17 (Frequency Assignment) for its Paging Channel. If the CDMA Frequency Assignment has  
 18 changed (the computed CDMA Channel is different from CDMACH<sub>s</sub>), the mobile station  
 19 shall perform the following actions:

- 20      • Set CDMACH<sub>s</sub> to the new CDMA Channel.
- 21      • Set PAGE\_CHAN<sub>s</sub> to '1'.
- 22      • Set PAGECH<sub>s</sub> to the Primary Paging Channel.
- 23      • If the stored configuration parameters is not current (see 2.6.2.2) for the
- 24      corresponding base station and frequency assignment, set CONFIG\_MSG\_SEQ<sub>s</sub>,
- 25      SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>,
- 26      EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 27      EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID-
- 28      MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,
- 29      FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and
- 30      ACC\_MSG\_SEQ<sub>s</sub> to NULL.
- 31      • Tune to the new CDMA Channel.

#### 32 2.6.2.2.5 Extended System Parameters Message

33 Whenever an *Extended System Parameters Message* is received on the Paging Channel, the  
 34 configuration message sequence number, CONFIG\_MSG\_SEQ<sub>r</sub>, shall be compared to that  
 35 stored in EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match, the mobile  
 36 station may ignore the message. If the comparison results in a mismatch, then the mobile  
 37 station shall process the remaining fields in the message as follows.

38 If the protocol revision level supported by the mobile station (MOB\_P\_REV<sub>p</sub>) is less than  
 39 the minimum protocol revision level supported by the base station (MIN\_P\_REV<sub>r</sub>), the  
 40 mobile station shall enter the *System Determination Substate* of the *Mobile Station*

1 *Initialization State* with a protocol mismatch indication (see 2.6.1.1). Otherwise, the mobile  
 2 station shall store the following parameters:

- 3 • Configuration message sequence number  
 4 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
 5 EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)
- 6 • Preferred Access Channel MSID type (PREF\_MSID\_TYPE<sub>S</sub> = PREF\_MSID\_TYPE<sub>R</sub>)
- 7 • Extended Preferred Access Channel MSID type  
 8 (EXT\_PREF\_MSID\_TYPE<sub>S</sub> = EXT\_PREF\_MSID\_TYPE<sub>R</sub>) if included; otherwise, set  
 9 EXT\_PREF\_MSID\_TYPE<sub>S</sub> to NULL.
- 10 • MEID Required indicator (MEID\_REQD<sub>S</sub> = MEID\_REQD<sub>R</sub>) if included; otherwise, set  
 11 MEID\_REQD<sub>S</sub> to '0'
- 12 • Broadcast slot cycle index (BCAST\_INDEX<sub>S</sub> = BCAST\_INDEX<sub>R</sub>)
- 13 • The mobile station shall set its operational IMSI, IMSI<sub>O</sub>, as follows:
  - 14 – If IMSI\_T\_SUPPORTED<sub>R</sub> is equal to '0', the mobile station shall set IMSI<sub>O</sub> to  
 15 IMSI<sub>Mp</sub>.
  - 16 – If IMSI\_T\_SUPPORTED<sub>R</sub> is equal to '1' and the mobile station's IMSI<sub>Tp</sub> has  
 17 been programmed, the mobile station shall set IMSI<sub>O</sub> to IMSI<sub>Tp</sub>.
  - 18 – If IMSI\_T\_SUPPORTED<sub>R</sub> is equal to '1' and the mobile station's IMSI<sub>Tp</sub> has not  
 19 been programmed, the mobile station shall set IMSI<sub>O</sub> to IMSI<sub>Mp</sub>.
- 20 • If MCC<sub>R</sub> = '111111111' and IMSI\_11\_12<sub>R</sub> = '111111', the mobile station shall set  
 21 the IMSI<sub>O</sub> to IMSI<sub>Mp</sub> and store:
  - 22 – Mobile Country Code (MCC<sub>S</sub> = MCC<sub>Mp</sub>) and
  - 23 – IMSI 11th and 12th digits (IMSI\_11\_12<sub>S</sub> = IMSI<sub>M</sub>\_11\_12<sub>p</sub>);
  - 24 otherwise, the mobile station shall store:
    - 25 – Mobile Country Code (MCC<sub>S</sub> = MCC<sub>R</sub>) and
    - 26 – IMSI 11th and 12th digits (IMSI\_11\_12<sub>S</sub> = IMSI\_11\_12<sub>R</sub>).
- 27 • Least significant digit of MNC (IMSI\_10<sub>S</sub> = IMSI\_10<sub>R</sub>), if included.
- 28 • If IMSI<sub>O</sub> is set to the IMSI<sub>M</sub>, the mobile station shall set:
  - 29 – IMSI<sub>O</sub>\_S<sub>S</sub> to IMSI<sub>M</sub>\_S<sub>p</sub> (i.e., IMSI<sub>O</sub>\_S1<sub>S</sub> to IMSI<sub>M</sub>\_S1<sub>p</sub> and IMSI<sub>O</sub>\_S2<sub>S</sub> to  
 30 IMSI<sub>M</sub>\_S2<sub>p</sub>)
  - 31 – IMSI<sub>O</sub>\_11\_12<sub>S</sub> to IMSI<sub>M</sub>\_11\_12<sub>p</sub>
  - 32 – MCC<sub>O</sub><sub>S</sub> to MCC<sub>Mp</sub>
  - 33 – IMSI<sub>O</sub>\_ADDR\_NUM<sub>S</sub> to IMSI<sub>M</sub>\_ADDR\_NUM<sub>p</sub>
- 34 • If IMSI<sub>O</sub> is set to the IMSI<sub>T</sub>, the mobile station shall set:
  - 35 – IMSI<sub>O</sub>\_S<sub>S</sub> to IMSI<sub>T</sub>\_S<sub>p</sub> (i.e., IMSI<sub>O</sub>\_S1<sub>S</sub> to IMSI<sub>T</sub>\_S1<sub>p</sub> and IMSI<sub>O</sub>\_S2<sub>S</sub> to  
 36 IMSI<sub>T</sub>\_S2<sub>p</sub>).



- 1        - IMSI\_O\_11\_12<sub>s</sub> to IMSI\_T\_11\_12<sub>p</sub>
- 2        - MCC\_O<sub>s</sub> to MCC\_T<sub>p</sub>
- 3        - IMSI\_O\_ADDR\_NUM<sub>s</sub> to IMSI\_T\_ADDR\_NUM<sub>p</sub>
- 4        • If IMSI\_O has been changed, the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
5        CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>  
6        to NULL, and set PAGE\_CHAN<sub>s</sub> to '1', and set PAGECH<sub>s</sub> to the Primary Paging  
7        Channel.
- 8        • Protocol revision level (P\_REV<sub>s</sub> = P\_REV<sub>r</sub>) if included in the message; otherwise, set  
9        P\_REV<sub>s</sub> as follows:
  - 10       - For Band Class 0, if the mobile station determines it is operating in Korea, set  
11       P\_REV<sub>s</sub> to '00000010'; otherwise, set P\_REV<sub>s</sub> to '00000011'.
  - 12       - For Band Class 3, set P\_REV<sub>s</sub> to '00000011'.
  - 13       - For Band Class 1 and Band Class 4, set P\_REV<sub>s</sub> to '00000001'.
- 14       • Minimum protocol revision level (MIN\_P\_REV<sub>s</sub> = MIN\_P\_REV<sub>r</sub>) if included in the  
15       message; otherwise, MIN\_P\_REV<sub>s</sub> = '00000010' for Band Class 0, MIN\_P\_REV<sub>s</sub> =  
16       '00000001' for Band Class 1 and Band Class 4, and MIN\_P\_REV<sub>s</sub> = '00000011' for  
17       Band Class 3.
- 18       • Protocol revision level currently in use (P\_REV\_IN\_USE<sub>s</sub> = the lesser value of  
19       P\_REV<sub>s</sub> and MOB\_P\_REV<sub>p</sub> of the current band class)
- 20       • Slope of the handoff add/drop criterion (SOFT\_SLOPE<sub>s</sub> = SOFT\_SLOPE<sub>r</sub>) if included  
21       in the message; otherwise, SOFT\_SLOPE<sub>s</sub> = '000000'.
- 22       • Intercept of the handoff add criterion (ADD\_INTERCEPT<sub>s</sub> = ADD\_INTERCEPT<sub>r</sub>)
- 23       • Intercept of the handoff drop criterion (DROP\_INTERCEPT<sub>s</sub> = DROP\_INTERCEPT<sub>r</sub>)
- 24       • Delete foreign TMSI (DELETE\_FOR\_TMSI<sub>s</sub> = DELETE\_FOR\_TMSI<sub>r</sub>)
- 25       • Use TMSI (USE\_TMSI<sub>s</sub> = USE\_TMSI<sub>r</sub>)
- 26       • TMSI zone length (TMSI\_ZONE\_LEN<sub>s</sub> = TMSI\_ZONE\_LEN<sub>r</sub>)
- 27       • TMSI zone number (TMSI\_ZONE<sub>s</sub> = TMSI\_ZONE<sub>r</sub>)
- 28       • Maximum number of alternative service options (MAX\_NUM\_ALT\_SO<sub>s</sub> =  
29       MAX\_NUM\_ALT\_SO<sub>r</sub>).
- 30       • System reselection indicator (RESELECT\_INCLUDED<sub>s</sub> = RESELECT\_INCLUDED<sub>r</sub>) if  
31       included in the message; otherwise, RESELECT\_INCLUDED<sub>s</sub> = '0'.
- 32       • Pilot reporting indicator (PILOT\_REPORT<sub>s</sub> = PILOT\_REPORT<sub>r</sub>)
- 33       • Neighbor Set access entry handoff information indicator  
34       (NGHBR\_SET\_ENTRY\_INFO<sub>s</sub> = NGHBR\_SET\_ENTRY\_INFO<sub>r</sub>) if included in the  
35       message; otherwise, NGHBR\_SET\_ENTRY\_INFO<sub>s</sub> = '0'.

- 1 • Neighbor Set access handoff information indicator (NGHBR\_SET\_ACCESS\_INFO<sub>S</sub> =  
2 NGHBR\_SET\_ACCESS\_INFO<sub>T</sub>) if included in the message; otherwise,  
3 NGHBR\_SET\_ACCESS\_INFO<sub>S</sub> = '0'.
- 4 • Short Data Burst supported indicator (SDB\_SUPPORTED<sub>S</sub> = SDB\_SUPPORTED<sub>T</sub>)
- 5 • Nominal reverse traffic channel output power offset relative to Reverse Pilot  
6 Channel power (RLGAIN\_TRAFFIC\_PILOT<sub>S</sub> = RLGAIN\_TRAFFIC\_PILOT<sub>T</sub>)
- 7 • Broadcast GPS Assist Indicator (BROADCAST\_GPS\_ASST<sub>S</sub> =  
8 BROADCAST\_GPS\_ASST<sub>T</sub>)
- 9 • Reverse Power Control Delay (REV\_PWR\_CNTL\_DELAY<sub>S</sub> =  
10 REV\_PWR\_CNTL\_DELAY<sub>T</sub>) if included
- 11 • Permission for the mobile station to request QoS settings in the *Origination*  
12 *Message*, *Origination Continuation Message*, or *Enhanced Origination Message*  
13 (MOB\_QOS<sub>S</sub> = MOB\_QOS<sub>T</sub>)
- 14 • If ENC\_SUPPORTED<sub>T</sub> is equal to '1', the mobile station shall store:
  - 15 – Signaling encryption supported indicator (SIG\_ENCRYPT\_SUP<sub>S</sub> =  
16 SIG\_ENCRYPT\_SUP<sub>T</sub>)
  - 17 – User information encryption supported indicator (UI\_ENCRYPT\_SUP<sub>S</sub> =  
18 UI\_ENCRYPT\_SUP<sub>T</sub>)
- 19 • Sync ID supported indicator (USE\_SYNC\_ID<sub>S</sub> = USE\_SYNC\_ID<sub>T</sub>)
- 20 • Concurrent services supported indicator (CS\_SUPPORTED<sub>S</sub> = CS\_SUPPORTED<sub>T</sub>)
- 21 • Maximum number of additional service reference identifiers allowed in origination  
22 (MAX\_ADD\_SERV\_INSTANCE<sub>S</sub> = MAX\_ADD\_SERV\_INSTANCE<sub>T</sub>), if included;  
23 otherwise, the mobile station shall set MAX\_ADD\_SERV\_INSTANCE<sub>S</sub> to 0.
- 24 • Primary Broadcast Control Channel supported indicator (BCCH\_SUPPORTED<sub>S</sub> =  
25 BCCH\_SUPPORTED<sub>T</sub>).
- 26 • Pilot information request supported indicator (PILOT\_INFO\_REQ\_SUPPORTED<sub>S</sub> =  
27 PILOT\_INFO\_REQ\_SUPPORTED<sub>T</sub>).
- 28 • Message integrity supported indicator (MSG\_INTEGRITY\_SUP<sub>S</sub> =  
29 MSG\_INTEGRITY\_SUP<sub>T</sub>), if P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to 10;  
30 otherwise, MSG\_INTEGRITY\_SUP<sub>S</sub> = 0.
- 31 • If MSG\_INTEGRITY\_SUP<sub>T</sub> is equal to '1' and SIG\_INTEGRITY\_SUP\_INCL<sub>T</sub> is equal to  
32 '1', the mobile station shall store the message integrity algorithms that the base  
33 station supports (SIG\_INTEGRITY\_SUP<sub>S</sub> = SIG\_INTEGRITY\_SUP<sub>T</sub>); otherwise, the  
34 mobile station shall set SIG\_INTEGRITY\_SUP<sub>S</sub> to '00000000'.
- 35 • Band class information request indicator (BAND\_CLASS\_INFO\_REQ<sub>S</sub> =  
36 BAND\_CLASS\_INFO\_REQ<sub>T</sub>)
- 37 • Alternate CDMA band class (ALT\_BAND\_CLASS<sub>S</sub> = ALT\_BAND\_CLASS<sub>T</sub>), if  
38 BAND\_CLASS\_INFO\_REQ<sub>T</sub> is equal to '1'.

- 1 • CDMA off time report supported indicator  
2 (CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>S</sub> = CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>T</sub>)
- 3 • If CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>T</sub> is equal to '1', the mobile station shall store:  
4 – CDMA off time report threshold (CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>S</sub> =  
5 CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>T</sub> in units specified by  
6 CDMA\_OFF\_TIME\_REP\_UNIT<sub>T</sub>)
- 7 • Control Hold Mode supported indicator (CHM\_SUPPORTED<sub>S</sub> = CHM\_SUPPORTED<sub>T</sub>)  
8 if included; otherwise, the mobile station shall perform the following:  
9 – If P\_REV\_IN\_USE<sub>S</sub> is less than six, set CHM\_SUPPORTED<sub>S</sub> to '0'.  
10 – Otherwise, set CHM\_SUPPORTED<sub>S</sub> to '1'.
- 11 • Release to Idle State allowed indicator (RELEASE\_TO\_IDLE\_IND<sub>S</sub> =  
12 RELEASE\_TO\_IDLE\_IND<sub>T</sub>).
- 13 • *Reconnect Message* supported indicator  
14 (RECONNECT\_MSG\_IND<sub>S</sub> = RECONNECT\_MSG\_IND<sub>T</sub>).
- 15 • Short Data Burst allowed in *Reconnect Message* allowed indicator  
16 (SDB\_IN\_RCNM\_IND<sub>S</sub> = SDB\_IN\_RCNM\_IND<sub>T</sub>), if included; otherwise, set  
17 SDB\_IN\_RCNM\_IND<sub>S</sub> to '0'.
- 18 • Forward Packet Data Channel supported Indicator (FOR\_PDCH\_SUPPORTED<sub>S</sub> =  
19 FOR\_PDCH\_SUPPORTED<sub>T</sub>).
- 20 • PDCH Control Hold Mode supported indicator (PDCH\_CHM\_SUPPORTED<sub>S</sub> =  
21 PDCH\_CHM\_SUPPORTED<sub>T</sub>) if included; otherwise, set PDCH\_CHM\_SUPPORTED<sub>S</sub>  
22 to '0'.
- 23 • If RER\_MODE\_SUPPORTED<sub>T</sub> is not included, the mobile station shall set  
24 RER\_MODE\_SUPPORTED<sub>S</sub> to '0'; otherwise, the mobile station shall set  
25 RER\_MODE\_SUPPORTED<sub>S</sub> to RER\_MODE\_SUPPORTED<sub>T</sub>.
- 26 • If TKZ\_MODE\_SUPPORTED<sub>T</sub> is not included, the mobile station shall set  
27 TKZ\_MODE\_SUPPORTED<sub>S</sub> to '0'; otherwise, the mobile station shall set  
28 TKZ\_MODE\_SUPPORTED<sub>S</sub> to TKZ\_MODE\_SUPPORTED<sub>T</sub>. If  
29 TKZ\_MODE\_SUPPORTED<sub>S</sub> is equal to '1', the mobile station shall store the tracking  
30 zone identifier (TKZ\_ID<sub>S</sub> = TKZ\_ID<sub>T</sub>).
- 31 • If AUTO\_FCSO\_ALLOWED<sub>T</sub> is not included, the mobile station shall set  
32 AUTO\_FCSO\_ALLOWED<sub>S</sub> to '0'; otherwise, the mobile station shall set  
33 AUTO\_FCSO\_ALLOWED<sub>S</sub> to AUTO\_FCSO\_ALLOWED<sub>T</sub>.
- 34 • If CAND\_BAND\_INFO\_REQ<sub>T</sub> is included, the mobile station shall set  
35 CAND\_BAND\_INFO\_REQ<sub>S</sub> to CAND\_BAND\_INFO\_REQ<sub>T</sub>; otherwise, the mobile  
36 station shall set CAND\_BAND\_INFO\_REQ<sub>S</sub> to '0'.

- 1       • If BYPASS\_REG\_IND<sub>r</sub> is included, the mobile station shall set BYPASS\_REG\_IND<sub>s</sub>  
2       to BYPASS\_REG\_IND<sub>r</sub>; otherwise, the mobile station shall set BYPASS\_REG\_IND<sub>s</sub>  
3       to '00'.
- 4 If BCCH\_SUPPORTED<sub>s</sub> equals '1', the mobile station shall enter the *System Determination*  
5 *Substate of the Mobile Station Initialization State* with a new system indication.
- 6 If P\_REV\_IN\_USE<sub>s</sub> has been changed, the mobile station shall set ACC\_MSG\_SEQ<sub>s</sub>,  
7 CURR\_ACC\_MSG\_SEQ, SYS\_PAR\_MSG\_SEQ<sub>s</sub>, EXT\_NGHR\_LST\_MSG\_SEQ<sub>s</sub>,  
8 GEN\_NGHR\_LST\_MSG\_SEQ<sub>s</sub>, and GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL.
- 9 If NGHR\_SET\_ENTRY\_INFO is equal to '1', the mobile station shall store the access entry  
10 handoff in order and message processing operation indicator (ACC\_ENT\_HO\_ORDER<sub>s</sub> =  
11 ACC\_ENT\_HO\_ORDER<sub>r</sub>).
- 12 If the mobile station supports packet data service options, the mobile station shall store  
13 the packet data services zone identifier (PACKET\_ZONE\_ID<sub>s</sub> = PACKET\_ZONE\_ID<sub>r</sub>);  
14 otherwise, the mobile station shall set PACKET\_ZONE\_ID<sub>s</sub> to '00000000'.
- 15 If the mobile station supports packet data service options and the PZ\_HYST\_ENABLED  
16 field is included, the mobile station shall store the packet zone hysteresis enabled  
17 indicator (PZ\_HYST\_ENABLED<sub>s</sub> = PZ\_HYST\_ENABLED<sub>r</sub>); otherwise, the mobile station  
18 shall set PZ\_HYST\_ENABLED<sub>s</sub> to '1'.
- 19 If the mobile station supports packet data service options and the PZ\_HYST\_LIST\_LEN field  
20 is included, the mobile station shall store the packet zone hysteresis list length  
21 (PZ\_HYST\_LIST\_LEN<sub>s</sub> = PZ\_HYST\_LIST\_LEN<sub>r</sub>); otherwise, the mobile station shall set  
22 PZ\_HYST\_LIST\_LEN<sub>s</sub> to 4.
- 23 If the mobile station supports packet data service options and the PZ\_HYST\_ACT\_TIMER  
24 field is included, the mobile station shall store the packet zone hysteresis activation timer  
25 (PZ\_HYST\_ACT\_TIMER<sub>s</sub> = PZ\_HYST\_ACT\_TIMER<sub>r</sub>); otherwise, the mobile station shall set  
26 PZ\_HYST\_ACT\_TIMER<sub>s</sub> to 30 seconds.
- 27 If the mobile station supports packet data service options and the PZ\_HYST\_TIMER\_MUL  
28 field and the PZ\_HYST\_TIMER\_EXP field are included, the mobile station shall store the  
29 packet zone hysteresis timer (PZ\_HYST\_TIMER<sub>s</sub> = PZ\_HYST\_TIMER\_MUL<sub>r</sub> × 8 ^  
30 PZ\_HYST\_TIMER\_EXP<sub>r</sub>); otherwise, the mobile station shall set PZ\_HYST\_TIMER<sub>s</sub> to 60  
31 seconds.
- 32 If RESELECT\_INCLUDED<sub>s</sub> is equal to '1', the mobile station shall store:
  - 33       • Pilot power threshold (EC\_THRESH<sub>s</sub> = EC\_THRESH<sub>r</sub>)
  - 34       • Pilot E<sub>c</sub>/I<sub>0</sub> threshold (EC\_I0\_THRESH<sub>s</sub> = EC\_I0\_THRESH<sub>r</sub>)
- 35 If NGHR\_SET\_ACCESS\_INFO<sub>s</sub> is equal to '1', the mobile station shall store:
  - 36       • Access handoff permitted indicator (ACCESS\_HO<sub>s</sub> = ACCESS\_HO<sub>r</sub>)
  - 37       • Access probe handoff permitted indicator (ACCESS\_PROBE\_HO<sub>s</sub> =  
38       ACCESS\_PROBE\_HO<sub>r</sub>)
  - 39       • If ACCESS\_PROBE\_HO<sub>s</sub> is equal to '1', access handoff list update permitted  
40       indicator (ACC\_HO\_LIST\_UPD<sub>s</sub> = ACC\_HO\_LIST\_UPD<sub>r</sub>)

- 1       • Maximum number of times that the mobile station is permitted to perform an  
2       access probe handoff ( $\text{MAX\_NUM\_PROBE\_HO}_S = \text{MAX\_NUM\_PROBE\_HO}_T$ )
- 3       • Access handoff permitted for message response indicator ( $\text{ACCESS\_HO\_MSG\_RSP}_S$   
4       =  $\text{ACCESS\_HO\_MSG\_RSP}_T$ )
- 5       • Access probe handoff permitted for other messages indicator  
6       ( $\text{ACC\_PROBE\_HO\_OTHER\_MSG}_S = \text{ACC\_PROBE\_HO\_OTHER\_MSG}_T$ )
- 7       If  $\text{NGHBR\_SET\_ENTRY\_INFO}_S$  or  $\text{NGHBR\_SET\_ACCESS\_INFO}_S$  is equal to '1', the mobile  
8       station shall store the size of the Neighbor Set ( $\text{NGHBR\_SET\_SIZE}_S = \text{NGHBR\_SET\_SIZE}_T$ ).
- 9       If  $\text{NGHBR\_SET\_ENTRY\_INFO}_S$  is equal to '0', then for all  $\text{NGHBR\_SET\_SIZE}_S$  occurrences  
10      of  $\text{ACCESS\_ENTRY\_HO}$ , the mobile station shall set the  $\text{ACCESS\_ENTRY\_HO}$  field of  
11       $\text{NGHBR\_REC}[i]$  to '0'.
- 12      If  $\text{NGHBR\_SET\_ENTRY\_INFO}_S$  is equal to '1', then for all  $\text{NGHBR\_SET\_SIZE}_S$  occurrences  
13      of  $\text{ACCESS\_ENTRY\_HO}$ , the mobile station shall set the  $\text{ACCESS\_ENTRY\_HO}$  field of  
14       $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$  occurrence of  $\text{ACCESS\_ENTRY\_HO}_T$ .
- 15      If  $\text{NGHBR\_SET\_ACCESS\_INFO}_S$  is equal to '0', then for all  $\text{NGHBR\_SET\_SIZE}_S$  occurrences  
16      of  $\text{ACCESS\_HO\_ALLOWED}$ , the mobile station shall set the  $\text{ACCESS\_HO\_ALLOWED}$  field  
17      of  $\text{NGHBR\_REC}[i]$  to '0'.
- 18      If  $\text{NGHBR\_SET\_ACCESS\_INFO}_S$  is equal to '1', then for all  $\text{NGHBR\_SET\_SIZE}_S$  occurrences  
19      of  $\text{ACCESS\_HO\_ALLOWED}$ , the mobile station shall set the  $\text{ACCESS\_HO\_ALLOWED}$  field  
20      of  $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$  occurrence of  $\text{ACCESS\_HO\_ALLOWED}_T$ .
- 21      The mobile station shall set all bits of  $\text{TMSI\_CODE}_{S-p}$  to '1' if all of the following conditions  
22      are met:
  - 23       • The bits of  $\text{TMSI\_CODE}_{S-p}$  are not all equal to '1',
  - 24       •  $\text{DELETE\_FOR\_TMSI}_S$  is equal to '1', and
  - 25       •  $\text{ASSIGNING\_TMSI\_ZONE\_LEN}_{S-p}$  is not equal to  $\text{TMSI\_ZONE\_LEN}_S$ , or the least  
26       significant  $\text{ASSIGNING\_TMSI\_ZONE\_LEN}_{S-p}$  octets of  $\text{ASSIGNING\_TMSI\_ZONE}_{S-p}$   
27       are not equal to  $\text{TMSI\_ZONE}_S$ .
- 28      If the mobile station supports the Quick Paging Channel operation:
  - 29       • The mobile station shall set  $\text{QPCH\_SUPPORTED}_S$  to  $\text{QPCH\_SUPPORTED}_T$ .
  - 30       • If  $\text{QPCH\_SUPPORTED}_T = '1'$ :
    - 31          – The mobile station shall set  $\text{QPCH\_RATE}_S$  to  $\text{QPCH\_RATE}_T$ .
    - 32          – If the number of Quick Paging Channels specified in the received message  
33          ( $\text{NUM\_QPCH}_T$ ) is different from  $\text{NUM\_QPCH}_S$ , the mobile station shall use the  
34          hash algorithm specified in 2.6.7.1 to select a new Quick Paging Channel  
35          number in the range 1 to  $\text{NUM\_QPCH}_T$ . The mobile station shall store the new  
36          Quick Paging Channel number as  $\text{QPAGECH}_S$  and as  $\text{ASSIGNED\_QPAGECH}_S$ .  
37          The mobile station shall then set  $\text{NUM\_QPCH}_S$  to  $\text{NUM\_QPCH}_T$ .

- 1       – The mobile station shall set QPCH\_POWER\_LEVEL\_PAGE<sub>S</sub> to  
2       QPCH\_POWER\_LEVEL\_PAGE<sub>R</sub>.
- 3       – The mobile station shall set QPCH\_CCI\_SUPPORTED<sub>S</sub> to  
4       QPCH\_CCI\_SUPPORTED<sub>R</sub>.
- 5       – If QPCH\_CCI\_SUPPORTED<sub>R</sub> = '1', the mobile station shall set  
6       QPCH\_POWER\_LEVEL\_CONFIG<sub>S</sub> to QPCH\_POWER\_LEVEL\_CONFIG<sub>R</sub>.
- 7       • The mobile station shall set QPCH\_BI\_SUPPORTED<sub>S</sub> to QPCH\_BI\_SUPPORTED<sub>R</sub>, if  
8       included.
- 9       • If QPCH\_BI\_SUPPORTED<sub>R</sub> = '1', the mobile station shall set  
10      QPCH\_POWER\_LEVEL\_BCAST<sub>S</sub> to QPCH\_POWER\_LEVEL\_BCAST<sub>R</sub>.
- 11   If the mobile station supports the *Device Information Message* on the r-csch, the mobile  
12   station shall store:
- 13      • Autonomous message supported indicator  
14      (AUTO\_MSG\_SUPPORTED<sub>S</sub> = AUTO\_MSG\_SUPPORTED<sub>R</sub>)
- 15   If AUTO\_MSG\_SUPPORTED<sub>R</sub> is equal to '1' and the mobile station supports the *Device*  
16   *Information Message* on the r-csch, the mobile station shall store:
- 17      • Autonomous message interval  
18      (AUTO\_MSG\_INTERVAL<sub>S</sub> = AUTO\_MSG\_INTERVAL<sub>R</sub>)
- 19   The mobile station shall store mobile station initiated position location determination  
20   supported indicator (MS\_INIT\_POS\_LOC\_SUP\_IND<sub>S</sub> = MS\_INIT\_POS\_LOC\_SUP\_IND<sub>R</sub>).
- 21   The mobile station shall set FOR\_PDCH\_COMMON\_PARMS<sub>S</sub> = '0'.
- 22   If both FOR\_PDCH\_SUPPORTED<sub>R</sub> and PDCH\_PARMS\_INCL<sub>R</sub> are included and equal to '1',  
23   the mobile station shall perform the following:
- 24      • If FOR\_PDCH\_RLGAIN\_INCL<sub>R</sub> is included and equal to '1', the mobile station shall  
25      set:
- 26          – (RLGAIN\_ACKCH\_PILOT<sub>S</sub> = RLGAIN\_ACKCH\_PILOT<sub>R</sub>).
- 27          – (RLGAIN\_CQICH\_PILOT<sub>S</sub> = RLGAIN\_CQICH\_PILOT<sub>R</sub>).
- 28      • The mobile station shall set  
29      NUM\_SOFT\_SWITCHING\_FRAMES<sub>S</sub> = NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1, and  
30      NUM\_SOFTER\_SWITCHING\_FRAMES<sub>S</sub> = NUM\_SOFTER\_SWITCHING\_FRAMES<sub>R</sub> +  
31      1.
- 32      • The mobile station shall set  
33      NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> = NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> +  
34      1, and NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM<sub>S</sub> =  
35      NUM\_SOFTER\_SWITCHING\_FRAMES<sub>R</sub> + 1.
- 36      • The mobile station shall set NUM\_SOFT\_SWITCHING\_SLOTS<sub>S</sub> according to Table  
37      3.7.2.3.2.21-9 based on the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>R</sub>.
- 38      • The mobile station shall set NUM\_SOFTER\_SWITCHING\_SLOTS<sub>S</sub> according to Table  
39      3.7.2.3.2.21-9 based on the value of NUM\_SOFTER\_SWITCHING\_SLOTS<sub>R</sub>.

- 1     • The mobile station shall set  $\text{PDCH\_SOFT\_SWITCHING\_DELAY}_S$  to
- 2        $\text{PDCH\_SOFT\_SWITCHING\_DELAY}_T + 1$ , and  $\text{PDCH\_SOFTER\_SWITCHING\_DELAY}_S$
- 3       to  $\text{PDCH\_SOFTER\_SWITCHING\_DELAY}_T + 1$ .
- 4     • The mobile station shall set  $\text{FOR\_PDCH\_COMMON\_PARMS}_S = '1'$ .
- 5     • The mobile station shall set  $\text{WALSH\_TABLE\_ID}_S = \text{WALSH\_TABLE\_ID}_T$ .
- 6     • The mobile station shall set  $\text{NUM\_PDCCH}_S = \text{NUM\_PDCCH}_T$ .
- 7     • The mobile station shall store  $\text{FOR\_PDCCH\_WALSH}_S[i]$  to the  $i^{\text{th}}$  occurrence of
- 8        $\text{FOR\_PDCCH\_WALSH}_T$ .
- 9     If  $\text{FOR\_PDCH\_SUPPORTED}_T$  is included and equal to '1', then the mobile station shall set
- 10    Reverse Packet Data Channel supported indicator ( $\text{REV\_PDCH\_SUPPORTED}_S =$
- 11     $\text{REV\_PDCH\_SUPPORTED}_T$ ).
- 12    If  $\text{REV\_PDCH\_PARMS\_INCL}_T$  is not included, or if it is included and equal to '0', the
- 13    mobile station shall set  $\text{REV\_PDCH\_PARMS\_INCL}_S$  to '0'; otherwise, the mobile station
- 14    shall set  $\text{REV\_PDCH\_PARMS\_INCL}_S$  to '1' and perform the following:
- 15     • If  $\text{REV\_PDCH\_RLGAIN\_INCL}_T$  is equal to '1', the mobile station shall set:
- 16       –  $(\text{RLGAIN\_SPICH\_PILOT}_S = \text{RLGAIN\_SPICH\_PILOT}_T)$ .
- 17       –  $(\text{RLGAIN\_REQCH\_PILOT}_S = \text{RLGAIN\_REQCH\_PILOT}_T)$ .
- 18       –  $(\text{RLGAIN\_PDCCH\_PILOT}_S = \text{RLGAIN\_PDCCH\_PILOT}_T)$ .
- 19     • If  $\text{REV\_PDCH\_PARMS\_1\_INCL}_T$  is equal to '1', the mobile station shall set:
- 20       –  $(\text{REV\_PDCH\_TABLE\_SEL}_S = \text{REV\_PDCH\_TABLE\_SEL}_T)$ .
- 21       –  $(\text{REV\_PDCH\_MAX\_AUTO\_TPR}_S \text{ to } \text{REV\_PDCH\_MAX\_AUTO\_TPR}_T)$ .
- 22       –  $(\text{REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL}_S =$
- 23          $\text{REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL}_T + 1)$ .
- 24     • If  $\text{REV\_PDCH\_OPER\_PARMS\_INCL}_T$  is equal to '1', the mobile station shall set:
- 25       –  $(\text{REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET}_S$
- 26          $= \text{REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET}_T + 1)$ .
- 27       –  $(\text{REV\_PDCH\_DEFAULT\_PERSISTENCE}_S =$
- 28          $\text{REV\_PDCH\_DEFAULT\_PERSISTENCE}_T)$ .
- 29       –  $(\text{REV\_PDCH\_RESET\_PERSISTENCE}_S = \text{REV\_PDCH\_RESET\_PERSISTENCE}_T)$ .
- 30       –  $(\text{REV\_PDCH\_GRANT\_PRECEDENCE}_S = \text{REV\_PDCH\_GRANT\_PRECEDENCE}_T)$ .
- 31       –  $(\text{REV\_PDCH\_MSIB\_SUPPORTED}_S = \text{REV\_PDCH\_MSIB\_SUPPORTED}_T)$ .
- 32       –  $(\text{REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND}_S =$
- 33          $\text{REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND}_T)$ .

1 The mobile station shall store the following parameters:

- 2 • *BCMC Service Parameters Message* sent  
3 (SENDING\_BSPM<sub>S</sub> = SENDING\_BSPM<sub>R</sub>), if included; otherwise, set  
4 SENDING\_BSPM<sub>S</sub> to '0'.
- 5 • *BCMC Service Parameters Message* transmission periodicity index  
6 (BSPM\_PERIOD\_INDEX<sub>S</sub> = BSPM\_PERIOD\_INDEX<sub>R</sub>) if SENDING\_BSPM<sub>R</sub> equals '1';  
7 otherwise, BSPM\_PERIOD\_INDEX<sub>S</sub> = NULL.
- 8 • If BSPM\_PERIOD\_INDEX<sub>S</sub> is not equal to NULL, the mobile station shall set  
9 BSPM\_WAIT\_TIME to  $(B + 1) \times 160\text{ms}$ , where

$$10 \quad B = 2^i \times 16, 0 \leq i \leq 15$$

11 and  $i = \text{BSPM\_PERIOD\_INDEX}_S$ .

12 If CAND\_BAND\_INFO\_REQ<sub>R</sub> is set to '1', the mobile station shall store the number of  
13 candidate band classes minus one ( $\text{NUM\_CAND\_BAND\_CLASS}_S =$   
14  $\text{NUM\_CAND\_BAND\_CLASS}_R$ ).

15 If CAND\_BAND\_INFO\_REQ<sub>R</sub> is set to '1', the mobile station shall perform the following for  
16 each occurrence of the CAND\_BAND\_CLASS record:

- 17 • Set the CAND\_BAND\_CLASS field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$   
18 occurrence of CAND\_BAND\_CLASS<sub>R</sub>.
- 19 • Set the SUBCLASS\_INFO\_INCL field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$   
20 occurrence of SUBCLASS\_INFO\_INCL<sub>R</sub>.
- 21 • If the  $i^{\text{th}}$  occurrence of SUBCLASS\_INFO\_INCL<sub>R</sub> is set to '1', set the  
22 SUBCLASS\_REC\_LEN field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$  occurrence of  
23 SUBCLASS\_REC\_LEN<sub>R</sub>.
- 24 • If the  $i^{\text{th}}$  occurrence of SUBCLASS\_INFO\_INCL<sub>R</sub> is set to '1', the mobile station shall  
25 perform the following for each band subclass indicator received:
  - 26 – Set the BAND\_SUBCLASS\_IND\_REC[j] field of CAND\_BAND\_CLASS\_REC[i] to  
27 the  $j^{\text{th}}$  occurrence of BAND\_SUBCLASS\_IND<sub>R</sub>.

28 If TX\_PWR\_LIMIT\_INCL<sub>R</sub> is set to '1' and the mobile station is operating in the 1915MHz –  
29 1920MHz block of the PCS band, the mobile station shall store the transmit power limit  
30  $\text{TX\_PWR\_LIMIT}_S = (\text{TX\_PWR\_LIMIT}_R - 30\text{dBm})$ ; otherwise, the mobile station shall set  
31  $\text{TX\_PWR\_LIMIT}_S$  to the limit defined in [11].

#### 32 2.6.2.2.6 Global Service Redirection Message

33 Whenever a *Global Service Redirection Message* is received on the Paging Channel, the  
34 configuration message sequence number, CONFIG\_MSG\_SEQ<sub>R</sub>, shall be compared to that  
35 stored in GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>. If the comparison results in a match or if



1 SYS\_PAR\_MSG\_SEQ<sub>S</sub> is not current, the mobile station may ignore the message;  
 2 otherwise, the mobile station shall store the following parameters:

- 3 • Configuration message sequence number  
 4 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
 5 GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)
- 6 • The mobile station shall ignore this message, if any of the following conditions is  
 7 true:
  - 8 – EXT\_GLOBAL\_REDIRECT<sub>S</sub> = '1'
  - 9 – EXCL\_P\_REV\_MS<sub>R</sub> = '1'
  - 10 – Type of redirection as specified by RECORD\_TYPE<sub>R</sub> is not supported
  - 11 – BAND\_CLASS<sub>R</sub> is not supported (RECORD\_TYPE<sub>R</sub> = '00000010')
  - 12 – None of the included CDMA\_CHAN<sub>R</sub> are supported (RECORD\_TYPE<sub>R</sub> =  
 13 '00000010')

14 If the subfield corresponding to the access overload class, ACCOLC<sub>P</sub>, of the mobile station  
 15 is set equal to '1' in the REDIRECT\_ACCOLC<sub>R</sub> field of the received message, the mobile  
 16 station shall store the following parameters and then shall enter the *System Determination*  
 17 *Substate of the Mobile Station Initialization State* with a redirection indication (see 2.6.1.1):

- 18 • Return if fail indicator (RETURN\_IF\_FAIL<sub>S</sub> = RETURN\_IF\_FAIL<sub>R</sub>)
- 19 • If DELETE\_TMSI<sub>R</sub> is equal to '1', the mobile station shall set all the bits of  
 20 TMSI\_CODE<sub>S-P</sub> to '1'
- 21 • Redirection record (REDIRECT\_REC<sub>S</sub> = redirection record from received message)
- 22 • If RECORD\_TYPE<sub>R</sub> = '00000001', the mobile station shall:
  - 23 – Set CDMA\_MODE<sub>S</sub> to '1'
  - 24 – Set DIGITAL\_REG<sub>S-P</sub> to '00000000'
  - 25 – Set the maximum delay upon redirection (MAX\_REDIRECT\_DELAY<sub>S</sub> =  
 26 MAX\_REDIRECT\_DELAY<sub>R</sub>)

#### 27 2.6.2.2.7 Extended Neighbor List Message

28 Whenever a valid *Extended Neighbor List Message* is received on the current Paging  
 29 Channel (PAGECH<sub>S</sub>), the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>R</sub>,  
 30 shall be compared to that stored in EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>. If the comparison  
 31 results in a match, the mobile station may ignore the message. If the comparison results  
 32 in a mismatch, then the mobile station shall process the remaining fields in the message  
 33 as follows.

34 If the PILOT\_INC field is not within the valid range specified in 3.7.2.3.2.14, then the  
 35 mobile station shall ignore the *Extended Neighbor List Message* that contains it.

1 The mobile station shall store the following parameters:

- 2 • Configuration message sequence number  
3 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
4 EXT\_NGHRB\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
5 NGHRB\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)
- 6 • Pilot PN sequence offset increment (PILOT\_INC<sub>S</sub> = PILOT\_INC<sub>R</sub>)

7 The mobile station shall set NGHRB\_SET\_SIZE<sub>S</sub> to the number of neighboring base  
8 stations contained in the *Extended Neighbor List Message*.

9 For each of the neighboring base stations contained in the *Extended Neighbor List*  
10 *Message*, if FREQ\_INCL<sub>R</sub> equals '0', or if FREQ\_INCL<sub>R</sub> equals '1' and NGHRB\_BAND<sub>R</sub> is  
11 supported, the mobile station shall perform the following:

- 12 • If the *i*<sup>th</sup> occurrence of NGHRB\_CONFIG<sub>R</sub> is equal to '000', '001', or '010', set the  
13 NGHRB\_CONFIG field of NGHRB\_REC[i] to the *i*<sup>th</sup> occurrence of NGHRB\_CONFIG<sub>R</sub>;  
14 otherwise, set the NGHRB\_CONFIG field of NGHRB\_REC [i] to '011'.
- 15 • Set the NGHRB\_PN field of NGHRB\_REC[i] to the *i*<sup>th</sup> occurrence of NGHRB\_PN<sub>R</sub>.
- 16 • Set the SEARCH\_PRIORITY field of NGHRB\_REC[i] to the *i*<sup>th</sup> occurrence of  
17 SEARCH\_PRIORITY<sub>R</sub>.

18 For each of the neighboring base stations contained in the *Extended Neighbor List*  
19 *Message*, if FREQ\_INCL<sub>R</sub> equals '1' and NGHRB\_BAND<sub>R</sub> is supported, the mobile station  
20 shall also perform the following:

- 21 • Set the NGHRB\_BAND field of NGHRB\_REC[i] to the *i*<sup>th</sup> occurrence of  
22 NGHRB\_BAND<sub>R</sub>.
- 23 • Set the NGHRB\_FREQ field of NGHRB\_REC[i] to the *i*<sup>th</sup> occurrence of  
24 NGHRB\_FREQ<sub>R</sub>.

25 For each of the neighboring base stations contained in the *Extended Neighbor List*  
26 *Message*, if FREQ\_INCL<sub>R</sub> equals '0', the mobile station shall also perform the following:

- 27 • Set the NGHRB\_BAND field of NGHRB\_REC[i] to CDMABAND<sub>S</sub>.
- 28 • If NGHRB\_CONFIG<sub>R</sub> equals '010', set the NGHRB\_FREQ field of NGHRB\_REC[i] to  
29 the first CDMA Channel listed in the *CDMA Channel List Message or Extended*  
30 *CDMA Channel List Message* transmitted by the current base station; otherwise, set  
31 the NGHRB\_FREQ field of NGHRB\_REC[i] to CDMACH<sub>S</sub>.

32 If GEN\_NGHRB\_LST\_MSG\_SEQ<sub>S</sub> is not equal to CONFIG\_MSG\_SEQ<sub>S</sub>, the mobile station  
33 shall perform the following:

- 34 • Set the SRCH\_WIN\_NGHRB field of NGHRB\_REC to SRCH\_WIN\_N<sub>S</sub> for all  
35 NGHRB\_SET\_SIZE<sub>S</sub> entries.
- 36 • Set the SRCH\_OFFSET\_NGHRB field of NGHRB\_REC to '000' for all entries.

37 The mobile station shall set the ACCESS\_ENTRY\_HO field of the NGHRB\_REC to '0' for all  
38 NGHRB\_SET\_SIZE<sub>S</sub> entries if any of the following conditions are met:

- 1       • EXT\_SYS\_PARAMETER<sub>S</sub> is equal to '0',
- 2       • NGHBR\_SET\_ENTRY\_INFO<sub>S</sub> is equal to '0', or
- 3       • EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub> is not equal to CONFIG\_MSG\_SEQ<sub>S</sub>.

4       The mobile station shall set the ACCESS\_HO\_ALLOWED field of the NGHBR\_REC to '0' for  
5       all NGHBR\_SET\_SIZE<sub>S</sub> entries if any of the following conditions are met:

- 6       • EXT\_SYS\_PARAMETER<sub>S</sub> is equal to '0',
- 7       • NGHBR\_SET\_ACCESS\_INFO<sub>S</sub> is equal to '0', or
- 8       • EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub> is not equal to CONFIG\_MSG\_SEQ<sub>S</sub>.

9       The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it  
10       consists only of pilot offsets listed in the *Extended Neighbor List Message*. If the *Extended*  
11       *Neighbor List Message* contains more pilot offsets than the mobile station can store, the  
12       mobile station shall store the pilot offsets beginning at the start of the *Extended Neighbor*  
13       *List Message*, up to the limits of the mobile station's Neighbor Set storage capacity.

#### 14   2.6.2.2.8 General Neighbor List Message

15       Whenever a valid *General Neighbor List Message* is received on the current Paging Channel  
16       (PAGECH<sub>S</sub>), the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>R</sub>, shall be  
17       compared to that stored in GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>. If the comparison results in a  
18       match, the mobile station may ignore the message. If the comparison results in a  
19       mismatch, then the mobile station shall process the remaining fields in the message as  
20       follows.

21       If the PILOT\_INC field is not within the valid range specified in 3.7.2.3.2.22, then the  
22       mobile station shall ignore the *General Neighbor List Message* that contains it.

23       The mobile station shall store the following parameters:

- 24       • Configuration message sequence number  
25        (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
26        GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>).
- 27       • Pilot PN sequence offset increment (PILOT\_INC<sub>S</sub> = PILOT\_INC<sub>R</sub>).

28       If NGHBR\_CONFIG\_PN\_INCL<sub>R</sub> is equal to '1' and FREQ\_FIELDS\_INCL<sub>R</sub> is equal to '1', the  
29       mobile station shall store the following parameters:

- 30       • Configuration message sequence number  
31        (EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
32        NGHBR\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>).

33       The mobile station shall set NGHBR\_SET\_SIZE<sub>S</sub> to the number of neighboring base  
34       stations contained in the *General Neighbor List Message*.

35       For each of the neighboring base stations contained in the *General Neighbor List Message*,  
36       if FREQ\_INCL<sub>R</sub> equal '0', or if FREQ\_INCL<sub>R</sub> equal '1' and NGHBR\_BAND<sub>R</sub> is supported, the  
37       mobile station shall perform the following:

- 1       • If NGHBR\_CONFIG\_PN\_INCL<sub>r</sub> is equal to '1', set the NGHBR\_CONFIG and  
2       NGHBR\_PN fields as follows:
  - 3           – If the *i*<sup>th</sup> occurrence of NGHBR\_CONFIG<sub>r</sub> is equal to '000', '001', or '010', set the  
4           NGHBR\_CONFIG field of NGHBR\_REC[i] to the *i*<sup>th</sup> occurrence of  
5           NGHBR\_CONFIG<sub>r</sub>; otherwise, set the NGHBR\_CONFIG field of NGHBR\_REC[i] to  
6           '011'.
  - 7           – Set the NGHBR\_PN field of NGHBR\_REC[i] to the *i*<sup>th</sup> occurrence of NGHBR\_PN<sub>r</sub>.
- 8       • If NGHBR\_SRCH\_MODE<sub>r</sub> = '00' or '10' and EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> is not  
9       equal to CONFIG\_MSG\_SEQ<sub>r</sub>, set SEARCH\_PRIORITY field of each NGHBR\_REC to  
10       '10' (high) for all NGHBR\_SET\_SIZE<sub>s</sub> entries.
- 11       • If NGHBR\_SRCH\_MODE<sub>r</sub> = '01' or '11', set the SEARCH\_PRIORITY field of  
12       NGHBR\_REC[i] to the *i*<sup>th</sup> occurrence of SEARCH\_PRIORITY<sub>r</sub>.
- 13       • If NGHBR\_SRCH\_MODE<sub>r</sub> = '00' or '01', set the SRCH\_WIN\_NGHBR field of each  
14       NGHBR\_REC to SEARCH\_WIN<sub>s</sub> for all NGHBR\_SET\_SIZE<sub>s</sub> entries if  
15       SYS\_PAR\_MSG\_SEQ<sub>s</sub> is equal to CONFIG\_MSG\_SEQ<sub>s</sub>; otherwise, set  
16       SETTING\_SEARCH\_WIN to '1'.
- 17       • If NGHBR\_SRCH\_MODE<sub>r</sub> = '00' or '01', set the SRCH\_OFFSET\_NGHBR field of each  
18       NGHBR\_REC to '000'.
- 19       • If NGHBR\_SRCH\_MODE<sub>r</sub> = '10' or '11':
  - 20           – set the SRCH\_WIN\_NGHBR field of NGHBR\_REC[i] to the *i*<sup>th</sup> occurrence of  
21           SRCH\_WIN\_NGHBR<sub>r</sub>
  - 22           – if SRCH\_OFFSET\_INCL<sub>r</sub> equals '1', set the SRCH\_OFFSET\_NGHBR field of  
23           NGHBR\_REC[i] to the *i*<sup>th</sup> occurrence of SRCH\_OFFSET\_NGHBR<sub>r</sub>, and
  - 24           – if SRCH\_OFFSET\_INCL<sub>r</sub> equals '0', set the SRCH\_OFFSET\_NGHBR field of each  
25           NGHBR\_REC to '000'.
- 26       • If USE\_TIMING<sub>r</sub> is equal to '1', set the TIMING\_INCL field of NGHBR\_REC[i] to the  
27       *i*<sup>th</sup> occurrence of TIMING\_INCL<sub>r</sub>; otherwise, set the TIMING\_INCL field of  
28       NGHBR\_REC to '0' for all entries.
- 29       • If BCCH\_IND\_INCL<sub>r</sub> is equal to '1', set the BCCH\_SUPPORT field of NGHBR\_REC[i]  
30       to the *i*<sup>th</sup> occurrence of BCCH\_SUPPORT<sub>r</sub>; otherwise, set the BCCH\_IND\_INCL field  
31       of NGHBR\_REC to '0' for all entries.
- 32       • Set the NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC[i] to the *i*<sup>th</sup> occurrence of  
33       NGHBR\_PDCH\_SUPPORTED<sub>r</sub> if included; otherwise, set the  
34       NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC to '0' for all entries.
- 35       • The mobile station shall set RESQ\_ENABLED<sub>s</sub> = RESQ\_ENABLED<sub>r</sub>. If  
36       RESQ\_ENABLED<sub>s</sub> is equal to '1', then the mobile station shall store:
  - 37           – Call rescue delay timer value (RESQ\_DELAY\_TIME<sub>s</sub> = RESQ\_DELAY\_TIME<sub>r</sub>)

- 1       – Call rescue allowed timer value ( $\text{RESQ\_ALLOWED\_TIME}_S =$   
2        $\text{RESQ\_ALLOWED\_TIME}_T$ )
- 3       – Call rescue attempt timer value ( $\text{RESQ\_ATTEMPT\_TIME}_S =$   
4        $\text{RESQ\_ATTEMPT\_TIME}_T$ )
- 5       – Code channel index for call rescue ( $\text{RESQ\_CODE\_CHAN}_S =$   
6        $\text{RESQ\_CODE\_CHAN}_T$ )
- 7       – Quasi-Orthogonal Function mask identifier for call rescue ( $\text{RESQ\_QOF}_S =$   
8        $\text{RESQ\_QOF}_T$ )
- 9       – Minimum time between consecutive rescues ( $\text{RESQ\_MIN\_PERIOD}_S =$   
10        $\text{RESQ\_MIN\_PERIOD}_T + 1$ ) if  $\text{RESQ\_MIN\_PERIOD\_INCL}_T$  is equal to '1'; otherwise,  
11        $\text{RESQ\_MIN\_PERIOD}_S = '00000'$ .
- 12       – The required number of transmissions of a regular PDU before declaring L2  
13       Acknowledgment Failure when Call Rescue is enabled  
14       ( $\text{RESQ\_NUM\_TOT\_TRANS\_20MS}_S = \text{RESQ\_NUM\_TOT\_TRANS\_20MS}_T$ ) if  
15       included; otherwise, set  $\text{RESQ\_NUM\_TOT\_TRANS\_20MS}_S$  to  $N_{1m}$ .
- 16       – The required number of transmissions of a mini PDU before declaring L2  
17       Acknowledgment Failure when Call Rescue is enabled  
18       ( $\text{RESQ\_NUM\_TOT\_TRANS\_5MS}_S = \text{RESQ\_NUM\_TOT\_TRANS\_5MS}_T$ ) if included;  
19       otherwise, set  $\text{RESQ\_NUM\_TOT\_TRANS\_5MS}_S$  to  $N_{15m}$ .
- 20       – The Traffic Channel preamble length for Call Rescue Soft Handoff when  
21       operating in Radio Configuration 1 or 2 ( $\text{RESQ\_NUM\_PREAMBLE\_RC1\_RC2}_S =$   
22        $\text{RESQ\_NUM\_PREAMBLE\_RC1\_RC2}_T$ ).
- 23       – The Traffic Channel preamble length for Call Rescue Soft Handoff when  
24       operating in Radio Configuration greater than 2 ( $\text{RESQ\_NUM\_PREAMBLE}_S =$   
25        $\text{RESQ\_NUM\_PREAMBLE}_T$ ).
- 26       – The power level adjustment to be applied to the last closed-loop power level  
27       when re-enabling the transmitter for call rescue soft handoff  
28       ( $\text{RESQ\_POWER\_DELTA}_S = \text{RESQ\_POWER\_DELTA}_T$ ).
- 29       – Set the  $\text{NGHBR\_RESQ\_CONFIGURED}$  field of  $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$   
30       occurrence of  $\text{NGHBR\_RESQ\_CONFIGURED}_T$ .
- 31       For each of the neighboring base stations contained in the *General Neighbor List Message*,  
32       if  $\text{FREQ\_FIELDS\_INCL}_T$  equals '1',  $\text{FREQ\_INCL}_T$  equals '1', and  $\text{NGHBR\_BAND}_T$  is  
33       supported, the mobile station shall also perform the following:
  - 34           • Set the  $\text{NGHBR\_BAND}$  field of  $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$  occurrence of  
35            $\text{NGHBR\_BAND}_T$ .
  - 36           • Set the  $\text{NGHBR\_FREQ}$  field of  $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$  occurrence of  
37            $\text{NGHBR\_FREQ}_T$ .
- 38       For each of the neighboring base stations contained in the *General Neighbor List Message*,  
39       if  $\text{USE\_TIMING}_T$  is equal to '1' and  $\text{TIMING\_INCL}_T$  equals '1', the mobile station shall also  
40       perform the following:

- 1       • Set the NGHBR\_TX\_OFFSET field of NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of  
2       NGHBR\_TX\_OFFSET<sub>r</sub>.
- 3       • If GLOBAL\_TIMING\_INCL<sub>r</sub> is equal to '1', then the mobile station shall:  
4       – Set the NGHBR\_TX\_DURATION field of NGHBR\_REC to  
5       GLOBAL\_TX\_DURATION<sub>r</sub> for all entries.  
6       – Set the NGHBR\_TX\_PERIOD field of NGHBR\_REC to GLOBAL\_TX\_PERIOD<sub>r</sub> for  
7       all entries.
- 8       • If GLOBAL\_TIMING\_INCL<sub>r</sub> is equal to '0', then the mobile station shall:  
9       – Set the NGHBR\_TX\_DURATION field of NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of  
10      NGHBR\_TX\_DURATION<sub>r</sub>.  
11      – Set the NGHBR\_TX\_PERIOD field of NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of  
12      NGHBR\_TX\_PERIOD<sub>r</sub>.
- 13      For each of the neighboring base stations contained in the *General Neighbor List Message*,  
14      if FREQ\_FIELDS\_INCL<sub>r</sub> equals '1' and FREQ\_INCL<sub>r</sub> equals '0', or if FREQ\_FIELDS\_INCL<sub>r</sub>  
15      equals '0' and EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> is not equal to CONFIG\_MSG\_SEQ<sub>r</sub>, the  
16      mobile station shall also perform the following:  
17      • Set the NGHBR\_BAND field of NGHBR\_REC[i] to CDMABAND<sub>s</sub>.  
18      • If NGHBR\_CONFIG<sub>r</sub> equals '010', set the NGHBR\_FREQ field of NGHBR\_REC[i] to  
19      the first CDMA Channel listed in the *CDMA Channel List Message or Extended*  
20      *CDMA Channel List Message* transmitted by the current base station; otherwise, set  
21      the NGHBR\_FREQ field of NGHBR\_REC[i] to CDMACH<sub>s</sub>.
- 22      The mobile station shall set the ACCESS\_ENTRY\_HO field of the NGHBR\_REC to '0' for all  
23      NGHBR\_SET\_SIZE<sub>s</sub> entries if any of the following conditions are met:  
24      • EXT\_SYS\_PARAMETER<sub>s</sub> is equal to '0'  
25      • NGHBR\_SET\_ENTRY\_INFO<sub>s</sub> is equal to '0', or  
26      • EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub> is not equal to CONFIG\_MSG\_SEQ<sub>s</sub>.
- 27      The mobile station shall set the ACCESS\_HO\_ALLOWED field of the NGHBR\_REC to '0' for  
28      all NGHBR\_SET\_SIZE<sub>s</sub> entries if any of the following conditions are met:  
29      • EXT\_SYS\_PARAMETER<sub>s</sub> is equal to '0'  
30      • NGHBR\_SET\_ACCESS\_INFO<sub>s</sub> is equal to '0', or  
31      • EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub> is not equal to CONFIG\_MSG\_SEQ<sub>s</sub>.
- 32      The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it  
33      consists only of pilot offsets listed in the *General Neighbor List Message*. If the *General*  
34      *Neighbor List Message* contains more pilot offsets than the mobile station can store, the  
35      mobile station shall store the pilot offsets beginning at the start of the *General Neighbor*  
36      *List Message*, up to the limits of the mobile station's Neighbor Set storage capacity.
- 37      For each of the neighboring base stations contained in the *General Neighbor List Message*,  
38      the mobile station shall set the ADD\_PILOT\_REC\_INCL field of NGHBR\_REC[i] to the  $i^{\text{th}}$

occurrence of ADD\_PILOT\_REC\_INCL<sub>r</sub>. If ADD\_PILOT\_REC\_INCL<sub>r</sub> equals '1', for each pilot included in the message, the mobile station shall also perform the following:

- Set the NGHBR\_PILOT\_REC\_TYPE field of NGHBR\_PILOT\_REC to NGHBR\_PILOT\_REC\_TYPE<sub>r</sub>.
- If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '000'. The mobile station shall:
  - Set the TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to TD\_POWER\_LEVEL<sub>r</sub>.
  - Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE<sub>r</sub>.
- If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station shall:
  - Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>r</sub>.
  - Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by WALSH\_LENGTH<sub>r</sub>.
- If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station shall:
  - Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>r</sub>.
  - Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by WALSH\_LENGTH<sub>r</sub>.
  - Set the AUX\_TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
  - Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE<sub>r</sub>.
- If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:
  - Set the SR3\_PRIMARY\_PILOT field of NGHBR\_PILOT\_REC to SR3\_PRIMARY\_PILOT<sub>r</sub>.
  - Set the SR3\_PILOT\_POWER1 field of NGHBR\_PILOT\_REC to SR3\_PILOT\_POWER1<sub>r</sub>.
  - Set the SR3\_PILOT\_POWER2 field of NGHBR\_PILOT\_REC to SR3\_PILOT\_POWER2<sub>r</sub>.
- If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
  - Set the SR3\_PRIMARY\_PILOT field of NGHBR\_PILOT\_REC to SR3\_PRIMARY\_PILOT<sub>r</sub>.
  - Set the SR3\_PILOT\_POWER1 field of NGHBR\_PILOT\_REC to SR3\_PILOT\_POWER1<sub>r</sub>.
  - Set the SR3\_PILOT\_POWER2 field of NGHBR\_PILOT\_REC to SR3\_PILOT\_POWER2<sub>r</sub>.
  - Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>r</sub>.

- 1       – Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to  
2       AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
3       WALSH\_LENGTH<sub>r</sub>.
- 4       – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1 field of  
5       NGHBR\_PILOT\_REC to QOF1<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE1 field of  
6       NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length  
7       specified by WALSH\_LENGTH1<sub>r</sub>.
- 8       – Otherwise, set the AUX\_PILOT\_QOF1 field of NGHBR\_PILOT\_REC to QOF<sub>r</sub> and  
9       set the AUX\_PILOT\_WALSH\_CODE1 field of NGHBR\_PILOT\_REC to  
10      AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
11      WALSH\_LENGTH<sub>r</sub>.
- 12      – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2 field of  
13      NGHBR\_PILOT\_REC to QOF2<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2 field of  
14      NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length  
15      specified by WALSH\_LENGTH2<sub>r</sub>.
- 16      – Otherwise, set the AUX\_PILOT\_QOF2 field of NGHBR\_PILOT\_REC to QOF<sub>r</sub> and  
17      set the AUX\_PILOT\_WALSH\_CODE2 field of NGHBR\_PILOT\_REC to  
18      AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
19      WALSH\_LENGTH<sub>r</sub>.

20 If HRPD\_NGHBR\_INCL<sub>r</sub> equals '1', the mobile station shall set NUM\_HRPD\_NGHBR<sub>s</sub> to  
21 NUM\_HRPD\_NGHBR<sub>r</sub>, the number of neighboring HRPD systems contained in the *General*  
22 *Neighbor List Message*. For each of the neighboring HRPD systems contained in the  
23 *General Neighbor List Message*, the mobile station shall perform the following:

- 24      • Set the PN field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of NGHBR\_PN<sub>r</sub>.
- 25      • Set the BAND\_CLASS field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of  
26      NGHBR\_BAND<sub>r</sub> if NGHBR\_FREQ\_INCL<sub>r</sub> equals '1'; otherwise, set the BAND\_CLASS  
27      field of HRPD\_NGHBR\_LIST[i] to CDMABAND<sub>s</sub>.
- 28      • Set the CDMA\_FREQ field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of  
29      NGHBR\_FREQ<sub>r</sub> if NGHBR\_FREQ\_INCL<sub>r</sub> equals '1'; otherwise, set the BAND\_CLASS  
30      field of HRPD\_NGHBR\_LIST[i] to CDMACH<sub>s</sub>.
- 31      • Set the PN\_ASSOCIATION field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of  
32      PN\_ASSOCIATION\_IND<sub>r</sub>.
- 33      • Set the DATA\_ASSOCIATION field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of  
34      DATA\_ASSOCIATION\_IND<sub>r</sub>.

#### 35 2.6.2.2.9 User Zone Identification Message

36 Whenever a *User Zone Identification Message* is received on the Paging Channel or Primary  
37 Broadcast Control Channel, and if the mobile station supports Tiered Services, the mobile  
38 station shall compare the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>r</sub>,  
39 to that stored in USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match, the  
40 mobile station may ignore the message. If the comparison results in a mismatch, then the



1 mobile station shall process the remaining fields in the message as follows.

2 The mobile station shall store the following parameters:

- 3 • Configuration message sequence number  
4 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
5 USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)
- 6 • UZ\_EXIT\_RCVD<sub>S</sub> = UZ\_EXIT<sub>R</sub>

7 The mobile station shall set NUM\_UZID<sub>S</sub> to the number of User Zones contained in the  
8 *User Zone Identification Message*.

9 For each User Zone contained in the *User Zone Identification Message*, the mobile station  
10 shall perform the following:

- 11 • Set the UZID field of UZ\_REC(i) to the i<sup>th</sup> occurrence of UZID<sub>R</sub>.
- 12 • Set the UZ\_REV field of the UZ\_REC(i) to the i<sup>th</sup> occurrence of UZ\_REV<sub>R</sub>.
- 13 • Set the TEMP\_SUB field of the UZ\_REC(i) to the i<sup>th</sup> occurrence of TEMP\_SUB<sub>R</sub>.

#### 14 2.6.2.2.10 Private Neighbor List Message

15 Whenever a *Private Neighbor List Message* is received on the Paging Channel or Primary  
16 Broadcast Control Channel, and if the mobile station supports Tiered Services, the mobile  
17 station shall compare the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>R</sub>,  
18 to that stored in PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>. If the comparison results in a match, the  
19 mobile station may ignore the message. If the comparison results in a mismatch, then the  
20 mobile station shall process the remaining fields in the message as follows.

21 The mobile station shall store the following parameters:

- 22 • Configuration message sequence number  
23 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
24 PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)
- 25 • Common configuration included indicator (COMMON\_INCL<sub>S</sub> = COMMON\_INCL<sub>R</sub>)

26 The mobile station shall set NUM\_PRI\_NGHBR<sub>S</sub> to the number of Private Neighbor base  
27 stations contained in the *Private Neighbor List Message*.

28 For each Private Neighbor base station contained in the *Private Neighbor List Message* the  
29 mobile station shall perform the following:

- 30 • Set the SRCH\_WIN\_PRI\_NGHBR field of PRI\_NGHBR\_REC(i) to SRCH\_WIN\_PN<sub>R</sub>.
- 31 • Set the SID field of PRI\_NGHBR\_REC(i) to the i<sup>th</sup> occurrence SID<sub>R</sub>.
- 32 • Set the NID field of PRI\_NGHBR\_REC(i) to the i<sup>th</sup> occurrence NID<sub>R</sub>.
- 33 • Set the PRI\_NGHBR\_PN field of PRI\_NGHBR\_REC(i) to the i<sup>th</sup> occurrence  
34 PRI\_NGHBR\_PN<sub>R</sub>.
- 35 • If COMMON\_INCL<sub>R</sub> is equal to '1', then the mobile station shall:  
36 – Set the BAND\_CLASS field of PRI\_NGHBR\_REC(i) to COMMON\_BAND\_CLASS<sub>R</sub>.

- 1       – Set the NGHBR\_FREQ field of PRI\_NGHBR\_REC(i) to COMMON\_NGHBR\_FREQ<sub>r</sub>.
- 2       • If COMMON\_INCL<sub>r</sub> is equal to '0', then the mobile station shall:
  - 3       – Set the BAND\_CLASS field of PRI\_NGHBR\_REC(i) to the i<sup>th</sup> occurrence of
  - 4       BAND\_CLASS<sub>r</sub>.
  - 5       – Set the NGHBR\_FREQ field of PRI\_NGHBR\_REC(i) to the i<sup>th</sup> occurrence of
  - 6       NGHBR\_FREQ<sub>r</sub>.
  - 7       • If i<sup>th</sup> occurrence of UZID\_INCL<sub>r</sub> is equal to '0', then the mobile station shall set the
  - 8       PS\_NUM\_UZID field of PRI\_NGHBR\_REC(i) to '0000'.
  - 9       • If i<sup>th</sup> occurrence of UZID\_INCL<sub>r</sub> is equal to '1', then the mobile station shall set the
  - 10       PS\_NUM\_UZID field of PRI\_NGHBR\_REC(i) to the NUM\_UZID<sub>r</sub> associated with the i<sup>th</sup>
  - 11       occurrence of UZID\_INCL<sub>r</sub>.
  - 12       • For each User Zone supported by the i<sup>th</sup> private system, the mobile station shall
  - 13       perform the following:
    - 14       – Set the PS\_UZID(j) field of PRI\_NGHBR\_REC(i) to the j<sup>th</sup> occurrence of UZID<sub>r</sub>.
    - 15       – Set the PS\_UZ\_REV(j) field of PRI\_NGHBR\_REC(i) to the j<sup>th</sup> occurrence of
    - 16       UZ\_REV<sub>r</sub>.
    - 17       – Set the PS\_TEMP\_SUB(j) field of PRI\_NGHBR\_REC(i) to the j<sup>th</sup> occurrence of
    - 18       TEMP\_SUB<sub>r</sub>.

#### 19 2.6.2.2.11 Extended Global Service Redirection Message

20 Whenever an *Extended Global Service Redirection Message* is received on the Paging  
 21 Channel or Primary Broadcast Control Channel, the configuration message sequence  
 22 number, CONFIG\_MSG\_SEQ<sub>r</sub>, shall be compared to that stored in  
 23 EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match, the mobile  
 24 station may ignore the message. If the comparison results in a mismatch, the mobile  
 25 station shall store the following parameters:

- 26       • Configuration message sequence number  
 27       (CONFIG\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>,  
 28       GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>,  
 29       EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>)

30

31 The mobile station shall perform the following:

- 32       • The mobile station shall set (RETURN\_IF\_FAIL<sub>s</sub> = RETURN\_IF\_FAIL<sub>r</sub>),  
 33       TEMP\_TMSI\_CODE to TMSI\_CODE<sub>s-p</sub>, and clear the REDIRECT\_REC\_LIST. For i  
 34       = 1 to (NUM\_ADD\_RECORD<sub>r</sub> + 1), the mobile station shall perform the following:
  - 35       – If all the following conditions are satisfied from the i<sup>th</sup> redirection record:
    - 36       + The subfield corresponding to the access overload class, ACCOLC<sub>p</sub>, of the
    - 37       mobile station is set equal to '1' in the REDIRECT\_ACCOLC<sub>r</sub> field or
    - 38       ADD\_REDIRECT\_ACCOLC<sub>r</sub> of the i<sup>th</sup> redirection record.

- 1           + MOB\_P\_REV<sub>p</sub> is in the redirection mobile protocol revision range associated
- 2           with the *i*<sup>th</sup> redirection record (REDIRECT\_P\_REV\_INCL<sub>r</sub> = '1' and
- 3           EXCL\_P\_REV\_IND<sub>r</sub> = '0', and (REDIRECT\_P\_MIN<sub>r</sub> ≤ MOB\_P\_REV<sub>p</sub> ≤
- 4           REDIRECT\_P\_MAX<sub>r</sub>) where *i* is equal to 1).
- 5           + MOB\_P\_REV<sub>p</sub> is not in any of the excluded mobile protocol revision range
- 6           associated with the *i*<sup>th</sup> redirection record (REDIRECT\_P\_REV\_INCL<sub>r</sub> = '1' and
- 7           EXCL\_P\_REV\_IND<sub>r</sub> = '1' and (MOB\_P\_REV<sub>p</sub> < REDIRECT\_P\_MIN<sub>r</sub> or
- 8           MOB\_P\_REV<sub>p</sub> > REDIRECT\_P\_MAX<sub>r</sub>)).
- 9           + Type of redirection as specified by RECORD\_TYPE<sub>r</sub> (*i* is equal to 1) or
- 10          ADD\_RECORD\_TYPE<sub>r</sub> is supported.
- 11          + BAND\_CLASS<sub>r</sub> is supported (RECORD\_TYPE<sub>r</sub> = '00000010' or
- 12          ADD\_RECORD\_TYPE<sub>r</sub> = '00000010').
- 13          + At least one of the CDMA\_CHAN<sub>r</sub> is supported for at least one band
- 14          subclass (when included) corresponding to REDIRECT\_SUBCLASS<sub>r</sub> = '1'.
- 15          (RECORD\_TYPE<sub>r</sub> = '00000010' or ADD\_RECORD\_TYPE<sub>r</sub> = '00000010').
- 16          then mobile station shall store the following parameters from the redirection record:
- 17          + Set DELETE\_TMSI field of REDIRECT\_REC\_LIST[*j*] to DELETE\_TMSI<sub>r</sub> (*i* is
- 18          equal to 1) or ADD\_DELETE\_TMSI<sub>r</sub>, where *j* (i.e., the initial *j* value is set to
- 19          0) is incremented by 1 whenever the *i*<sup>th</sup> redirection record satisfies the
- 20          redirection record selection conditions above.
- 21          + Set REDIRECT\_REC\_LIST[*j*] to the *i*<sup>th</sup> redirection record from the received
- 22          message.
- 23          + Set RECORD\_TYPE field of REDIRECT\_REC\_LIST[*j*] to RECORD\_TYPE<sub>r</sub> (*i* is
- 24          equal to 1) or ADD\_RECORD\_TYPE<sub>r</sub>.
- 25          + If RECORD\_TYPE<sub>r</sub> = '00000001' (*i* is equal to 1) or ADD\_RECORD\_TYPE<sub>r</sub> =
- 26          '00000001', the mobile station shall:
- 27               ○ Set CDMA\_MODE<sub>s</sub> to '1'
- 28               ○ Set DIGITAL\_REG field of REDIRECT\_REC\_LIST[*j*] to '00000000'.
- 29               ○ Set MAX\_REDIRECT\_DELAY field of REDIRECT\_REC\_LIST[*j*] to
- 30               MAX\_REDIRECT\_DELAY<sub>r</sub>.
- 31          + If LAST\_SEARCH\_RECORD\_IND<sub>r</sub> or ADD\_LAST\_SEARCH\_RECORD\_IND<sub>r</sub> is
- 32          equal to '1', the mobile station shall ignore the rest of the message.
- 33          • If REDIRECT\_REC\_LIST[*j*] is not empty, the mobile station shall enter the *System*
- 34          *Determination Substate* of the *Mobile Station Initialization State* with a redirection
- 35          indication (see 2.6.1.1); otherwise, the mobile station shall ignore the *Extended*
- 36          *Global Service Redirection Message*.

#### 2.6.2.2.12 Extended CDMA Channel List Message Overview

The mobile station may receive the *Extended CDMA Channel List Message* from the Paging Channel or from the Primary Broadcast Control Channel. The mobile station shall follow requirements defined in 2.6.2.2.12.1 or 2.6.2.2.12.2 to process the *Extended CDMA Channel List Message*.

##### 2.6.2.2.12.1 Extended CDMA Channel List Message on Paging Channel

Whenever an *Extended CDMA Channel List Message* is received on the Paging Channel, the mobile station shall compare the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>r</sub>, to that stored in EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows:

If the *Extended CDMA Channel List Message* lists CDMA channels from more than one band class and the mobile station hashes to a band class other than the current band class, the mobile station shall process this message after NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> and GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> become current.

The mobile station shall store the following parameters:

- Configuration message sequence number  
(CONFIG\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>,  
EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>,  
CHAN\_LST\_MSG\_SEQ<sub>s</sub> = CONFIG\_MSG\_SEQ<sub>r</sub>).

The mobile station shall process this message if FD\_CHAN\_LST\_SEQ<sub>s</sub> is current and the mobile station does not support any bandclass listed by the base station in the *Flex Duplex CDMA Channel List Message* or if the mobile station does not support flexible spacing between forward and reverse channels. Otherwise, the mobile station shall ignore this message.

The mobile station shall determine the CDMA Channel (Frequency Assignment) for its Paging Channel as follows:

- Starting from an empty list, the mobile station shall generate the first CDMA Channel list from the *Extended CDMA Channel List Message* as follows:
  - For each band class record included in this message, the mobile station shall perform the following:
    - + If band subclass information is included for this band class record (SUBCLASS\_INFO\_INCL<sub>r</sub> = '1' or ADD\_SUBCLASS\_INFO\_INCL<sub>r</sub> = '1'), the mobile station shall add only those channels belonging to the band class and band subclasses that are supported by both the mobile station and the

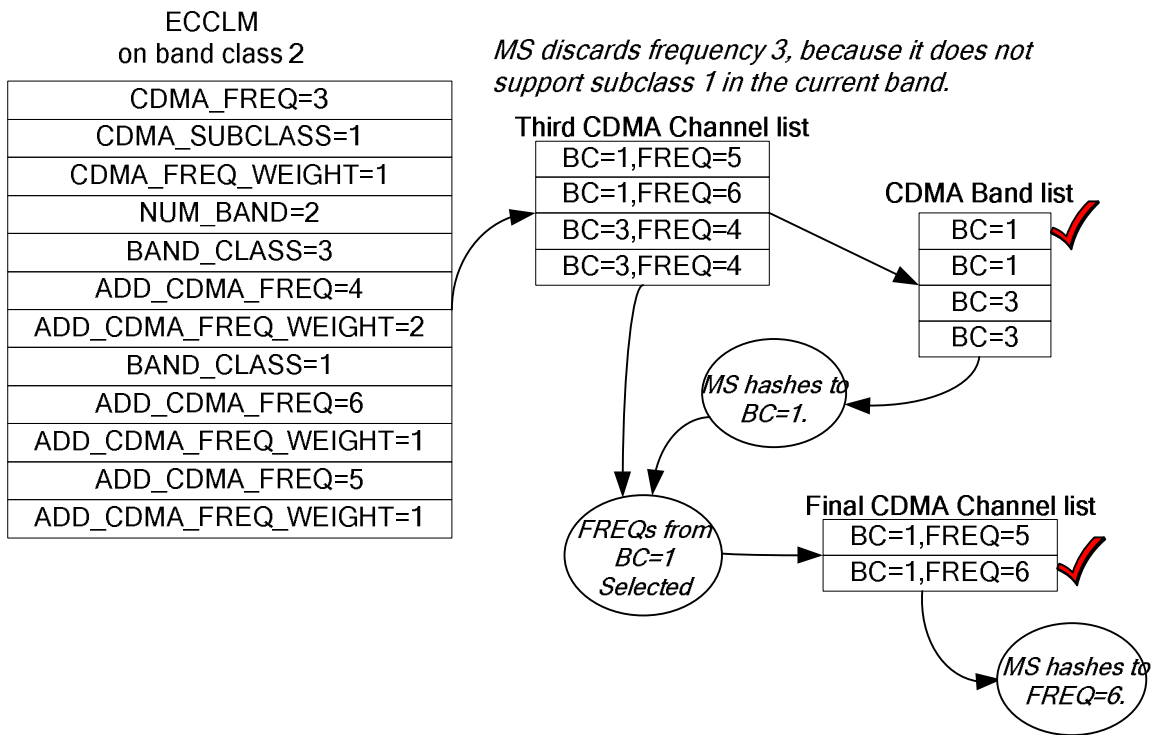
- 1 base station, in the order they appear in the *Extended CDMA Channel List*  
 2 *Message*<sup>7</sup>.
- 3 + Otherwise (SUBCLASS\_INFO\_INCL<sub>r</sub> = '0', ADD\_SUBCLASS\_INFO\_INCL<sub>r</sub> = '0'  
 4 or P\_REV\_IN\_USE<sub>s</sub> is less than 11), the mobile station shall add only those  
 5 channels that it supports for the associated band class, in the order they  
 6 appear in the *Extended CDMA Channel List Message*.
- 7 – If P\_REV\_IN\_USE<sub>s</sub> is greater than or equal to 11, the mobile station shall sort  
 8 the channels first by the ascending order of band class value, as specified in  
 9 [30], then by the ascending order of CDMA\_FREQ within each band class.
- 10 • If RC\_QPCH\_SEL\_INCL<sub>r</sub> is equal to '1' and the mobile station is capable of RC  
 11 greater than 2 or capable of supporting Quick Paging Channel, the mobile station  
 12 shall eliminate the channels with RC\_QPCH\_HASH\_IND<sub>r</sub> equal to '0' from the first  
 13 CDMA Channel list to generate the second CDMA Channel list while preserving the  
 14 order in the first CDMA Channel list. Otherwise, the mobile station shall set the  
 15 second CDMA Channel list to be equal to the first CDMA Channel list.
- 16 • The mobile station shall generate the third CDMA Channel list as follows.
- 17 – If CDMA\_FREQ\_WEIGHT\_INCL<sub>r</sub> is equal to '0', the mobile station shall set the  
 18 third CDMA Channel list to be equal to the second CDMA Channel list.
- 19 – If CDMA\_FREQ\_WEIGHT\_INCL<sub>r</sub> is equal to '1', starting with an empty third  
 20 CDMA Channel list, for each entry "E" in the second CDMA Channel list in the  
 21 order they appear, the mobile station shall append N consecutive entries "E" at  
 22 the end of the third CDMA Channel list, where N is the weight of "E" and equals  
 23 either CDMA\_FREQ\_WEIGHT<sub>r+1</sub> or ADD\_CDMA\_FREQ\_WEIGHT<sub>r+1</sub>  
 24 appropriately.
- 25 • The mobile station shall generate a CDMA band list as follows. Starting with an  
 26 empty CDMA band list, for each channel in the third CDMA Channel list in the  
 27 order they appear, the mobile station shall append an entry equal to the band class  
 28 of that channel, at the end of the CDMA band list.
- 29 • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of  
 30 the CDMA band list to compute the band class for its Paging Channel.
- 31 • The mobile station shall eliminate those channels which are not in the computed  
 32 band class from the third CDMA channel list to generate the final CDMA channel  
 33 list.

---

<sup>7</sup> The mobile station will not discard frequencies as long as they belong to a subclass that is both listed in the message and supported by the mobile station. If the base station does not list any subclass, the mobile station assumes that all subclasses are supported by the base station. The subclass to frequency mapping is not provided in the *Extended CDMA Channel List Message*; the mobile station needs to refer to [45] to find the mapping.

- If the final CDMA Channel list is empty, the mobile station shall enter the *System Determination Substate* with an acquisition failure indication.
- The mobile station shall then use the hash algorithm specified in 2.6.7.1 and the size of the final CDMA channel list to determine the CDMA Channel (Frequency Assignment) for its Paging Channel.

Figure 2.6.2.2.12.1-1 shows an example of the hashing procedure.



**Figure 2.6.2.2.12.1-1. Hashing Example**

If the CDMA Frequency Assignment has changed but the band class is the same (the computed CDMA Channel is different from CDMACH<sub>s</sub> but the computed CDMA band class is the same as CDMABAND<sub>s</sub>), the mobile station shall perform the following actions:

- If the stored configuration parameters is not current (see 2.6.2.2) for the corresponding base station and frequency assignment, the mobile station shall perform the following actions:
  - Set CDMACH<sub>s</sub> to the new CDMA Channel.
  - Set PAGE\_CHAN<sub>s</sub> to '1'.
  - Set PAGECH<sub>s</sub> to the Primary Paging Channel.

- 1       o Set CONFIG\_MSG\_SEQ<sub>s</sub>, SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
2       CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
3       FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
4       GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
5       GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>,  
6       USER\_ZONE\_IDMSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, and  
7       ACC\_MSG\_SEQ<sub>s</sub> to NULL. The mobile station shall keep the parameters  
8       associated with the current overhead messages until they are updated on the  
9       new Paging Channel<sup>8</sup>.
- 10       o Tune to the new CDMA Channel.
- 11       • Otherwise, the mobile station shall perform the following actions:  
12       – Set CDMACH<sub>s</sub> to the new CDMA Channel.  
13       – The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a  
14       new Paging Channel number in the range 1 to PAGE\_CHAN<sub>s</sub>, where  
15       PAGE\_CHAN<sub>s</sub> is the value stored for the Paging Channel whose stored  
16       information is current. The mobile station shall store the new Paging Channel  
17       number as PAGECH<sub>s</sub>.  
18       – Tune to the new CDMA Channel and shall begin monitoring the new Paging  
19       Channel.
- 20   If the band class has changed (the computed CDMA band class is different than  
21   CDMABAND<sub>s</sub>), the mobile station shall perform the following actions:  
22       • If BYPASS\_SYS\_DET\_IND<sub>s</sub> is equal to '0' for this CDMA channel, the mobile station  
23       shall perform the following:  
24       – Set NEW\_BAND\_RECORD.NEW\_BAND\_CLASS to the computed band class  
25       – Set NEW\_BAND\_RECORD.NEW\_FREQ to the computed CDMA Channel  
26       – The mobile station shall enter the *System Determination Substate* of the *Mobile*  
27       *Station Initialization State* with a new band indication.  
28       • If BYPASS\_SYS\_DET\_IND<sub>s</sub> is equal to '1' for this CDMA channel, the mobile station  
29       shall perform the following:  
30       – If the stored configuration parameters is not current (see 2.6.2.2) for the  
31       corresponding base station and frequency assignment, the mobile station shall  
32       perform the following actions:  
33       + Set CDMACH<sub>s</sub> to the new CDMA Channel.

---

<sup>8</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).

- 1           + Set CDMABAND<sub>S</sub> to the new band class.
- 2           + Set PAGE\_CHAN<sub>S</sub> to '1'.
- 3           + Set PAGECH<sub>S</sub> to the Primary Paging Channel.
- 4           + Set CONFIG\_MSG\_SEQ<sub>S</sub>, SYS\_PAR\_MSG\_SEQ<sub>S</sub>, NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,
- 5           CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,
- 6           FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,
- 7           GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>,
- 8           GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>,
- 9           USER\_ZONE\_IDMSG\_SEQ<sub>S</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, and
- 10          ACC\_MSG\_SEQ<sub>S</sub> to NULL. The mobile station shall keep the parameters
- 11          associated with the current overhead messages until they are updated on
- 12          the new Paging Channel<sup>9</sup>.
- 13          + Tune to the new CDMA Channel.
- 14          – Otherwise, the mobile station shall perform the following actions:
- 15           + Set CDMACH<sub>S</sub> to the new CDMA Channel.
- 16           + Set CDMABAND<sub>S</sub> to the new band class.
- 17           + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select
- 18           a new Paging Channel number in the range 1 to PAGE\_CHAN<sub>S</sub>, where
- 19           PAGE\_CHAN<sub>S</sub> is the value stored for the Paging Channel whose stored
- 20           information is current. The mobile station shall store the new Paging
- 21           Channel number as PAGECH<sub>S</sub>.
- 22           + Tune to the new CDMA Channel and shall begin monitoring the new Paging
- 23           Channel.
- 24   2.6.2.2.12.2 Extended CDMA Channel List Message on Primary Broadcast Control
- 25   Channel
- 26   Whenever the *Extended CDMA Channel List Message* is received on the Primary Broadcast
- 27   Control Channel, the mobile station shall compare the configuration message sequence
- 28   number, CONFIG\_MSG\_SEQ<sub>r</sub>, to that stored in CONFIG\_MSG\_SEQ<sub>S</sub>. If the comparison
- 29   results in a match, the mobile station may ignore the message. If the comparison results
- 30   in a mismatch, the mobile station shall process the remaining fields in the message as
- 31   follows:
- 32   If the *Extended CDMA Channel List Message* lists CDMA channels from more than one
- 33   band class and the mobile station hashes to a band class other than the current band

---

<sup>9</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).



1 class, the mobile station shall process this message after UNI\_NGHRBR\_LST\_MSG\_SEQ<sub>S</sub>  
2 becomes current.

3 The mobile station shall store the following parameters:

- 4 • Configuration message sequence number  
5 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
6 EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>).

7 The mobile station shall process this message if FD\_CHAN\_LST\_SEQ<sub>S</sub> is current and the  
8 mobile station does not support any bandclass listed by the base station in the *Flex Duplex*  
9 *CDMA Channel List Message* or if the mobile station does not support flexible spacing  
10 between forward and reverse channels. Otherwise, the mobile station shall ignore this  
11 message.

12 To determine the CDMA Channel (Frequency Assignment) for its Primary Broadcast  
13 Control Channel, the mobile station shall first select a subset of CDMA channels from the  
14 *Extended CDMA Channel List Message* that will be used for channel hashing. The  
15 attributes for channel selection are support for that frequency, the band subclass (if  
16 included), RC greater than 2, Quick Paging Channel and transmit diversity. The mobile  
17 station shall first select the entire CDMA channel list for channel hashing. Starting from  
18 an empty list, the mobile station shall then select the first CDMA Channel list as follows:

- 19 • For each band class record included in this message, the mobile station shall  
20 perform the following:
  - 21 – If band subclass information is included for this band class record  
22 (SUBCLASS\_INFO\_INCL<sub>R</sub> = '1' or ADD\_SUBCLASS\_INFO\_INCL<sub>R</sub> = '1'), the mobile  
23 station shall add only those channels belonging to the band class and band  
24 subclasses that are supported by both the mobile station and the base station,  
25 in the order they appear in the *Extended CDMA Channel List Message*<sup>10</sup>.
  - 26 – Otherwise (SUBCLASS\_INFO\_INCL<sub>R</sub> = '0', ADD\_SUBCLASS\_INFO\_INCL<sub>R</sub> = '0' or  
27 P\_REV\_IN\_USE<sub>S</sub> is less than 11), the mobile station shall add only those  
28 channels that it supports for the associated band class, in the order they  
29 appear in the *Extended CDMA Channel List Message*.
- 30 • If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to 11, the mobile station shall sort the  
31 channels first by the ascending order of band class value as specified in [30], then  
32 by the ascending order of CDMA\_FREQ within each band class.
- 33 • If TD\_SEL\_INCL<sub>R</sub> is equal to '1', the mobile station shall perform the following:

---

<sup>10</sup> The mobile station will not discard frequencies as long as they belong to a subclass that is both listed in the message and supported by the mobile station. If the base station does not list any subclass, the mobile station assumes that all subclasses are supported by the base station. The subclass to frequency mapping is not provided in the *Extended CDMA Channel List Message*; the mobile station needs to refer to [45] to find the mapping.

- 1       – If the mobile station is capable of supporting the transmit diversity mode  
2       specified by  $TD\_MODE_r$ , the mobile station shall select those CDMA channels  
3       that have  $TD\_HASH\_IND_r$  set to '1' from the CDMA channel list for the first  
4       CDMA Channel list while preserving the order.
- 5       – If the mobile station is not capable of supporting the transmit diversity mode  
6       specified by  $TD\_MODE_r$ , the mobile station shall select those CDMA channels  
7       that have  $TD\_HASH\_IND_r$  set to '0' from the CDMA channel list for the first  
8       CDMA Channel list while preserving the order.
- 9       • If  $TD\_SEL\_INCL_r$  is equal to '0', the mobile station shall select the entire list for the  
10      first CDMA Channel list.

11 From this first CDMA Channel list, the mobile station shall select the second CDMA  
12 Channel list as follows:

- 13      • If  $RC\_QPCH\_SEL\_INCL_r$  is equal to '1' and the mobile station is capable of RC  
14      greater than 2 or capable of supporting QPCH, the mobile station shall select those  
15      CDMA channels with  $RC\_QPCH\_HASH\_IND_r$  set to '1' for the second CDMA  
16      Channel list for CDMA channel hashing while preserving the order. If this list is  
17      empty, the mobile station shall use the first CDMA Channel list as the second  
18      CDMA Channel list for CDMA channel hashing.
- 19      • Otherwise, the mobile station shall use the first CDMA Channel list as the second  
20      CDMA Channel list for CDMA channel hashing.

21 From this second CDMA Channel list, the mobile station shall select the third CDMA  
22 Channel listsubset as follows:

- 23      • If  $CDMA\_FREQ\_WEIGHT\_INCL_r$  is equal to '0', the mobile station shall set the third  
24      CDMA Channel list to be equal to the second CDMA Channel list
- 25      • If  $CDMA\_FREQ\_WEIGHT\_INCL_r$  is equal to '1', starting with an empty third CDMA  
26      Channel list, for each entry "E" in the second CDMA Channel list in the order they  
27      appear, the mobile station shall append N consecutive entries "E" at the end of the  
28      third CDMA Channel, where N is the weight of "E" and equals either  
29       $CDMA\_FREQ\_WEIGHT_{r+1}$  or  $ADD\_CDMA\_FREQ\_WEIGHT_{r+1}$  appropriately

30 The mobile station shall determine the band class for its Primary Broadcast Control  
31 Channel as follows:

- 32      • The mobile station shall generate a CDMA band list as follows. Starting with an  
33      empty CDMA band list, for each channel in the third CDMA Channel list in the  
34      order they appear, the mobile station shall append an entry equal to the band class  
35      of that channel, at the end of the CDMA band list
- 36      • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of  
37      the CDMA band list to compute the band class for its Primary Broadcast Control  
38      Channel.

1 After the band class has been selected, the mobile station shall determine the CDMA  
2 Channel (Frequency Assignment) for its Primary Broadcast Control Channel as follows:

- 3 • The mobile station shall eliminate those channels which are not in the computed  
4 band class from the third CDMA Channel list to generate the final CDMA Channel  
5 list.
- 6 • If the final CDMA Channel list is empty, the mobile station shall enter the *System*  
7 *Determination Substate* with an acquisition failure indication
- 8 • The mobile station shall then use the hash algorithm specified in 2.6.7.1 with the  
9 number of channels in the final CDMA Channel list to determine the CDMA  
10 Channel (Frequency Assignment) for its Primary Broadcast Control Channel.

11 If the CDMA Frequency Assignment has changed but the band class is the same (the  
12 computed CDMA Channel is different from CDMACH<sub>S</sub> but the computed CDMA band class  
13 is CDMABAND<sub>S</sub>), the mobile station shall perform the following:

- 14 • Set CDMACH<sub>S</sub> to the new CDMA Channel.
- 15 • Set CONFIG\_MSG\_SEQ<sub>S</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>,  
16 UNI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
17 FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and  
18 PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL. The mobile station  
19 shall keep the parameters associated with the current overhead messages until  
20 they are updated on the new Primary Broadcast Control Channel<sup>11</sup>.
- 21 • If the mobile station is operating in the Spreading Rate 1:
  - 22 – If the assigned CDMA channel supports transmit diversity, the mobile station  
23 shall set the following fields corresponding to the assigned CDMA channel:
    - 24 + SR1\_TD\_POWER\_LEVEL<sub>S</sub> = TD\_POWER\_LEVEL<sub>r</sub>.
    - 25 + SR1\_TD\_MODE<sub>S</sub> = TD\_MODE<sub>r</sub>.
    - 26 + BRAT<sub>S</sub> = SR1\_BRAT\_TD<sub>S</sub>.
    - 27 + BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_TD<sub>S</sub>.
    - 28 + BCCH<sub>S</sub> = BCCH\_CODE\_CHAN\_TD<sub>S</sub>.
  - 29 – Otherwise, the mobile station shall set the following fields corresponding to the  
30 assigned CDMA channel:
    - 31 + BRAT<sub>S</sub> = SR1\_BRAT\_NON\_TD<sub>S</sub>,
    - 32 + BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_NON\_TD<sub>S</sub>,

---

<sup>11</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).

- 1           +   BCCH<sub>S</sub> = BCCH\_CODE\_CHAN\_NON\_TD<sub>S</sub>,
- 2       •   Tune to the new CDMA Channel
- 3   If the band class has changed (the computed CDMA band class is different than
- 4   CDMABAND<sub>S</sub>), the mobile station shall perform the following actions:
- 5       •   If BYPASS\_SYS\_DET\_IND<sub>R</sub> is equal to '0' for this CDMA channel, the mobile station
- 6       shall perform the following:
- 7           –   Set NEW\_BAND\_RECORD.NEW\_BAND\_CLASS to the computed band class.
- 8           –   Set NEW\_BAND\_RECORD.NEW\_FREQ to the computed CDMA Channel.
- 9           –   The mobile station shall enter the *System Determination Substate* of the *Mobile*
- 10          *Station Initialization State* with a new band indication.
- 11       •   If BYPASS\_SYS\_DET\_IND<sub>R</sub> is equal to '1' for this CDMA channel, the mobile station
- 12       shall perform the following:
- 13           –   Set CDMACH<sub>S</sub> to the new CDMA Channel.
- 14           –   Set CDMABAND<sub>S</sub> to the new band class.
- 15           o   Set CONFIG\_MSG\_SEQ<sub>S</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>,
- 16           UNI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,
- 17           FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and
- 18           PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL. The mobile
- 19           station shall keep the parameters associated with the current overhead
- 20           messages until they are updated on the new Primary Broadcast Control
- 21           Channel<sup>12</sup>.
- 22       o   If the mobile station is operating in the Spreading Rate 1:
- 23           +   If the assigned CDMA channel supports transmit diversity, the mobile
- 24           station shall set the following fields corresponding to the assigned CDMA
- 25           channel:
- 26               o   SR1\_TD\_POWER\_LEVEL<sub>S</sub> = TD\_POWER\_LEVEL<sub>R</sub>.
- 27               o   SR1\_TD\_MODE<sub>S</sub> = TD\_MODE<sub>R</sub>.
- 28               o   BRAT<sub>S</sub> = SR1\_BRAT\_TD<sub>S</sub>.
- 29               o   BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_TD<sub>S</sub>.
- 30               o   BCCH<sub>S</sub> = BCCH\_CODE\_CHAN\_TD<sub>S</sub>.

---

<sup>12</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).

- 1       – Otherwise, the mobile station shall set the following fields corresponding to the
- 2       assigned CDMA channel:
- 3       +  $BRAT_S = SR1\_BRAT\_NON\_TD_S$ ,
- 4       +  $BCCH\_CODE\_RATE_S = SR1\_CRAT\_NON\_TD_S$ ,
- 5       +  $BCCH_S = BCCH\_CODE\_CHAN\_NON\_TD_S$ ,
- 6       – Tune to the new CDMA Channel

#### 7   2.6.2.2.13 ANSI-41 System Parameters Message

8   Whenever an *ANSI-41 System Parameters Message* is received, the configuration message  
 9   sequence number,  $CONFIG\_MSG\_SEQ_R$ , shall be compared to that stored in  
 10  $A41\_SYS\_PAR\_MSG\_SEQ_S$ . If the comparison results in a match, the mobile station may  
 11 ignore the message. If the comparison results in a mismatch, then the mobile station shall  
 12 process the remaining fields in the message as described in 2.6.2.2.13.1, 2.6.2.2.13.2,  
 13 2.6.2.2.13.3, and 2.6.2.2.13.4.

14 If  $REG\_PRD$  is not within the valid range specified in 3.7.2.3.2.31, then the mobile station  
 15 shall ignore the *ANSI-41 System Parameters Message* that contains it.

#### 16   2.6.2.2.13.1 Stored Parameters

17   The mobile station shall store the following parameters:

- 18       • Configuration message sequence number  
 19       ( $CONFIG\_MSG\_SEQ_S = CONFIG\_MSG\_SEQ_R$ ,  
 20        $A41\_SYS\_PAR\_MSG\_SEQ_S = CONFIG\_MSG\_SEQ_R$ )
- 21       • Home registration indicator ( $HOME\_REG_S = HOME\_REG_R$ )
- 22       • SID roamer registration indicator ( $FOR\_SID\_REG_S = FOR\_SID\_REG_R$ )
- 23       • NID roamer registration indicator ( $FOR\_NID\_REG_S = FOR\_NID\_REG_R$ )
- 24       • Power-up registration indicator ( $POWER\_UP\_REG_S = POWER\_UP\_REG_R$ )
- 25       • Power-down registration indicator ( $POWER\_DOWN\_REG_S = POWER\_DOWN\_REG_R$ )
- 26       • Parameter-change registration indicator ( $PARAMETER\_REG_S = PARAMETER\_REG_R$ )
- 27       • Preferred Enhanced Access Channel MSID type  
 28       ( $PREF\_MSID\_TYPE_S = PREF\_MSID\_TYPE_R$ )
- 29       • Extended Preferred Enhanced Access Channel MSID type  
 30       ( $EXT\_PREF\_MSID\_TYPE_S = EXT\_PREF\_MSID\_TYPE_R$ ), if included; otherwise, set  
 31        $EXT\_PREF\_MSID\_TYPE_S$  to NULL.
- 32       • MEID Required indicator is included ( $MEID\_REQD_S = MEID\_REQD_R$ ), if included;  
 33       otherwise, set  $MEID\_REQD_S$  to '0'
- 34       • The mobile station shall set its operational IMSI,  $IMSI\_O$ , as follows:
- 35       – If  $IMSI\_T\_SUPPORTED_R$  is equal to '0', the mobile station shall set  $IMSI\_O$  to  
 36        $IMSI\_M_P$ .

- 1        - If IMSI\_T\_SUPPORTED<sub>r</sub> is equal to '1' and the mobile station's IMSI\_T<sub>p</sub> has  
2           been programmed, the mobile station shall set IMSI\_O to IMSI\_T<sub>p</sub>.
  - 3        - If IMSI\_T\_SUPPORTED<sub>r</sub> is equal to '1' and the mobile station's IMSI\_T<sub>p</sub> has not  
4           been programmed, the mobile station shall set IMSI\_O to IMSI\_M<sub>p</sub>.
  - 5        - If IMSI\_O has been changed, the mobile station shall set  
6           MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
7           FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub> to NULL and set NUM\_FCCCH<sub>s</sub> to '1' and  
8           FCCCH\_ID<sub>s</sub> to '1'.
  - 9        • If OTHER\_INFO\_INCL<sub>r</sub> is set to '1', the mobile station shall store:  
10          - Base station identification (BASE\_ID<sub>s</sub> = BASE\_ID<sub>r</sub>)  
11          - If MCC<sub>r</sub> = '1111111111' and IMSI\_11\_12<sub>r</sub> = '1111111', the mobile station shall  
12           set the IMSI\_O to IMSI\_M<sub>p</sub> and store:  
13           + Mobile Country Code (MCC<sub>s</sub> = MCC\_M<sub>p</sub>) and  
14           + IMSI 11th and 12th digits (IMSI\_11\_12<sub>s</sub> = IMSI\_M\_11\_12<sub>p</sub>);  
15          - Otherwise, the mobile station shall store:  
16           + Mobile Country Code (MCC<sub>s</sub> = MCC<sub>r</sub>) and  
17           + IMSI 11th and 12th digits (IMSI\_11\_12<sub>s</sub> = IMSI\_11\_12<sub>r</sub>).  
18          - Broadcast GPS assist indicator (BROADCAST\_GPS\_ASST<sub>s</sub> =  
19           BROADCAST\_GPS\_ASST<sub>r</sub>)  
20          - Signaling encryption supported indicator (SIG\_ENCRYPT\_SUP<sub>s</sub> =  
21           SIG\_ENCRYPT\_SUP<sub>r</sub>)  
22        • Least significant digit of MNC (IMSI\_10<sub>s</sub> = IMSI\_10<sub>r</sub>), if included.  
23        • If IMSI\_O is set to the IMSI\_M, the mobile station shall set:  
24          - IMSI\_O\_S<sub>s</sub> to IMSI\_M\_S<sub>p</sub> (i.e., IMSI\_O\_S1<sub>s</sub> to IMSI\_M\_S1<sub>p</sub> and IMSI\_O\_S2<sub>s</sub> to  
25           IMSI\_M\_S2<sub>p</sub>)  
26          - IMSI\_O\_11\_12<sub>s</sub> to IMSI\_M\_11\_12<sub>p</sub>  
27          - MCC\_O<sub>s</sub> to MCC\_M<sub>p</sub>  
28          - IMSI\_O\_ADDR\_NUM<sub>s</sub> to IMSI\_M\_ADDR\_NUM<sub>p</sub>  
29        • If IMSI\_O is set to the IMSI\_T, the mobile station shall set:  
30          - IMSI\_O\_S<sub>s</sub> to IMSI\_T\_S<sub>p</sub> (i.e., IMSI\_O\_S1<sub>s</sub> to IMSI\_T\_S1<sub>p</sub> and IMSI\_O\_S2<sub>s</sub> to  
31           IMSI\_T\_S2<sub>p</sub>).  
32          - IMSI\_O\_11\_12<sub>s</sub> to IMSI\_T\_11\_12<sub>p</sub>  
33          - MCC\_O<sub>s</sub> to MCC\_T<sub>p</sub>  
34          - IMSI\_O\_ADDR\_NUM<sub>s</sub> to IMSI\_T\_ADDR\_NUM<sub>p</sub>  
35        • Delete foreign TMSI (DELETE\_FOR\_TMSI<sub>s</sub> = DELETE\_FOR\_TMSI<sub>r</sub>)

- 1       • Use TMSI ( $USE\_TMSI_S = USE\_TMSI_T$ )
- 2       • TMSI zone length ( $TMSI\_ZONE\_LEN_S = TMSI\_ZONE\_LEN_T$ )
- 3       • TMSI zone number ( $TMSI\_ZONE_S = TMSI\_ZONE_T$ )
- 4       • Maximum number of alternative service options ( $MAX\_NUM\_ALT\_SO_S =$
- 5        $MAX\_NUM\_ALT\_SO_T$ ).
- 6       • The mobile station shall set all bits of  $TMSI\_CODE_{S-p}$  to '1' if all of the following
- 7       conditions are met:
  - 8       – The bits of  $TMSI\_CODE_{S-p}$  are not all equal to '1',
  - 9       –  $DELETE\_FOR\_TMSI_S$  is equal to '1', and
  - 10      –  $ASSIGNING\_TMSI\_ZONE\_LEN_{S-p}$  is not equal to  $TMSI\_ZONE\_LEN_S$ , or the least
  - 11      significant  $ASSIGNING\_TMSI\_ZONE\_LEN_{S-p}$  octets of
  - 12       $ASSIGNING\_TMSI\_ZONE_{S-p}$  are not equal to  $TMSI\_ZONE_S$ .
- 13      • Message integrity supported indicator ( $MSG\_INTEGRITY\_SUP_S =$
- 14       $MSG\_INTEGRITY\_SUP_T$ ), if  $P\_REV\_IN\_USE_S$  is greater than or equal to 10;
- 15      otherwise,  $MSG\_INTEGRITY\_SUP_S = 0$ .
- 16      • If  $MSG\_INTEGRITY\_SUP_T$  is equal to '1' and  $SIG\_INTEGRITY\_SUP\_INCL_T$  is equal to
- 17      '1', the mobile station shall store the message integrity algorithms that the base
- 18      station supports ( $SIG\_INTEGRITY\_SUP_S = SIG\_INTEGRITY\_SUP_T$ ); otherwise, the
- 19      mobile station shall set  $SIG\_INTEGRITY\_SUP_S$  to '00000000'.
- 20    If the mobile station supports packet data service options, the mobile station shall store
- 21    the packet data services zone identifier ( $PACKET\_ZONE\_ID_S = PACKET\_ZONE\_ID_T$ );
- 22    otherwise, the mobile station shall set  $PACKET\_ZONE\_ID_S$  to '00000000'.
- 23    If the mobile station supports packet data service options and the  $PZ\_HYST\_ENABLED$
- 24    field is included, the mobile station shall store the packet zone hysteresis enabled
- 25    indicator ( $PZ\_HYST\_ENABLED_S = PZ\_HYST\_ENABLED_T$ ); otherwise, the mobile station
- 26    shall set  $PZ\_HYST\_ENABLED_S$  to '1'.
- 27    If the mobile station supports packet data service options and the  $PZ\_HYST\_LIST\_LEN$  field
- 28    is included, the mobile station shall store the packet zone hysteresis list length
- 29    ( $PZ\_HYST\_LIST\_LEN_S = PZ\_HYST\_LIST\_LEN_T$ ); otherwise, the mobile station shall set
- 30     $PZ\_HYST\_LIST\_LEN_S$  to 4.
- 31    If the mobile station supports packet data service options and the  $PZ\_HYST\_ACT\_TIMER$
- 32    field is included, the mobile station shall store the packet zone hysteresis activation timer
- 33    ( $PZ\_HYST\_ACT\_TIMER_S = PZ\_HYST\_ACT\_TIMER_T$ ); otherwise, the mobile station shall set
- 34     $PZ\_HYST\_ACT\_TIMER_S$  to 30 seconds.
- 35    If the mobile station supports packet data service options and the  $PZ\_HYST\_TIMER\_MUL$
- 36    field and the  $PZ\_HYST\_TIMER\_EXP$  field are included, the mobile station shall store the
- 37    packet zone hysteresis timer ( $PZ\_HYST\_TIMER_S = PZ\_HYST\_TIMER\_MUL_T \times 8 \wedge$
- 38     $PZ\_HYST\_TIMER\_EXP_T$ ); otherwise, the mobile station shall set  $PZ\_HYST\_TIMER_S$  to 60
- 39    seconds.
- 40    If the mobile station supports the *Device Information Message* on the r-csch, the mobile

- 1 station shall store:
  - 2 • Autonomous message supported indicator
  - 3 (AUTO\_MSG\_SUPPORTED<sub>S</sub> = AUTO\_MSG\_SUPPORTED<sub>T</sub>)
- 4 If AUTO\_MSG\_SUPPORTED<sub>T</sub> is equal to '1' and the mobile station supports *the Device*
- 5 *Information Message* on the r-csch, the mobile station shall store:
  - 6 • Autonomous message interval
  - 7 (AUTO\_MSG\_INTERVAL<sub>S</sub> = AUTO\_MSG\_INTERVAL<sub>T</sub>)
- 8 The mobile station shall store concurrent service supported indicator (CS\_SUPPORTED<sub>S</sub>=
- 9 CS\_SUPPORTED<sub>T</sub>).
- 10 Maximum number of additional service reference identifiers allowed in origination
- 11 (MAX\_ADD\_SERV\_INSTANCE<sub>S</sub> = MAX\_ADD\_SERV\_INSTANCE<sub>T</sub>), if included; otherwise, the
- 12 mobile station shall set MAX\_ADD\_SERV\_INSTANCE<sub>S</sub> to 0.
- 13 The mobile station shall store mobile station initiated position location determination
- 14 supported indicator (MS\_INIT\_POS\_LOC\_SUP\_IND<sub>S</sub> = MS\_INIT\_POS\_LOC\_SUP\_IND<sub>T</sub>).
- 15 The mobile station shall also perform the following:
  - 16 • If the mobile station is not in the *Origination Attempt Substate*, or *Page Response*
  - 17 *Substate*, the mobile station shall store the following prior to storing the remaining
  - 18 parameters:
    - 19 – Registered system identification (REG\_SID<sub>S</sub> = SID<sub>S</sub>).
    - 20 – Registered network identification (REG\_NID<sub>S</sub> = NID<sub>S</sub>).
    - 21 – Registered registration zone (REG\_REG\_ZONE<sub>S</sub> = REG\_ZONE<sub>S</sub>).
    - 22 – Registered zone timer length (REG\_ZONE\_TIMER<sub>S</sub> = ZONE\_TIMER<sub>T</sub>).
  - 23 • System identification (SID<sub>S</sub> = SID<sub>T</sub>)
  - 24 • Network identification (NID<sub>S</sub> = NID<sub>T</sub>)
  - 25 • Registration zone (REG\_ZONE<sub>S</sub> = REG\_ZONE<sub>T</sub>)
  - 26 • Number of registration zones to be retained (TOTAL\_ZONES<sub>S</sub> = TOTAL\_ZONES<sub>T</sub>)
  - 27 • Zone timer length (ZONE\_TIMER<sub>S</sub> = ZONE\_TIMER<sub>T</sub>)
  - 28 • Multiple SID storage indicator (MULT\_SIDS<sub>S</sub> = MULT\_SIDS<sub>T</sub>)
  - 29 • Multiple NID storage indicator (MULT\_NIDS<sub>S</sub> = MULT\_NIDS<sub>T</sub>)
  - 30 • Registration period (REG\_PRD<sub>S</sub> = REG\_PRD<sub>T</sub>)
  - 31 • If DIST\_REG\_INCL is equal to '1', the mobile station shall store:
    - 32 – Registration distance (REG\_DIST<sub>S</sub> = REG\_DIST<sub>T</sub>)
  - 33 • If DIST\_REG\_INCL is equal to '0', then the mobile station shall set REG\_DIST<sub>S</sub>
  - 34 equal to '000000000000'.



- 1       • If TKZ\_MODE\_SUPPORTED<sub>r</sub> is not included, the mobile station shall set
- 2       TKZ\_MODE\_SUPPORTED<sub>s</sub> to '0'; otherwise, the mobile station shall set
- 3       TKZ\_MODE\_SUPPORTED<sub>s</sub> to TKZ\_MODE\_SUPPORTED<sub>r</sub>. If
- 4       TKZ\_MODE\_SUPPORTED<sub>s</sub> is equal to '1', the mobile station shall store the tracking
- 5       zone identifier (TKZ\_ID<sub>s</sub> = TKZ\_ID<sub>r</sub>).

6       The mobile station shall ignore any fields at the end of the *ANSI-41 System Parameters*  
 7       *Message* that are not defined according to the protocol revision level (MOB\_P\_REV<sub>p</sub> of the  
 8       current band class) being used by the mobile station.

#### 9       2.6.2.2.13.2 Roaming Status

- 10      The mobile station shall determine the roaming status for the mobile station (see 2.6.5.3).
- 11      The mobile station should indicate to the user whether the mobile station is roaming.

#### 12     2.6.2.2.13.3 Registration

- 13      The mobile station shall update stored variables and perform other registration procedures
- 14      as specified in 2.6.5.5.2.2.

#### 15     2.6.2.2.13.4 PACA Disable for SID Change

- 16      If PACA<sub>s</sub> is equal to enabled, and SID<sub>s</sub> is not equal to PACA\_SID<sub>s</sub>, the mobile station shall
- 17      set PACA<sub>s</sub> to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and
- 18      should indicate to the user that the PACA call has been canceled

#### 19     2.6.2.2.14 MC-RR Parameters Message

- 20      Whenever an *MC-RR Parameters Message* is received, the configuration message sequence
- 21      number, CONFIG\_MSG\_SEQ<sub>r</sub>, shall be compared to that stored in
- 22      MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match, the mobile station may
- 23      ignore the message. If the comparison results in a mismatch, then the mobile station shall
- 24      process the remaining fields in the message as described in 2.6.2.2.14.1, 2.6.2.2.14.2, and
- 25      2.6.2.2.14.3.

- 26      If the protocol revision level supported by the mobile station (MOB\_P\_REV<sub>p</sub>) is less than
- 27      the minimum protocol revision level supported by the base station (MIN\_P\_REV<sub>r</sub>), the
- 28      mobile station shall enter the *System Determination Substate* of the *Mobile Station*
- 29      *Initialization State* with a protocol mismatch indication (see 2.6.1.1).

- 30      If BASE\_LAT, BASE\_LONG, or PWR\_REP\_THRESH is not within the valid ranges specified
- 31      in 3.7.2.3.2.31, then the mobile station shall ignore the *MC-RR Parameters Message* that
- 32      contains them.

- 33      If the mobile station supports Spreading Rate 3 on the common channel and SR3\_INCL<sub>s</sub> is
- 34      equal to '1', the mobile station shall set:

- 35       • BRAT<sub>s</sub> = SR3\_BRAT<sub>r</sub>,
- 36       • BCCH<sub>s</sub> = SR3\_BCCH\_CODE\_CHAN<sub>r</sub>;
- 37       • BCCH\_CODE\_RATE<sub>s</sub> = 1/3;

- 1 •  $SR3\_PRIMARY\_PILOT_S = SR3\_PRIMARY\_PILOT_T$ ;
- 2 •  $SR3\_PILOT\_POWER1_S = SR3\_PILOT\_POWER1_T$ ;
- 3 •  $SR3\_PILOT\_POWER2_S = SR3\_PILOT\_POWER2_T$ ;
- 4 • If  $SR3\_CENTER\_FREQ\_INCL_T$  is equal to '1',  $POTENTIAL\_CDMACH_S =$
- 5  $SR3\_CENTER\_FREQ_T$ .
- 6 If  $POTENTIAL\_CDMACH_S$  is different from  $CDMACH_S$ , the mobile station shall set
- 7  $CDMACH_S = POTENTIAL\_CDMACH_S$  and then tune to the CDMA Channel ( $CDMACH_S$ ).

#### 8 2.6.2.2.14.1 Stored Parameters

9 The mobile station shall store the following parameters:

- 10 • Configuration message sequence number
- 11 ( $CONFIG\_MSG\_SEQ_S = CONFIG\_MSG\_SEQ_T$ ,
- 12  $MC\_RR\_PAR\_MSG\_SEQ_S = CONFIG\_MSG\_SEQ_T$ )
- 13 • Base station identification ( $BASE\_ID_S = BASE\_ID_T$ )
- 14 • Protocol revision level ( $P\_REV_S = P\_REV_T$ )
- 15 • Protocol revision level currently in use ( $P\_REV\_IN\_USE_S =$  the lesser value of
- 16  $P\_REV_S$  and  $MOB\_P\_REV_P$  of the current band class)
- 17 • Minimum protocol revision level ( $MIN\_P\_REV_S = MIN\_P\_REV_T$ ).
- 18 • Search window size for the Active Set and Candidate Set
- 19 ( $SRCH\_WIN\_A_S = SRCH\_WIN\_A_T$ )
- 20 • Search window size for the Remaining Set ( $SRCH\_WIN\_R_S = SRCH\_WIN\_R_T$ )
- 21 • Pilot detection threshold ( $T\_ADD_S = T\_ADD_T$ )
- 22 • Pilot drop threshold ( $T\_DROP_S = T\_DROP_T$ )
- 23 • Active Set versus Candidate Set comparison threshold ( $T\_COMP_S = T\_COMP_T$ )
- 24 • Drop timer value ( $T\_TDROP_S = T\_TDROP_T$ )
- 25 • Drop timer range value ( $T\_TDROP\_RANGE_S = T\_TDROP\_RANGE_T$ ) if
- 26  $T\_TDROP\_RANGE\_INCL_T$  is equal to '1'; otherwise,  $T\_TDROP\_RANGE_S = '0000'$
- 27 • Maximum age for retention of Neighbor Set members
- 28 ( $NGHBR\_MAX\_AGE_S = NGHBR\_MAX\_AGE_T$ )
- 29 • Slope of the handoff add/drop criterion ( $SOFT\_SLOPE_S = SOFT\_SLOPE_T$ )
- 30 • Intercept of the handoff add criterion ( $ADD\_INTERCEPT_S = ADD\_INTERCEPT_T$ )
- 31 • Intercept of the handoff drop criterion ( $DROP\_INTERCEPT_S = DROP\_INTERCEPT_T$ )
- 32 • If  $ENC\_SUPPORTED_T$  is equal to '1', the mobile station shall store:
- 33 – Signaling encryption supported indicator ( $SIG\_ENCRYPT\_SUP_S =$
- 34  $SIG\_ENCRYPT\_SUP_T$ )

- 1           – User information encryption supported indicator (UI\_ENCRYPT\_SUP<sub>S</sub> =  
2           UI\_ENCRYPT\_SUP<sub>r</sub>)
- 3   If P\_REV\_IN\_USE<sub>S</sub> has been changed, the mobile station shall set ACC\_MSG\_SEQ<sub>S</sub>,  
4   CURR\_ACC\_MSG\_SEQ, A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, UNI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, and  
5   EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to NULL.
- 6   If CCH\_INFO\_INCL<sub>r</sub> is equal to '1', the mobile station shall store:
- 7       • If MCC<sub>r</sub> = '111111111' and IMSI\_11\_12<sub>r</sub> = '111111', the mobile station shall set  
8       the IMSI\_O to IMSI\_M<sub>p</sub> and store:
    - 9           – Mobile Country Code (MCC<sub>S</sub> = MCC\_M<sub>p</sub>) and
    - 10          – IMSI 11th and 12th digits (IMSI\_11\_12<sub>S</sub> = IMSI\_M\_11\_12<sub>p</sub>);
  - 11      • Otherwise, the mobile station shall store:
    - 12          – Mobile Country Code (MCC<sub>S</sub> = MCC<sub>r</sub>) and
    - 13          – IMSI 11th and 12th digits (IMSI\_11\_12<sub>S</sub> = IMSI\_11\_12<sub>r</sub>).
  - 14      • Least significant digit of MNC (IMSI\_10<sub>S</sub> = IMSI\_10<sub>r</sub>), if included.
  - 15      • If IMSI\_O has been changed, the mobile station shall set  
16      EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub> to NULL, and set  
17      NUM\_FCCCH<sub>S</sub> to '1' and FCCCH\_ID<sub>S</sub> to '1'.
  - 18      • *Extended Global Service Redirection Message* sent  
19      (EXT\_GLOBAL\_REDIRECT<sub>S</sub> = EXT\_GLOBAL\_REDIRECT<sub>r</sub>) if included; otherwise,  
20      EXT\_GLOBAL\_REDIRECT<sub>S</sub> = '0'
  - 21      • *User Zone Identification Message* sent  
22      (USER\_ZONE\_ID<sub>S</sub> = USER\_ZONE\_ID<sub>r</sub>) if included; otherwise, USER\_ZONE\_ID<sub>S</sub> = '0'
  - 23      • *Private Neighbor List Message* sent  
24      (PRI\_NGHBR\_LST<sub>S</sub> = PRI\_NGHBR\_LST<sub>r</sub>) if included; otherwise,  
25      PRI\_NGHBR\_LST<sub>S</sub> = '0'
  - 26      • *ANSI-41 RAND Message* sent  
27      (SENDING\_RAND<sub>S</sub> = SENDING\_RAND<sub>r</sub>) if included; otherwise,  
28      SENDING\_RAND<sub>S</sub> = '0'
  - 29      • *Access Point Pilot Information Message* sent  
30      (AP\_PILOT\_INFO<sub>S</sub> = AP\_PILOT\_INFO<sub>r</sub>) if included; otherwise, AP\_PILOT\_INFO<sub>S</sub> = '0'
  - 31      If the APPIM\_PERIOD\_INDEX is included in the message APPIM\_PERIOD\_INDEX<sub>S</sub> =  
32      APPIM\_PERIOD\_INDEX<sub>r</sub>. Otherwise, APPIM\_PERIOD\_INDEX<sub>S</sub> = 0.
  - 33      • *Access Point Identification Message* sent  
34      (AP\_IDT<sub>S</sub> = AP\_IDT<sub>r</sub>) if included; otherwise, AP\_IDT<sub>S</sub> = '0'
  - 35      • *Access Point Identification Text Message* sent  
36      (AP\_ID\_TEXT<sub>S</sub> = AP\_ID\_TEXT<sub>r</sub>) if included; otherwise, AP\_ID\_TEXT<sub>S</sub> = '0'

- 1       • *General Overhead Information Message* sent  
2       (GEN\_OVHD\_INF\_IND<sub>S</sub> = GEN\_OVHD\_INF\_IND<sub>T</sub>) if included; otherwise,  
3       GEN\_OVHD\_INF\_IND<sub>S</sub> = '0'
- 4       If the GEN\_OVHD\_CYCLE\_INDEX is included in the message  
5       GEN\_OVHD\_CYCLE\_INDEX<sub>S</sub> = GEN\_OVHD\_CYCLE\_INDEX<sub>T</sub>. Otherwise,  
6       GEN\_OVHD\_CYCLE\_INDEX<sub>S</sub> = 0.
- 7       • *Flex Duplex CDMA Channel List Message* sent  
8       (FD\_CHAN\_LST\_IND<sub>S</sub> = FD\_CHAN\_LST\_IND<sub>T</sub>) if included; otherwise,  
9       FD\_CHAN\_LST\_IND<sub>S</sub> = '0'.
- 10      • *Alternative Technologies Information Message* sent  
11      (ATIM\_IND<sub>S</sub> = ATIM\_IND<sub>T</sub>) if included; otherwise, ATIM\_IND<sub>S</sub> = '0'
- 12      If the ATIM\_CYCLE\_INDEX is included in the message ATIM\_CYCLE\_INDEX<sub>S</sub> =  
13      ATIM\_CYCLE\_INDEX<sub>T</sub>.  
14      Otherwise, ATIM\_CYCLE\_INDEX<sub>S</sub> = 0.
- 15      • Maximum slot cycle index  
16      (MAX\_SLOT\_CYCLE\_INDEX<sub>S</sub> = MAX\_SLOT\_CYCLE\_INDEX<sub>T</sub>)
- 17      • *BCMC Service Parameters Message* sent  
18      (SENDING\_BSPM<sub>S</sub> = SENDING\_BSPM<sub>T</sub>), if included; otherwise, set  
19      SENDING\_BSPM<sub>S</sub> to '0'.
- 20      • *BCMC Service Parameters Message* transmission periodicity index  
21      (BSPM\_PERIOD\_INDEX<sub>S</sub> = BSPM\_PERIOD\_INDEX<sub>T</sub>) if SENDING\_BSPM<sub>T</sub> equals '1';  
22      otherwise, BSPM\_PERIOD\_INDEX<sub>S</sub> = NULL.
- 23      • BSPM\_PERIOD\_INDEX<sub>S</sub> is not equal to NULL, the mobile station shall set  
24      BSPM\_WAIT\_TIME to  $(B + 1) \times 160\text{ms}$  where
- 25                  $B = 2^i \times 16, 0 \leq i \leq 15$
- 26                 and  $i = \text{BSPM\_PERIOD\_INDEX}_S$ .
- 27      • Power control reporting threshold (PWR\_REP\_THRESH<sub>S</sub> = PWR\_REP\_THRESH<sub>T</sub>)
- 28      • Power control reporting frame count (PWR\_REP\_FRAMES<sub>S</sub> = PWR\_REP\_FRAMES<sub>T</sub>)
- 29      • Threshold report mode indicator  
30      (PWR\_THRESH\_ENABLE<sub>S</sub> = PWR\_THRESH\_ENABLE<sub>T</sub>)
- 31      • Periodic report mode indicator (PWR\_PERIOD\_ENABLE<sub>S</sub> =  
32      PWR\_PERIOD\_ENABLE<sub>T</sub>).
- 33      • Power report delay (PWR\_REP\_DELAY<sub>S</sub> = PWR\_REP\_DELAY<sub>T</sub>)
- 34      • System reselection indicator (RESELECT\_INCLUDED<sub>S</sub> = RESELECT\_INCLUDED<sub>T</sub>).
- 35      • Pilot reporting indicator (PILOT\_REPORT<sub>S</sub> = PILOT\_REPORT<sub>T</sub>)
- 36      • Short Data Burst supported indicator (SDB\_SUPPORTED<sub>S</sub> = SDB\_SUPPORTED<sub>T</sub>)

- 1 • Broadcast GPS Assist Indicator ( $BROADCAST\_GPS\_ASST_S =$   
2  $BROADCAST\_GPS\_ASST_T$ )
- 3 • Nominal reverse traffic channel output power offset relative to Reverse Pilot  
4 Channel power ( $RLGAIN\_TRAFFIC\_PILOT_S = RLGAIN\_TRAFFIC\_PILOT_T$ )
- 5 • If  $NUM\_FCCCH_T$  is not equal to '0':
  - 6 – Number of the Forward Common Control Channels ( $NUM\_FCCCH_S =$   
7  $NUM\_FCCCH_T$ )
  - 8 – Data rate for the Forward Common Control Channels ( $FCCCH\_RATE_S =$   
9  $FCCCH\_RATE_T$ )
  - 10 – Code rate for the Forward Common Control Channels ( $FCCCH\_CODE\_RATE_S =$   
11  $FCCCH\_CODE\_RATE_T$ )
  - 12 – For  $i = 0$  to  $NUM\_FCCCH_T - 1$ , store the channel code index for each Forward  
13 Common Control Channel ( $FCCCH\_CODE\_CHAN_S[i] = FCCCH\_CODE\_CHAN_T$ )
- 14 • Broadcast index ( $BCAST\_INDEX_S = BCAST\_INDEX_T$ )
- 15 • The number of Broadcast Control Channels ( $NUM\_BCCH\_BCAST_S =$   
16  $NUM\_BCCH\_BCAST_T$ )
- 17 • If  $NUM\_BCCH\_BCAST_T$  is greater than '000',  $i$  occurrences of the following fields,  
18 where  $i$  ranges from 1 to  $NUM\_BCCH\_BCAST_T$ :
  - 19 – Set the Broadcast Control Channel Number (BCN) to  $i+1$
  - 20 – BCCH Walsh code index ( $BCCH\_CODE\_CHAN[BCN]_S = BCCH\_CODE\_CHAN[i]_T$ )
  - 21 – BCCH data rate ( $BRAT[BCN]_S = BRAT[i]_T$ )
  - 22 – BCCH code rate ( $BCCH\_CODE\_RATE[BCN]_S = BCCH\_CODE\_RATE[i]_T$ )
- 23 • Sync ID supported indicator ( $USE\_SYNC\_ID_S = USE\_SYNC\_ID_T$ )
- 24 • Pilot information request supported indicator ( $PILOT\_INFO\_REQ\_SUPPORTED_S =$   
25  $PILOT\_INFO\_REQ\_SUPPORTED_T$ ).
- 26 • Band class information request indicator ( $BAND\_CLASS\_INFO\_REQ_S =$   
27  $BAND\_CLASS\_INFO\_REQ_T$ )
- 28 • Alternate CDMA band class ( $ALT\_BAND\_CLASS_S = ALT\_BAND\_CLASS_T$ ), if  
29  $BAND\_CLASS\_INFO\_REQ_T$  is equal to '1'.
- 30 • Access entry handoff in order and message processing operation indicator  
31 ( $ACC\_ENT\_HO\_ORDER_S = ACC\_ENT\_HO\_ORDER_T$ ).
- 32 • If  $REV\_PWR\_CNTL\_DELAY\_INCL$  is equal to '1', reverse power control delay  
33 ( $REV\_PWR\_CNTL\_DELAY_S = REV\_PWR\_CNTL\_DELAY_T$ )
- 34 • Permission indicator for the mobile station to request QoS settings in the  
35 *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination*  
36 *Message* ( $MOB\_QOS_S = MOB\_QOS_T$ )
- 37 • If  $RESELECT\_INCLUDED_S$  is equal to '1', the mobile station shall store:

- 1           – Pilot power threshold ( $EC\_THRESH_S = EC\_THRESH_T$ )
- 2           – Pilot  $E_c/I_0$  threshold ( $EC\_I0\_THRESH_S = EC\_I0\_THRESH_T$ )
- 3       • Access handoff permitted indicator ( $ACCESS\_HO_S = ACCESS\_HO_T$ )
- 4       • Access probe handoff permitted indicator ( $ACCESS\_PROBE\_HO_S =$
- 5        $ACCESS\_PROBE\_HO_T$ )
- 6       • If  $ACCESS\_PROBE\_HO_S$  is equal to '1', access handoff list update permitted
- 7       indicator ( $ACC\_HO\_LIST\_UPD_S = ACC\_HO\_LIST\_UPD_T$ )
- 8       • Maximum number of times that the mobile station is permitted to perform an
- 9       access probe handoff ( $MAX\_NUM\_PROBE\_HO_S = MAX\_NUM\_PROBE\_HO_T$ )
- 10      • Access handoff permitted for message response indicator ( $ACCESS\_HO\_MSG\_RSP_S$
- 11       $= ACCESS\_HO\_MSG\_RSP_T$ )
- 12      • Access probe handoff permitted for other messages indicator
- 13      ( $ACC\_PROBE\_HO\_OTHER\_MSG_S = ACC\_PROBE\_HO\_OTHER\_MSG_T$ )
- 14      • If  $USER\_ZONE\_ID_S$  is equal to '0', then the mobile station shall perform the
- 15      following:
  - 16          – Set  $USER\_ZONE\_ID\_MSG\_SEQ_S$  to  $CONFIG\_MSG\_SEQ_S$ .
  - 17          – Set the UZID field of the UZ\_REC to '0000000000000000' for all entries.
  - 18          – Set the UZ\_REV field of the UZ\_REC to '0000' for all entries.
  - 19          – Set the TEMP\_SUB field of the UZ\_REC to '0' for all entries.
- 20      • If  $USER\_ZONE\_ID_S$  is equal to '1' and the mobile station does not support Tiered
- 21      Services, then the mobile station shall set  $USER\_ZONE\_ID\_MSG\_SEQ_S$  to
- 22       $CONFIG\_MSG\_SEQ_S$ .
- 23      • If  $PRI\_NGHBR\_LST_S$  is equal to '0', then the mobile station shall set
- 24       $PRI\_NGHBR\_LST\_MSG\_SEQ_S$  to  $CONFIG\_MSG\_SEQ_S$ .
- 25      • If  $PRI\_NGHBR\_LST_S$  is equal to '1' and the mobile station does not support Tiered
- 26      Services, then the mobile station shall set  $PRI\_NGHBR\_LST\_MSG\_SEQ_S$  to
- 27       $CONFIG\_MSG\_SEQ_S$ .
- 28      • If  $EXT\_GLOBAL\_REDIRECT_S$  is equal to '0', then the mobile station shall set
- 29       $EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ_S$  to  $CONFIG\_MSG\_SEQ_S$ .
- 30      • The mobile station shall perform the following:
  - 31          – If  $SENDING\_RAND_S$  is equal to '1', the mobile station shall set  $AUTH_S$  to '01';
  - 32          otherwise, the mobile station shall set  $AUTH_S$  to '00'.
- 33      • The mobile station shall store the following:
  - 34          – Base station latitude ( $BASE\_LAT_S = BASE\_LAT_T$ )
  - 35          – Base station longitude ( $BASE\_LONG_S = BASE\_LONG_T$ )

- 1     • If CAND\_BAND\_INFO\_REQ<sub>r</sub> is included, the mobile station shall set  
2     CAND\_BAND\_INFO\_REQ<sub>s</sub> to CAND\_BAND\_INFO\_REQ<sub>r</sub>; otherwise, the mobile  
3     station shall set CAND\_BAND\_INFO\_REQ<sub>s</sub> to '0'.
- 4     • If CAND\_BAND\_INFO\_REQ<sub>r</sub> is set to '1', the mobile station shall store the number  
5     of candidate band classes minus one (NUM\_CAND\_BAND\_CLASS<sub>s</sub> =  
6     NUM\_CAND\_BAND\_CLASS<sub>r</sub>).
- 7     • If CAND\_BAND\_INFO\_REQ<sub>r</sub> is set to '1', the mobile station shall perform the  
8     following for each occurrence of the CAND\_BAND\_CLASS record:
  - 9       – Set the CAND\_BAND\_CLASS field of CAND\_BAND\_CLASS\_REC[i] to the i<sup>th</sup>  
10      occurrence of CAND\_BAND\_CLASS<sub>r</sub>.
  - 11      – Set the SUBCLASS\_REC\_LEN field of CAND\_BAND\_CLASS\_REC[i] to the i<sup>th</sup>  
12      occurrence of SUBCLASS\_REC\_LEN<sub>r</sub>.
  - 13      – If the i<sup>th</sup> occurrence of SUBCLASS\_REC\_LEN<sub>r</sub> field is non-zero, the mobile  
14      station shall perform the following for each band subclass indicator received:
    - 15       o Set the BAND\_SUBCLASS\_IND\_REC[j] field of CAND\_BAND\_CLASS\_REC[i]  
16       to the j<sup>th</sup> occurrence of BAND\_SUBCLASS\_IND<sub>r</sub>.
- 17   If TX\_PWR\_LIMIT\_INCL<sub>r</sub> is set to '1' and the mobile station is operating in the 1915MHz –  
18   1920MHz block of the PCS band, the mobile station shall store the transmit power limit  
19   TX\_PWR\_LIMIT<sub>s</sub> = (TX\_PWR\_LIMIT<sub>r</sub> - 30dB); otherwise, the mobile station shall set  
20   TX\_PWR\_LIMIT<sub>s</sub> to the limit defined in [11].
- 21   If CCH\_INFO\_INCL<sub>r</sub> is equal to '1' and the mobile station supports the Quick Paging  
22   Channel operation:
  - 23      • The mobile station shall set QPCH\_SUPPORTED<sub>s</sub> to QPCH\_SUPPORTED<sub>r</sub>.
  - 24      • If QPCH\_SUPPORTED<sub>r</sub> = '1':
    - 25       – The mobile station shall set QPCH\_RATE<sub>s</sub> to QPCH\_RATE<sub>r</sub>.
    - 26       – If the mobile station is monitoring the Primary Broadcast Control Channel in  
27       Spreading Rate 1 and the number of Quick Paging Channels specified in the  
28       received message (NUM\_QPCH<sub>r</sub>) is different from NUM\_QPCH<sub>s</sub>, the mobile  
29       station shall use the hash algorithm specified in 2.6.7.1 to select a new Quick  
30       Paging Channel number in the range 1 to NUM\_QPCH<sub>r</sub>. The mobile station  
31       shall store the new Quick Paging Channel number as QPAGECH<sub>s</sub> and as  
32       ASSIGNED\_QPAGECH<sub>s</sub>. The mobile station shall then set NUM\_QPCH<sub>s</sub> to  
33       NUM\_QPCH<sub>r</sub>.
    - 34       – If the mobile station is monitoring the Primary Broadcast Control Channel in  
35       Spreading Rate 3 and the number of Quick Paging Channels specified in the  
36       received message (NUM\_QPCH<sub>r</sub>) is different from NUM\_QPCH<sub>s</sub>, the mobile  
37       station shall perform the following:
      - 38          + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select  
39          a new Quick Paging Channel number in the range 1 to NUM\_QPCH<sub>r</sub>.

- 1           + The mobile station shall store the new Quick Paging Channel number as
- 2           QPAGECH<sub>S</sub> and as ASSIGNED\_QPAGECH<sub>S</sub>.
- 3           + For  $i = 0$  to NUM\_QPCH<sub>S</sub> - 1, store the channel code index for each Quick
- 4           Paging Channel (QPCH\_CODE\_CHAN<sub>S</sub>[ $i$ ] = QPCH\_CODE\_CHAN<sub>R</sub>).
- 5       • The mobile station shall set QPCH\_POWER\_LEVEL\_PAGE<sub>S</sub> to
- 6       QPCH\_POWER\_LEVEL\_PAGE<sub>R</sub>.
- 7       • The mobile station shall set QPCH\_CCI\_SUPPORTED<sub>S</sub> to QPCH\_CCI\_SUPPORTED<sub>R</sub>.
- 8       • If QPCH\_CCI\_SUPPORTED<sub>R</sub> = '1', the mobile station shall set
- 9       QPCH\_POWER\_LEVEL\_CONFIG<sub>S</sub> to QPCH\_POWER\_LEVEL\_CONFIG<sub>R</sub>.
- 10      • The mobile station shall set QPCH\_BI\_SUPPORTED<sub>S</sub> to QPCH\_BI\_SUPPORTED<sub>R</sub>.
- 11      • If QPCH\_BI\_SUPPORTED<sub>R</sub> = '1', the mobile station shall set
- 12      QPCH\_POWER\_LEVEL\_BCAST<sub>S</sub> to QPCH\_POWER\_LEVEL\_BCAST<sub>R</sub>.
- 13   The mobile station shall store the following:
- 14      • CDMA off time report supported indicator
- 15        (CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>S</sub> = CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>R</sub>)
- 16      • If CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>R</sub> is equal to '1', the mobile station shall store:
- 17        – CDMA off time report threshold (CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>S</sub> =
- 18        CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>R</sub> in units specified by
- 19        CDMA\_OFF\_TIME\_REP\_UNIT<sub>R</sub>)
- 20      • Control Hold Mode supported indicator (CHM\_SUPPORTED<sub>S</sub> = CHM\_SUPPORTED<sub>R</sub>)
- 21        if included; otherwise, set CHM\_SUPPORTED<sub>S</sub> to '1'.
- 22      • Release to Idle State allowed indicator (RELEASE\_TO\_IDLE\_IND<sub>S</sub> =
- 23        RELEASE\_TO\_IDLE\_IND<sub>R</sub>).
- 24      • *Reconnect Message* supported indicator
- 25        (RECONNECT\_MSG\_IND<sub>S</sub> = RECONNECT\_MSG\_IND<sub>R</sub>).
- 26      • Short Data Burst allowed in *Reconnect Message* allowed indicator
- 27        (SDB\_IN\_RCNM\_IND<sub>S</sub> = SDB\_IN\_RCNM\_IND<sub>R</sub>), if included; otherwise, set
- 28        SDB\_IN\_RCNM\_IND<sub>S</sub> to '0'.
- 29      • Forward Packet Data Channel supported indicator (FOR\_PDCH\_SUPPORTED<sub>S</sub> =
- 30        FOR\_PDCH\_SUPPORTED<sub>R</sub>).
- 31      • PDCH Control Hold Mode supported indicator (PDCH\_CHM\_SUPPORTED<sub>S</sub> =
- 32        PDCH\_CHM\_SUPPORTED<sub>R</sub>) if included; otherwise, set PDCH\_CHM\_SUPPORTED<sub>S</sub>
- 33        to '0'.
- 34   The mobile station shall set FOR\_PDCH\_COMMON\_PARMS<sub>S</sub> = '0'.
- 35   If both FOR\_PDCH\_SUPPORTED<sub>R</sub> and PDCH\_PARMS\_INCL<sub>R</sub> are included and equal to '1',
- 36   the mobile station shall perform the following:



- 1     • If FOR\_PDCH\_RLGAIN\_INCL<sub>r</sub> is included and equal to '1', the mobile station shall
- 2       set:
- 3       – (RLGAIN\_ACKCH\_PILOT<sub>s</sub> = RLGAIN\_ACKCH\_PILOT<sub>r</sub>).
- 4       – (RLGAIN\_CQICH\_PILOT<sub>s</sub> = RLGAIN\_CQICH\_PILOT<sub>r</sub>).
- 5     • The mobile station shall set
- 6       NUM\_SOFT\_SWITCHING\_FRAMES<sub>s</sub> = NUM\_SOFT\_SWITCHING\_FRAMES<sub>r</sub> + 1, and
- 7       NUM\_SOFTER\_SWITCHING\_FRAMES<sub>s</sub> = NUM\_SOFTER\_SWITCHING\_FRAMES<sub>r</sub> +
- 8       1.
- 9     • The mobile station shall set
- 10       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub> = NUM\_SOFT\_SWITCHING\_FRAMES<sub>r</sub> +
- 11       1, and NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM<sub>s</sub> =
- 12       NUM\_SOFTER\_SWITCHING\_FRAMES<sub>r</sub> + 1.
- 13    • The mobile station shall set NUM\_SOFT\_SWITCHING\_SLOTS<sub>s</sub> according to Table
- 14       3.7.2.3.2.21-9 based on the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>r</sub>.
- 15    • The mobile station shall set NUM\_SOFTER\_SWITCHING\_SLOTS<sub>s</sub> according to Table
- 16       3.7.2.3.2.21-9 based on the value of NUM\_SOFTER\_SWITCHING\_SLOTS<sub>r</sub>.
- 17    • The mobile station shall set PDCH\_SOFT\_SWITCHING\_DELAY<sub>s</sub> to
- 18       PDCH\_SOFT\_SWITCHING\_DELAY<sub>r</sub> + 1, and PDCH\_SOFTER\_SWITCHING\_DELAY<sub>s</sub>
- 19       to PDCH\_SOFTER\_SWITCHING\_DELAY<sub>r</sub> + 1.
- 20    • The mobile station shall set FOR\_PDCH\_COMMON\_PARMS<sub>s</sub> = '1'.
- 21    • The mobile station shall set WALSH\_TABLE\_ID<sub>s</sub> = WALSH\_TABLE\_ID<sub>r</sub>.
- 22    • The mobile station shall set NUM\_PDCCH<sub>s</sub> = NUM\_PDCCH<sub>r</sub>.
- 23    • The mobile station shall store FOR\_PDCCH\_WALSH<sub>s</sub>[i] to the i<sup>th</sup> occurrence of
- 24       FOR\_PDCCH\_WALSH<sub>r</sub>.
- 25    The mobile station shall store the following:
- 26    • If NEG\_SLOT\_CYCLE\_INDEX\_SUP<sub>r</sub> is included and equal to '1', the mobile station
- 27       shall set MIN\_SLOT\_CYCLE\_INDEX to -4; otherwise, the mobile station shall set
- 28       MIN\_SLOT\_CYCLE\_INDEX to 0.
- 29    • If RER\_MODE\_SUPPORTED<sub>r</sub> is not included, the mobile station shall set
- 30       RER\_MODE\_SUPPORTED<sub>s</sub> to '0'; otherwise, the mobile station shall set
- 31       RER\_MODE\_SUPPORTED<sub>s</sub> to RER\_MODE\_SUPPORTED<sub>r</sub>.
- 32    • If AUTO\_FCSO\_ALLOWED<sub>r</sub> is not included, the mobile station shall set
- 33       AUTO\_FCSO\_ALLOWED<sub>s</sub> to '0'; otherwise, the mobile station shall set
- 34       AUTO\_FCSO\_ALLOWED<sub>s</sub> to AUTO\_FCSO\_ALLOWED<sub>r</sub>.
- 35    If FOR\_PDCH\_SUPPORTED<sub>r</sub> is equal to '1', then the mobile station shall set Reverse
- 36    Packet Data Channel supported indicator (REV\_PDCH\_SUPPORTED<sub>s</sub> =
- 37    REV\_PDCH\_SUPPORTED<sub>r</sub>).
- 38    If REV\_PDCH\_PARMS\_INCL<sub>r</sub> is not included, or if it is included and equal to '0', the
- 39    mobile station shall set REV\_PDCH\_PARMS\_INCL<sub>s</sub> to '0'; otherwise, the mobile station

shall set REV\_PDCH\_PARMS\_INCL<sub>S</sub> to '1' and perform the following:

- If REV\_PDCH\_RLGAIN\_INCL<sub>T</sub> is equal to '1', the mobile station shall set:
  - (RLGAIN\_SPICH\_PILOT<sub>S</sub> = RLGAIN\_SPICH\_PILOT<sub>T</sub>).
  - (RLGAIN\_REQCH\_PILOT<sub>S</sub> = RLGAIN\_REQCH\_PILOT<sub>T</sub>).
  - (RLGAIN\_PDCCH\_PILOT<sub>S</sub> = RLGAIN\_PDCCH\_PILOT<sub>T</sub>).
- If REV\_PDCH\_PARMS\_1\_INCL<sub>T</sub> is equal to '1', the mobile station shall set:
  - (REV\_PDCH\_TABLE\_SEL<sub>S</sub> = REV\_PDCH\_TABLE\_SEL<sub>T</sub>).
  - (REV\_PDCH\_MAX\_AUTO\_TPR<sub>S</sub> to REV\_PDCH\_MAX\_AUTO\_TPR<sub>T</sub>).
  - (REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>S</sub> = REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>T</sub>+1).
- If REV\_PDCH\_OPER\_PARMS\_INCL<sub>T</sub> is equal to '1', the mobile station shall set:
  - (REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>S</sub> = REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>T</sub>+1).
  - (REV\_PDCH\_DEFAULT\_PERSISTENCE<sub>S</sub> = REV\_PDCH\_DEFAULT\_PERSISTENCE<sub>T</sub>).
  - (REV\_PDCH\_RESET\_PERSISTENCE<sub>S</sub> = REV\_PDCH\_RESET\_PERSISTENCE<sub>T</sub>).
  - (REV\_PDCH\_GRANT\_PRECEDENCE<sub>S</sub> = REV\_PDCH\_GRANT\_PRECEDENCE<sub>T</sub>).
  - (REV\_PDCH\_MSIB\_SUPPORTED<sub>S</sub> = REV\_PDCH\_MSIB\_SUPPORTED<sub>T</sub>).
  - (REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND<sub>S</sub> = REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND<sub>T</sub>).

The mobile station shall store the following:

- If BYPASS\_REG\_IND<sub>T</sub> is included, the mobile station shall set BYPASS\_REG\_IND<sub>S</sub> to BYPASS\_REG\_IND<sub>T</sub>; otherwise, the mobile station shall set BYPASS\_REG\_IND<sub>S</sub> to '00'.
- *Call Recovery Request Message* supported indicator (CRRM\_MSG\_IND<sub>S</sub> = CRRM\_MSG\_IND<sub>T</sub>).
- Base station horizontal location uncertainty (LOC\_UNC\_H<sub>S</sub> = LOC\_UNC\_H<sub>T</sub>)
- Base station height (HEIGHT<sub>S</sub> = HEIGHT<sub>T</sub>)
- Base station vertical location uncertainty (LOC\_UNC\_V<sub>S</sub> = LOC\_UNC\_V<sub>T</sub>)

The mobile station shall ignore any fields at the end of the *MC-RR Parameters Message* that are not defined according to the protocol revision level (MOB\_P\_REV<sub>P</sub> of the current band class) being used by the mobile station.

#### 2.6.2.2.14.2 Slot Cycle Index

The mobile station shall set SLOT\_CYCLE\_INDEX<sub>S</sub> to:

$$\max \left( \begin{array}{l} \text{MIN\_SLOT\_CYCLE\_INDEX}_S, \\ \min(\text{SLOT\_CYCLE\_INDEX\_REG}, \text{MAX\_SLOT\_CYCLE\_INDEX}_S) \end{array} \right).$$

Where, SLOT\_CYCLE\_INDEX\_REG is computed based on the slot cycle index value included in the last registration attempt (see 2.6.5.5.3.1 and 2.6.5.5.3.2).

If the mobile station is operating in the slotted mode, it shall set its slot cycle length as described in 2.6.2.1.1.3.

#### 2.6.2.2.14.3 Forward Common Control Channel Assignment Change

If the number of Forward Common Control Channels specified in the *MC-RR Parameters Message* (NUM\_FCCCH<sub>R</sub>) is not equal to '0' and is different from NUM\_FCCCH<sub>S</sub>, the mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Forward Common Control Channel number in the range 1 to NUM\_FCCCH<sub>R</sub> and shall store this value as FCCCH\_ID<sub>S</sub>. If NUM\_FCCCH<sub>R</sub> is not equal to '0', the mobile station shall store the FCCCH rate (FCCCH\_RATE<sub>S</sub> = FCCCH\_RATE<sub>R</sub>), the FCCCH code rate (FCCCH\_CODE\_RATE<sub>S</sub> = FCCCH\_CODE\_RATE<sub>R</sub>), and store FCCCH\_CODE\_CHAN<sub>R</sub> of the corresponding Forward Common Control Channel as FCCCH\_CODE\_CHAN<sub>S</sub>. The mobile station shall then set NUM\_FCCCH<sub>S</sub> to NUM\_FCCCH<sub>R</sub>.

The mobile station shall set ACC\_MSG\_SEQ<sub>S</sub> to NULL.

#### 2.6.2.2.14.4 RESCAN Parameter

If the RESCAN<sub>R</sub> field in the *MC-RR Parameters Message* equals '1', the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a rescan indication (see 2.6.1.1).

#### 2.6.2.2.15 Enhanced Access Parameters Message

Whenever an *Enhanced Access Parameters Message* is received on the f-csch, the sequence number, ACC\_MSG\_SEQ<sub>R</sub>, shall be compared to ACC\_MSG\_SEQ<sub>S</sub>. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows:

If MAX\_REQ\_SEQ or MAX\_RSP\_SEQ are not within the valid ranges specified in 3.7.2.3.2.2, then the mobile station shall ignore the *Enhanced Access Parameters Message* that contains them.

The mobile station shall store the following parameters:

- *Enhanced Access Parameters Message* sequence number (ACC\_MSG\_SEQ<sub>S</sub> = ACC\_MSG\_SEQ<sub>R</sub>)
- Persistence related parameters:
  - If PSIST\_PARMS\_INCL is equal to '1', store the following:
    - + Persistence parameter number according to the following rule: If the mobile station's access overload class is in the range 0-9 inclusive, set PSIST<sub>S</sub> equal to PSIST(0-9)\_EACH<sub>R</sub>; otherwise set PSIST<sub>S</sub> equal to PSIST(n)\_EACH<sub>R</sub>,

- 1 where n is equal to the mobile station access overload class.
- 2 + Persistence modifier for Enhanced Access Channel attempts for  
 3 registrations which are not responses to the *Registration Request Order*  
 4 (REG\_PSIST<sub>S</sub> = REG\_PSIST\_EACH<sub>r</sub>).
- 5 + Persistence modifier for Enhanced Access Channel attempts for message  
 6 transmissions (MSG\_PSIST<sub>S</sub> = MSG\_PSIST\_EACH<sub>r</sub>).
- 7 + Persistence modifier for emergency calls by the mobile stations in access  
 8 overload classes 0 to 9 (PSIST\_EMG<sub>S</sub> = PSIST\_EMG<sub>r</sub>).
- 9 – If PSIST\_PARMS\_INCL<sub>r</sub> is equal to '0', store the following:
- 10 + Set PSIST<sub>S</sub> to 0.
- 11 + Persistence modifier for emergency calls by a mobile station in access  
 12 overload classes 0 to 9 (PSIST\_EMG<sub>S</sub> = '000').
- 13 + Persistence modifier for Enhanced Access Channel attempts for message  
 14 transmissions (MSG\_PSIST<sub>S</sub> = '000').
- 15 + Persistence modifier for Enhanced Access Channel attempts for  
 16 registrations which are not responses to the *Registration Request Order*  
 17 (REG\_PSIST<sub>S</sub> = '000').
- 18 • The mobile station shall store the Access Control based on Call Type (ACCT)  
 19 information as follows:
- 20 – Set ACCT\_SO\_LIST to NULL.
- 21 – Set ACCT\_SO\_GRP\_LIST to NULL.
- 22 – If ACCT\_INCL<sub>r</sub> is equal to '1' and ACCOLC<sub>p</sub> is in the range 0 to 9, then the  
 23 mobile station shall perform the following:
- 24 + Set ACCT\_INCL\_EMG<sub>S</sub> to ACCT\_INCL\_EMG<sub>r</sub>.
- 25 + If ACCT\_SO\_INCL<sub>r</sub> is equal to '1', then for each ACCT\_SO<sub>r</sub> included in this  
 26 message:
- 27 o If ACCT\_AOC\_BITMAP\_INCL<sub>r</sub> is equal to '0', or if  
 28 ACCT\_AOC\_BITMAP\_INCL<sub>r</sub> is equal to '1' and the bit in the associated  
 29 ACCT\_AOC\_BITMAP1<sub>r</sub> corresponding to the mobile station's ACCOLC<sub>p</sub>  
 30 (see Table 3.7.2.3.2.2-1) is equal to '1', then add ACCT\_SO<sub>r</sub> to  
 31 ACCT\_SO\_LIST.
- 32 + If ACCT\_SO\_GRP\_INCL<sub>r</sub> is equal to '1', then for each ACCT\_SO\_GRP<sub>r</sub>  
 33 included in this message:
- 34 o If ACCT\_AOC\_BITMAP\_INCL<sub>r</sub> is equal to '0', or if  
 35 ACCT\_AOC\_BITMAP\_INCL<sub>r</sub> is equal to '1' and the bit in the associated  
 36 ACCT\_AOC\_BITMAP2<sub>r</sub> corresponding to the mobile station's ACCOLC<sub>p</sub>  
 37 (see Table 3.7.2.3.2.2-1) is equal to '1', then add ACCT\_SO\_GRP<sub>r</sub> to  
 38 ACCT\_SO\_GRP\_LIST.

- 1     • Link Access Control related parameters:
- 2         – Acknowledgment timeout ( $EACH\_ACC\_TMO_S = ACC\_TMO_R$ )
- 3         – Maximum number of probe sequences for an Enhanced Access Channel request
- 4             ( $MAX\_REQ\_SEQ_S = MAX\_REQ\_SEQ_R$ )
- 5         – Maximum number of probe sequences for an Enhanced Access Channel
- 6             response ( $MAX\_RSP\_SEQ_S = MAX\_RSP\_SEQ_R$ )
- 7     • Mode Selection Table:
- 8          $NUM\_MODE\_SELECTION\_ENTRIES_S = (NUM\_MODE\_SELECTION\_ENTRIES_R + 1)$
- 9         For  $i = 1$  to  $NUM\_MODE\_SELECTION\_ENTRIES_S$ :
- 10             –  $MODE\_SELECTION_S[i].ACCESS\_MODE = ACCESS\_MODE$  field of the  $i^{th}$
- 11                 occurrence of the record
- 12             –  $MODE\_SELECTION_S[i].MIN\_DURATION = ACCESS\_MODE\_MIN\_DURATION$
- 13                 field of the  $i^{th}$  occurrence of the record
- 14             –  $MODE\_SELECTION_S[i].MAX\_DURATION = ACCESS\_MODE\_MAX\_DURATION$
- 15                 field of the  $i^{th}$  occurrence of the record
- 16     • Reverse gain adjustment of the Enhanced Access Channel or Reverse Common
- 17         Control Channel relative to the Reverse Pilot Channel ( $RLGAIN\_COMMON\_PILOT_S =$
- 18              $RLGAIN\_COMMON\_PILOT_R$ )
- 19     • The threshold level at which the interference correction begins to be applied
- 20         ( $IC\_THRESH_S = IC\_THRESH_R$ )
- 21     • The maximum interference correction that can be applied ( $IC\_MAX_S = IC\_MAX_R$ )
- 22     • Mode-specific parameters for the Enhanced Access Channel:
- 23         For  $i = 1$  to  $NUM\_MODE\_PARAM\_REC + 1$ :
- 24             For  $j = 0$  to  $7$ :
- 25                 If the  $(j+1)^{th}$  subfield of  $APPLICABLE\_MODES$  is equal to '1', store the
- 26                 following parameters:
- 27                     – Nominal transmit power offset on the Enhanced Access Channel
- 28                         ( $MODE\_PARMS_S[j].EACH\_NOM\_PWR = EACH\_NOM\_PWR$  field of the  $i^{th}$
- 29                         occurrence of the record)
- 30                     – Initial power offset for access on the Enhanced Access Channel
- 31                         ( $MODE\_PARMS_S[j].EACH\_INIT\_PWR = EACH\_INIT\_PWR$  field of the  $i^{th}$
- 32                         occurrence of the record)
- 33                     – Power increment on the Enhanced Access Channel
- 34                         ( $MODE\_PARMS_S[j].EACH\_PWR\_STEP = EACH\_PWR\_STEP$  field of the  $i^{th}$
- 35                         occurrence of the record )
- 36                     – Number of access probes on the Enhanced Access Channel
- 37                         ( $MODE\_PARMS_S[j].EACH\_NUM\_STEP = EACH\_NUM\_STEP$  field of the  $i^{th}$

- 1 occurrence of the record)
- 2 – Preamble enabled indicator on the Enhanced Access Channel  
 3 (MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_ENABLED = EACH\_PREAMBLE\_E  
 4 NABLED field of the i<sup>th</sup> occurrence of the record)
- 5 – Number of preamble fractions sent on the Enhanced Access Channel if  
 6 MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_ENABLED is equal to '1'  
 7 (MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_NUM\_FRAC =  
 8 EACH\_PREAMBLE\_NUM\_FRAC field of the i<sup>th</sup> occurrence of the record)
- 9 – Fractional preamble duration on the Enhanced Access Channel if  
 10 MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_ENABLED is equal to '1'  
 11 (MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_FRAC\_DURATION = EACH\_PREA  
 12 MBLE\_FRAC\_DURATION field of the i<sup>th</sup> occurrence of the record)
- 13 – Preamble gated-off duration on the Enhanced Access Channel if  
 14 MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_ENABLED is equal to '1'  
 15 (MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_OFF\_DURATION = EACH\_PREAM  
 16 BLE\_OFF\_DURATION field of the i<sup>th</sup> occurrence of the record)
- 17 – Additional preamble duration on the Enhanced Access Channel if  
 18 MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_ENABLED is equal to '1'  
 19 (MODE\_PARMS<sub>S</sub>[j].EACH\_PREAMBLE\_ADD\_DURATION =  
 20 EACH\_PREAMBLE\_ADD\_DURATION field of the i<sup>th</sup> occurrence of the  
 21 record)
- 22 – Enhanced Access Channel probe backoff range  
 23 (MODE\_PARMS<sub>S</sub>[j].EACH\_PROBE\_BKOFF = EACH\_PROBE\_BKOFF field  
 24 of the i<sup>th</sup> occurrence of the record)
- 25 – Enhanced Access Channel probe sequence backoff range  
 26 (MODE\_PARMS<sub>S</sub>[j].EACH\_BKOFF = EACH\_BKOFF field of the i<sup>th</sup>  
 27 occurrence of the record)
- 28 – Enhanced Access Channel slot (MODE\_PARMS<sub>S</sub>[j].EACH\_SLOT = 1 +  
 29 EACH\_SLOT field of the i<sup>th</sup> occurrence of the record)
- 30 – Enhanced Access Channel first slot offset  
 31 (MODE\_PARMS<sub>S</sub>[j].EACH\_SLOT\_OFFSET1 = EACH\_SLOT\_OFFSET1 field  
 32 of the i<sup>th</sup> occurrence of the record)
- 33 – Enhanced Access Channel second slot offset  
 34 (MODE\_PARMS<sub>S</sub>[j].EACH\_SLOT\_OFFSET2 = EACH\_SLOT\_OFFSET2 field  
 35 of the i<sup>th</sup> occurrence of the record)
- 36 • Additional parameters for the Basic Access Mode:
- 37 If BA\_PARMS\_LEN<sub>r</sub> is equal to '000', set the Basic Access Mode supported  
 38 indicator, BA\_SUPPORTED<sub>S</sub>, to '0'; otherwise store the following parameters:
- 39 – Basic Access Mode supported indicator (BA\_SUPPORTED<sub>S</sub> = '1')
- 40 – Number of Enhanced Access Channels (NUM\_EACH\_BA<sub>S</sub> = (NUM\_EACH\_BA<sub>r</sub> +

- 1           1))
- 2           – Rate words supported on the Enhanced Access Channels
- 3           (EACH\_BA\_RATES\_SUPPORTED<sub>S</sub> = EACH\_BA\_RATES\_SUPPORTED<sub>R</sub>)
- 4           • Additional parameters for the Reservation Access Mode:
- 5           If RA\_PARMS\_LEN<sub>R</sub> is equal to '00000', set the Reservation Access Mode supported
- 6           indicator, RA\_SUPPORTED<sub>S</sub>, to '0'; otherwise store the following parameters, if
- 7           included in the message:
- 8           – Reservation Access Mode supported indicator (RA\_SUPPORTED<sub>S</sub> = '1')
- 9           – Number of Enhanced Access Channels (NUM\_EACH\_RA<sub>S</sub> = (NUM\_EACH\_RA<sub>R</sub> +
- 10           1))
- 11           – Number of Common Assignment Channels (NUM\_CACH<sub>S</sub> = (NUM\_CACH<sub>R</sub> + 1))
- 12           – Code rate of Common Assignment Channels (CACH\_CODE\_RATE<sub>S</sub> =
- 13           CACH\_CODE\_RATE<sub>R</sub>)
- 14           – For i = 0 to NUM\_CACH<sub>S</sub> - 1, store the channel code index for each Common
- 15           Assignment Channel (CACH\_CODE\_CHAN<sub>S</sub>[i] = CACH\_CODE\_CHAN<sub>R</sub>).
- 16           – Number of Reverse Common Control Channels (NUM\_RCCCH<sub>S</sub> = (NUM\_RCCCH<sub>R</sub>
- 17           + 1))
- 18           – Rate words supported on the Reverse Common Control Channels
- 19           (RCCCH\_RATES\_SUPPORTED<sub>S</sub> = RCCCH\_RATES\_SUPPORTED<sub>R</sub>)
- 20           – Preamble enabled indicator on the Reverse Common Control Channels
- 21           (RCCCH\_PREAMBLE\_ENABLED<sub>S</sub> = RCCCH\_PREAMBLE\_ENABLED<sub>R</sub>)
- 22           – Number of preamble fractions sent on the Reverse Common Control Channel if
- 23           RCCCH\_PREAMBLE\_ENABLED<sub>R</sub> is equal to '1'
- 24           (RCCCH\_PREAMBLE\_NUM\_FRAC<sub>S</sub> = RCCCH\_PREAMBLE\_NUM\_FRAC<sub>R</sub>)
- 25           – Fractional preamble duration on the Reverse Common Control Channel if
- 26           RCCCH\_PREAMBLE\_ENABLED<sub>R</sub> is equal to '1'
- 27           (RCCCH\_PREAMBLE\_FRAC\_DURATION<sub>S</sub> =
- 28           RCCCH\_PREAMBLE\_FRAC\_DURATION<sub>R</sub>)
- 29           – Preamble gated-off duration on the Reverse Common Control Channel if
- 30           RCCCH\_PREAMBLE\_ENABLED<sub>R</sub> is equal to '1'
- 31           (RCCCH\_PREAMBLE\_OFF\_DURATION<sub>S</sub> =
- 32           RCCCH\_PREAMBLE\_OFF\_DURATION<sub>R</sub>)
- 33           – Additional preamble duration on the Reverse Common Control Channel if
- 34           RCCCH\_PREAMBLE\_ENABLED<sub>R</sub> is equal to '1'
- 35           (RCCCH\_PREAMBLE\_ADD\_DURATION<sub>S</sub> =
- 36           RCCCH\_PREAMBLE\_ADD\_DURATION<sub>R</sub>)
- 37           – Slot duration on the Reverse Common Control Channel (RCCCH\_SLOT<sub>S</sub> = 1 +
- 38           RCCCH\_SLOT<sub>R</sub>)
- 39           – First slot offset of the Reverse Common Control Channel

- 1 (RCCCH\_SLOT\_OFFSET1<sub>S</sub> = RCCCH\_SLOT\_OFFSET1<sub>T</sub>)
- 2 – Second slot offset of the Reverse Common Control Channel
- 3 (RCCCH\_SLOT\_OFFSET2<sub>S</sub> = RCCCH\_SLOT\_OFFSET2<sub>T</sub>)
- 4 – Nominal transmit power offset on the Reverse Common Control Channel
- 5 (RCCCH\_NOM\_PWR<sub>S</sub> = RCCCH\_NOM\_PWR<sub>T</sub>)
- 6 – Initial power offset for access on the Reverse Common Control Channel
- 7 (RCCCH\_INIT\_PWR<sub>S</sub> = RCCCH\_INIT\_PWR<sub>T</sub>)
- 8 – Power Control delay for the Reservation Access Mode
- 9 (RA\_PC\_DELAY<sub>S</sub> = RA\_PC\_DELAY<sub>T</sub>)
- 10 – Maximum delay to receive the *Early Acknowledgment Channel Assignment*
- 11 *Message* on the Common Assignment Channel
- 12 (EACAM\_CACH\_DELAY<sub>S</sub> = EACAM\_CACH\_DELAY<sub>T</sub>)
- 13 – Indicator for handoff supported on the Reverse Common Control Channels
- 14 (RCCCH\_HO\_SUPPORTED<sub>S</sub> = RCCCH\_HO\_SUPPORTED<sub>T</sub>)
- 15 – Threshold for handoff on the Reverse Common Control Channels if
- 16 RCCCH\_HO\_SUPPORTED<sub>T</sub> is equal to '1'
- 17 (RCCCH\_HO\_THRESH<sub>S</sub> = RCCCH\_HO\_THRESH<sub>T</sub>)
- 18 – Maximum delay to receive the *Early Acknowledgment Channel Assignment*
- 19 *Message* and the *Power Control Channel Assignment Message* if
- 20 RCCCH\_HO\_SUPPORTED<sub>T</sub> is equal to '1'
- 21 (EACAM\_PCCAM\_DELAY<sub>S</sub> = EACAM\_PCCAM\_DELAY<sub>T</sub>)
- 22 – Number of Common Power Control Channels (NUM\_CPCCH<sub>S</sub> = (NUM\_CPCCH<sub>T</sub> +
- 23 1))
- 24 – Power control rate for the Common Power Control Channels
- 25 (CPCCH\_RATE<sub>S</sub> = CPCCH\_RATE<sub>T</sub>)
- 26 – For i = 0 to NUM\_CPCCH<sub>S</sub> - 1, store the channel code index for each Common
- 27 Power Control Channel (CPCCH\_CODE\_CHAN<sub>S</sub>[i] = CPCCH\_CODE\_CHAN<sub>T</sub>).
- 28 – Number of Power Control Subchannels for the Reservation Access Mode
- 29 (NUM\_PCSCH\_RA<sub>S</sub> = (NUM\_PCSCH\_RA<sub>T</sub> + 1))
- 30 The mobile station shall set CURR\_ACC\_MSG\_SEQ equal to ACC\_MSG\_SEQ<sub>S</sub>.
- 31 2.6.2.2.16 ANSI-41 RAND Message
- 32 Whenever an *ANSI-41 RAND Message* is received, the mobile station shall process the
- 33 fields in the message as follows.
- 34 The mobile station shall store the following parameters:
- 35 • Random challenge value (RAND<sub>S</sub> = RAND<sub>T</sub>)
- 36 • Current *Enhanced Access Parameters Message* Sequence Number
- 37 (CURR\_ACC\_MSG\_SEQ = ACC\_MSG\_SEQ<sub>T</sub>).



- 1       • Pilot PN sequence offset increment ( $PILOT\_PN_S = PILOT\_PN_R$ )

2       The mobile station shall also compare the *Enhanced Access Parameters Message* sequence  
3       number,  $ACC\_MSG\_SEQ_R$ , with that stored in  $ACC\_MSG\_SEQ_S$ . If the comparison results  
4       in a mismatch, then the mobile station shall set  $ACC\_MSG\_SEQ_S$  to NULL (see 2.6.2.2).

5       The mobile station shall ignore any fields at the end of the *ANSI-41 RAND Message* which  
6       are not defined according to the protocol revision level ( $MOB\_P\_REV_P$  of the current band  
7       class) being used by the mobile station.

#### 8       2.6.2.2.17 Universal Neighbor List Message

9       Whenever a valid *Universal Neighbor List Message* is received on the Primary Broadcast  
10       Control Channel, the configuration message sequence number,  $CONFIG\_MSG\_SEQ_R$  shall  
11       be compared to that stored in  $UNIV\_NGHBR\_LST\_MSG\_SEQ_S$ . If the comparison results in  
12       a mismatch, then the mobile station shall process the remaining fields in the message as  
13       described below.

14       The mobile station shall store the following parameters:

- 15       • Configuration message sequence number  
16         ( $CONFIG\_MSG\_SEQ_S = CONFIG\_MSG\_SEQ_R$ ,  
17          $UNIV\_NGHBR\_LST\_MSG\_SEQ_S = CONFIG\_MSG\_SEQ_R$ ).

18       If  $RADIO\_INTERFACE\_TYPE_R$  is equal to '0000' but the  $PILOT\_INC$  field is not within the  
19       valid range specified in 3.7.2.3.2.33, then the mobile station shall ignore the entire record  
20       that contains it.

21       If  $RADIO\_INTERFACE\_TYPE_R$  is equal to '0000' and the  $PILOT\_INC$  field is within the valid  
22       range specified in 3.7.2.3.2.33, the mobile station shall perform the following:

23       The mobile station shall store the Pilot PN sequence offset increment ( $PILOT\_INC_S =$   
24        $PILOT\_INC_R$ ).

25       The mobile station shall set  $NGHBR\_SET\_SIZE_S$  to  $NUM\_NGHBR_R$ .

26       For each of the neighboring base stations contained in the *Universal Neighbor List*  
27       *Message*, if  $FREQ\_INCL_R$  is equal to '0', or if  $FREQ\_INCL_R$  is equal to '1' and  
28        $NGHBR\_BAND_R$  is supported, the mobile station shall perform the following:

- 29       • If the  $i^{th}$  occurrence of  $NGHBR\_CONFIG_R$  is equal to '000', '001', '010', or '100', set  
30         the  $NGHBR\_CONFIG$  field of  $NGHBR\_REC[i]$  to the  $i^{th}$  occurrence of  
31          $NGHBR\_CONFIG_R$ ; otherwise, set the  $NGHBR\_CONFIG$  field of  $NGHBR\_REC[i]$  to  
32         '011'.
- 33       • Set the  $NGHBR\_PN$  field of  $NGHBR\_REC[i]$  to the  $i^{th}$  occurrence of  $NGHBR\_PN_R$ .
- 34       • If  $NGHBR\_CONFIG_R$  is equal to '011', set the  $BCCH\_SUPPORT$  field of  
35          $NGHBR\_REC[i]$  to  $BCCH\_SUPPORT_R$  of the corresponding record.
- 36       • Set the  $ADD\_PILOT\_REC\_INCL$  field of  $NGHBR\_REC[i]$  to the  $i^{th}$  occurrence of  
37          $ADD\_PILOT\_REC\_INCL_R$ . If  $ADD\_PILOT\_REC\_INCL_R$  equals '1', for each pilot  
38         included in the message, the mobile station shall also perform the following:

- 1       – Set the NGHBR\_PILOT\_REC\_TYPE field of NGHBR\_PILOT\_REC to  
2       NGHBR\_PILOT\_REC\_TYPE<sub>r</sub>.
- 3       – If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '000'. The mobile station shall:
  - 4       + Set the TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to  
5       TD\_POWER\_LEVEL<sub>r</sub>.
  - 6       + Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE<sub>r</sub>.
- 7       – If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station shall:
  - 8       + Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>r</sub>.
  - 9       + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to  
10       AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
11       WALSH\_LENGTH<sub>r</sub>.
- 12      – If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station shall:
  - 13      + Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>r</sub>.
  - 14      + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to  
15      AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by WALSH\_LENGTH<sub>r</sub>.
  - 16      + Set the AUX\_TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to  
17      AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
  - 18      + Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE<sub>r</sub>.
- 19      – If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:
  - 20      + Set the SR3\_PRIMARY\_PILOT field of NGHBR\_PILOT\_REC to  
21      SR3\_PRIMARY\_PILOT<sub>r</sub>.
  - 22      + Set the SR3\_PILOT\_POWER1 field of NGHBR\_PILOT\_REC to  
23      SR3\_PILOT\_POWER1<sub>r</sub>.
  - 24      + Set the SR3\_PILOT\_POWER2 field of NGHBR\_PILOT\_REC to  
25      SR3\_PILOT\_POWER2<sub>r</sub>.
- 26      – If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
  - 27      + Set the SR3\_PRIMARY\_PILOT field of NGHBR\_PILOT\_REC to  
28      SR3\_PRIMARY\_PILOT<sub>r</sub>.
  - 29      + Set the SR3\_PILOT\_POWER1 field of NGHBR\_PILOT\_REC to  
30      SR3\_PILOT\_POWER1<sub>r</sub>.
  - 31      + Set the SR3\_PILOT\_POWER2 field of NGHBR\_PILOT\_REC to  
32      SR3\_PILOT\_POWER2<sub>r</sub>.
  - 33      + Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>r</sub>.
  - 34      + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to  
35      AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
36      WALSH\_LENGTH<sub>r</sub>.

- 1           + If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1 field of  
2           NGHBR\_PILOT\_REC to QOF1<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE1 field  
3           of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length  
4           specified by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF1 field  
5           of NGHBR\_PILOT\_REC to QOF<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE1  
6           field of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code  
7           length specified by WALSH\_LENGTH<sub>r</sub>.
- 8           + If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2 field of  
9           NGHBR\_PILOT\_REC to QOF2<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2 field  
10          of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length  
11          specified by WALSH\_LENGTH2<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF2 field  
12          of NGHBR\_PILOT\_REC to QOF<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2  
13          field of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code  
14          length specified by WALSH\_LENGTH<sub>r</sub>.
- 15          • If NGHBR\_SRCH\_MODE<sub>r</sub> = '00' or '10', set the SEARCH\_PRIORITY field of each  
16          NGHBR\_REC to '10' (high) for all NGHBR\_SET\_SIZE<sub>s</sub> entries.
- 17          • If NGHBR\_SRCH\_MODE<sub>r</sub> = '01' or '11', set the SEARCH\_PRIORITY field of  
18          NGHBR\_REC[i] to the i<sup>th</sup> occurrence of SEARCH\_PRIORITY<sub>r</sub>.
- 19          • If NGHBR\_SRCH\_MODE<sub>r</sub> = '00' or '01', set the SRCH\_WIN\_NGHBR field of each  
20          NGHBR\_REC to SRCH\_WIN\_N<sub>r</sub> for all NGHBR\_SET\_SIZE<sub>s</sub> entries.
- 21          • If NGHBR\_SRCH\_MODE<sub>r</sub> = '00' or '01', set the SRCH\_OFFSET\_NGHBR field of each  
22          NGHBR\_REC to '000'.
- 23          • If NGHBR\_SRCH\_MODE<sub>r</sub> = '10' or '11':
- 24           – set the SRCH\_WIN\_NGHBR field of NGHBR\_REC[i] to the i<sup>th</sup> occurrence of  
25           SRCH\_WIN\_NGHBR<sub>r</sub>
- 26           – if SRCH\_OFFSET\_INCL<sub>r</sub> equals '1', set the SRCH\_OFFSET\_NGHBR field of  
27           NGHBR\_REC[i] to the i<sup>th</sup> occurrence of SRCH\_OFFSET\_NGHBR<sub>r</sub>, and
- 28           – if SRCH\_OFFSET\_INCL<sub>r</sub> equals '0', set the SRCH\_OFFSET\_NGHBR field of each  
29           NGHBR\_REC to '000'.
- 30          • If USE\_TIMING<sub>r</sub> is equal to '1', set the TIMING\_INCL field of NGHBR\_REC[i] to the  
31          i<sup>th</sup> occurrence of TIMING\_INCL<sub>r</sub>; otherwise, set the TIMING\_INCL field of  
32          NGHBR\_REC to '0' for all entries.
- 33          • Set the NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC[i] to the i<sup>th</sup> occurrence of  
34          NGHBR\_PDCH\_SUPPORTED<sub>r</sub> if included; otherwise, set the  
35          NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC to '0' for all entries.
- 36          • The mobile station shall set RESQ\_ENABLED<sub>s</sub> = RESQ\_ENABLED<sub>r</sub>. If  
37          RESQ\_ENABLED<sub>s</sub> is equal to '1', then the mobile station shall store:
- 38           – Call rescue delay timer value (RESQ\_DELAY\_TIME<sub>s</sub> = RESQ\_DELAY\_TIME<sub>r</sub>)

- 1       – Call rescue allowed timer value ( $\text{RESQ\_ALLOWED\_TIME}_S =$   
2        $\text{RESQ\_ALLOWED\_TIME}_T$ )
- 3       – Call rescue attempt timer value ( $\text{RESQ\_ATTEMPT\_TIME}_S =$   
4        $\text{RESQ\_ATTEMPT\_TIME}_T$ )
- 5       – Code channel index for call rescue ( $\text{RESQ\_CODE\_CHAN}_S =$   
6        $\text{RESQ\_CODE\_CHAN}_T$ )
- 7       – Quasi-Orthogonal Function mask identifier for call rescue ( $\text{RESQ\_QOF}_S =$   
8        $\text{RESQ\_QOF}_T$ )
- 9       – Minimum time between consecutive rescues ( $\text{RESQ\_MIN\_PERIOD}_S =$   
10        $\text{RESQ\_MIN\_PERIOD}_T + 1$ ) if  $\text{RESQ\_MIN\_PERIOD\_INCL}_T$  is equal to '1'; otherwise,  
11        $\text{RESQ\_MIN\_PERIOD}_S = \text{'00000'}$ .
- 12       – The required number of transmissions of a regular PDU before declaring L2  
13       Acknowledgment Failure when Call Rescue is enabled  
14       ( $\text{RESQ\_NUM\_TOT\_TRANS\_20MS}_S = \text{RESQ\_NUM\_TOT\_TRANS\_20MS}_T$ ) if  
15       included; otherwise, set  $\text{RESQ\_NUM\_TOT\_TRANS\_20MS}_S$  to  $N_{1m}$ .
- 16       – The required number of transmissions of a mini PDU before declaring L2  
17       Acknowledgment Failure when Call Rescue is enabled  
18       ( $\text{RESQ\_NUM\_TOT\_TRANS\_5MS}_S = \text{RESQ\_NUM\_TOT\_TRANS\_5MS}_T$ ) if included;  
19       otherwise, set  $\text{RESQ\_NUM\_TOT\_TRANS\_5MS}_S$  to  $N_{15m}$ .
- 20       – The Traffic Channel preamble length for Call Rescue Soft Handoff when  
21       operating in Radio Configuration 1 or 2 ( $\text{RESQ\_NUM\_PREAMBLE\_RC1\_RC2}_S =$   
22        $\text{RESQ\_NUM\_PREAMBLE\_RC1\_RC2}_T$ ).
- 23       – The Traffic Channel preamble length for Call Rescue Soft Handoff when  
24       operating in Radio Configuration greater than 2 ( $\text{RESQ\_NUM\_PREAMBLE}_S =$   
25        $\text{RESQ\_NUM\_PREAMBLE}_T$ ).
- 26       – The power level adjustment to be applied to the last closed-loop power level  
27       when re-enabling the transmitter for call rescue soft handoff  
28       ( $\text{RESQ\_POWER\_DELTA}_S = \text{RESQ\_POWER\_DELTA}_T$ ).
- 29       – Set the  $\text{NGHBR\_RESQ\_CONFIGURED}$  field of  $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$   
30       occurrence of  $\text{NGHBR\_RESQ\_CONFIGURED}_T$ .
- 31       For each of the neighboring base stations contained in the *Universal Neighbor List*  
32       *Message*, if  $\text{FREQ\_FIELDS\_INCL}_T$  equals '1',  $\text{FREQ\_INCL}_T$  equals '1', and  $\text{NGHBR\_BAND}_T$  is  
33       supported, the mobile station shall also perform the following:
  - 34           • Set the  $\text{NGHBR\_BAND}$  field of  $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$  occurrence of  
35            $\text{NGHBR\_BAND}_T$ .
  - 36           • Set the  $\text{NGHBR\_FREQ}$  field of  $\text{NGHBR\_REC}[i]$  to the  $i^{\text{th}}$  occurrence of  
37            $\text{NGHBR\_FREQ}_T$ .
- 38       For each of the neighboring base stations contained in the *Universal Neighbor List*  
39       *Message*, if  $\text{USE\_TIMING}_T$  is equal to '1' and  $\text{TIMING\_INCL}_T$  equals '1', the mobile station  
40       shall also perform the following:

- 1       • Set the NGHBR\_TX\_OFFSET field of NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of  
2       NGHBR\_TX\_OFFSET<sub>r</sub>.
- 3       • If GLOBAL\_TIMING\_INCL<sub>r</sub> is equal to '1', then the mobile station shall:
  - 4       – Set the NGHBR\_TX\_DURATION field of NGHBR\_REC to  
5       GLOBAL\_TX\_DURATION<sub>r</sub> for all entries.
  - 6       – Set the NGHBR\_TX\_PERIOD field of NGHBR\_REC to GLOBAL\_TX\_PERIOD<sub>r</sub> for  
7       all entries.
- 8       • If GLOBAL\_TIMING\_INCL<sub>r</sub> is equal to '0', then the mobile station shall:
  - 9       – Set the NGHBR\_TX\_DURATION field of NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of  
10       NGHBR\_TX\_DURATION<sub>r</sub>.
  - 11       – Set the NGHBR\_TX\_PERIOD field of NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of  
12       NGHBR\_TX\_PERIOD<sub>r</sub>.

13 For each of the neighboring base stations contained in the *Universal Neighbor List*  
14 *Message*, if FREQ\_FIELDS\_INCL<sub>r</sub> equals '1' and FREQ\_INCL<sub>r</sub> equals '0', the mobile station  
15 shall also perform the following:

- 16       • Set the NGHBR\_BAND field of NGHBR\_REC[i] to CDMABAND<sub>s</sub>.
- 17       • If NGHBR\_CONFIG<sub>r</sub> equals '010', set the NGHBR\_FREQ field of NGHBR\_REC[i] to  
18       the first CDMA Channel listed in the *CDMA Channel List Message or Extended*  
19       *CDMA Channel List Message* transmitted by the current base station; otherwise, set  
20       the NGHBR\_FREQ field of NGHBR\_REC[i] to CDMACH<sub>s</sub>.

21 If NGHBR\_SET\_ENTRY\_INFO<sub>r</sub> is equal to '0', then for all NGHBR\_SET\_SIZE<sub>s</sub> occurrences  
22 of ACCESS\_ENTRY\_HO, the mobile station shall set the ACCESS\_ENTRY\_HO field of  
23 NGHBR\_REC[i] to '0'.

24 If NGHBR\_SET\_ENTRY\_INFO<sub>r</sub> is equal to '1', then for all NGHBR\_SET\_SIZE<sub>s</sub> occurrences  
25 of ACCESS\_ENTRY\_HO, the mobile station shall set the ACCESS\_ENTRY\_HO field of  
26 NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of ACCESS\_ENTRY\_HO<sub>r</sub>.

27 If NGHBR\_SET\_ACCESS\_INFO<sub>r</sub> is equal to '0', then for all NGHBR\_SET\_SIZE<sub>s</sub> occurrences  
28 of ACCESS\_HO\_ALLOWED, the mobile station shall set the ACCESS\_HO\_ALLOWED field  
29 of NGHBR\_REC[i] to '0'.

30 If NGHBR\_SET\_ACCESS\_INFO<sub>r</sub> is equal to '1', then for all NGHBR\_SET\_SIZE<sub>s</sub> occurrences  
31 of ACCESS\_HO\_ALLOWED, the mobile station shall set the ACCESS\_HO\_ALLOWED field  
32 of NGHBR\_REC[i] to the  $i^{\text{th}}$  occurrence of ACCESS\_HO\_ALLOWED<sub>r</sub>.

33 The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it  
34 consists only of pilot offsets listed in the *Universal Neighbor List Message*. If the *Universal*  
35 *Neighbor List Message* contains more pilot offsets than the mobile station can store, the  
36 mobile station shall store the pilot offsets beginning at the start of the *Universal Neighbor*  
37 *List Message*, up to the limits of the mobile station's Neighbor Set storage capacity.

38 If RADIO\_INTERFACE\_TYPE<sub>r</sub> is equal to '0001', the mobile station shall process the fields  
39 contained in the record as follows:

If RADIO\_INTERFACE\_TYPE<sub>r</sub> is equal to '0010', the mobile station shall process the fields contained in the record as follows:

The mobile station shall set NUM\_HRPD\_NGHBR<sub>s</sub> to NUM\_HRPD\_NGHBR<sub>r</sub>, the number of neighboring HRPD systems contained in the *Universal Neighbor List Message*. For each of the neighboring HRPD systems contained in the *Universal Neighbor List Message*, the mobile station shall perform the following:

- Set the PN field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of NGHBR\_PN<sub>r</sub>.
- Set the BAND\_CLASS field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of NGHBR\_BAND<sub>r</sub> if NGHBR\_FREQ\_INCL<sub>r</sub> equals '1'; otherwise, set the BAND\_CLASS field of HRPD\_NGHBR\_LIST[i] to CDMABAND<sub>s</sub>.
- Set the CDMA\_FREQ field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of NGHBR\_FREQ<sub>r</sub> if NGHBR\_FREQ\_INCL<sub>r</sub> equals '1'; otherwise, set the BAND\_CLASS field of HRPD\_NGHBR\_LIST[i] to CDMACH<sub>s</sub>.
- Set the PN\_ASSOCIATION field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of PN\_ASSOCIATION\_IND<sub>r</sub>.
- Set the DATA\_ASSOCIATION field of HRPD\_NGHBR\_LIST[i] to the i<sup>th</sup> occurrence of DATA\_ASSOCIATION\_IND<sub>r</sub>.

#### 2.6.2.2.18 BC MC Service Parameters Message

The mobile station may receive the *BC MC Service Parameters Message* on the Paging Channel or on the Primary Broadcast Control Channel.

When the mobile station desires to receive the *BC MC Service Parameters Message* on the Paging Channel, the mobile station shall monitor the F-PCH for the duration of four F-PCH slots from the first slot of a BSPM slot cycle (see 2.6.2.1.1.3.8.1) for the start of the *BC MC Service Parameters Message* transmission or until the *BC MC Service Parameters Message* with DIFF\_BSPM<sub>r</sub> equal to '0' is received; if the mobile station detects the start of the *BC MC Service Parameters Message*, the mobile station shall monitor the F-PCH until the entire *BC MC Service Parameters Message* is received.

When the mobile station desires to receive the *BC MC Service Parameters Message* on the Primary Broadcast Control Channel, the mobile station shall monitor the F-BCCH for the duration of four F-BCCH slots from the first slot of a BSPM slot cycle (see 2.6.2.1.1.3.8.2) for the start of the *BC MC Service Parameters Message* transmission or until the *BC MC Service Parameters Message* with DIFF\_BSPM<sub>r</sub> equal to '0' is received; if the mobile station detects the start of the *BC MC Service Parameters Message*, the mobile station shall monitor the F-BCCH until the entire *BC MC Service Parameters Message* is received.

Whenever the *BC MC Service Parameters Message* is received, the mobile station shall compare the BSPM sequence number, BSPM\_MSG\_SEQ<sub>r</sub>, to that stored in BSPM\_MSG\_SEQ<sub>s</sub>. If the comparison results in a match and FULL\_BSPM\_IND = '1', the mobile station may ignore the message. If the comparison results in a mismatch, the mobile station shall process the remaining fields in the message as follows:

1 The mobile station shall perform the following:

- 2 • If DIFF\_BSPM<sub>r</sub> equals '0', the mobile station shall perform the following:
  - 3 - The mobile station shall delete the currently stored *BCMC Service Parameters*
  - 4 *Message* parameters and shall store the parameters received in this *BCMC*
  - 5 *Service Parameters Message* as described below.
  - 6 - The mobile station shall set FULL\_BSPM\_IND to '1'.
- 7 • If DIFF\_BSPM<sub>r</sub> equals '1',
  - 8 - If (BSPM\_MSG\_SEQ<sub>r</sub> - BSPM\_MSG\_SEQ<sub>s</sub>) modulo 64 is greater than one,
  - 9 the mobile station shall perform the following:
    - 10 o The mobile station shall delete the currently stored *BCMC Service*
    - 11 *Parameters Message* parameters and shall store the parameters received
    - 12 in this *BCMC Service Parameters Message* as described below.
    - 13 o The mobile station shall set FULL\_BSPM\_IND to '0'.
  - 14 - Otherwise, the mobile station shall perform the following:
    - 15 o The mobile station shall update the currently stored *BCMC Service*
    - 16 *Parameters Message* parameters with the parameters received in this
    - 17 *BCMC Service Parameters Message* as described below.
- 18 The mobile station shall delete BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i] from BCMC Retry Delay List
- 19 if BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].BCMC\_FLOW\_ID is included in the *BCMC Service*
- 20 *Parameters Message*.
- 21 The mobile station shall store the following parameters:
  - 22 • BSPM sequence number (BSPM\_MSG\_SEQ<sub>s</sub> = BSPM\_MSG\_SEQ<sub>r</sub>).
  - 23 • Frequency change registration required indication (FREQ\_CHG\_REG\_REQUIRED<sub>s</sub>
  - 24 = FREQ\_CHG\_REG\_REQUIRED<sub>r</sub>).
  - 25 • Frequency change registration timer
  - 26 (FREQ\_CHG\_REG\_TIMER<sub>s</sub> = FREQ\_CHG\_REG\_TIMER<sub>r</sub>) if
  - 27 FREQ\_CHG\_REG\_TIMER\_IND<sub>r</sub> equals '1'; otherwise, set
  - 28 FREQ\_CHG\_REG\_TIMER<sub>s</sub> to NULL.
  - 29 • Autonomous BCMC request allowed indicator
  - 30 (AUTO\_REQ\_ALLOWED\_IND<sub>s</sub> = AUTO\_REQ\_ALLOWED\_IND<sub>r</sub>).
  - 31 • If USE\_TIME<sub>r</sub> is set to '1' set the BSPM\_ACTION\_TIME<sub>s</sub> = ACTION\_TIME<sub>r</sub>;
  - 32 otherwise, set the BSPM\_ACTION\_TIME<sub>s</sub> = NULL. A BSPM with an explicit action
  - 33 time shall take effect when System Time (in 80 ms units) modulo 64 becomes equal

- 1 to BSPM\_ACTION\_TIME<sub>S</sub>.
- 2 • BCMC on traffic channel supported indicator  
3 (BCMC\_ON\_TRAFFIC\_SUP<sub>S</sub> = BCMC\_ON\_TRAFFIC\_SUP<sub>r</sub>).
- 4 • Length of time stamp for use on r-csch  
5 (ACH\_TIME\_STAMP\_SHORT\_LENGTH<sub>S</sub> = ACH\_TIME\_STAMP\_SHORT\_LENGTH<sub>r</sub>) if  
6 NON\_DEFAULT\_VALUE\_INCLUDED<sub>r</sub> equals '1'; otherwise,  
7 ACH\_TIME\_STAMP\_SHORT\_LENGTH<sub>S</sub> shall be set to 10.
- 8 • Length of time stamp  
9 (TIME\_STAMP\_LONG\_LENGTH<sub>S</sub> = TIME\_STAMP\_LONG\_LENGTH<sub>r</sub>) if  
10 NON\_DEFAULT\_VALUE\_INCLUDED<sub>r</sub> equals '1'; otherwise,  
11 TIME\_STAMP\_LONG\_LENGTH<sub>S</sub> shall be set to 52.
- 12 • Unit for time stamp length (TIME\_STAMP\_UNIT<sub>S</sub> = TIME\_STAMP\_UNIT<sub>r</sub>) if  
13 NON\_DEFAULT\_VALUE\_INCLUDED<sub>r</sub> equals '1'; otherwise,  
14 TIME\_STAMP\_UNIT<sub>S</sub> shall be set to 6.
- 15 • If REGISTRATION\_REQ\_FLAG\_INCL<sub>r</sub> equals '1', the mobile station shall compute  
16 and store a BCMC registration required timer expiration value:  
17 
$$\text{REGISTRATION\_REQ\_TIMER\_MAX} = (2^{\text{REGISTRATION\_REQ\_TIMER\_PERIOD}_r} \times 80 \text{ ms}).$$
- 18 • For i=1 to NUM\_FSCH<sub>r</sub>, store the following:
- 19 - FBSCH\_LIST<sub>S</sub>[i].FSCH\_ID = the position where this Forward Supplemental  
20 Channel is listed in this message (i.e. First Forward Supplemental Channel  
21 listed is given FSCH\_ID of '001', second one is given FSCH\_ID of '010', and so  
22 on).
- 23 - FBSCH\_LIST<sub>S</sub>[i].FSCH\_BAND\_CLASS = ith occurrence of FSCH\_BAND\_CLASS<sub>r</sub>  
24 (Band class of the Forward Supplemental Channel) if  
25 FSCH\_BAND\_CLASS\_INCL<sub>r</sub> equals '1'; otherwise,  
26 FBSCH\_LIST<sub>S</sub>[i].FSCH\_BAND\_CLASS = CDMABAND<sub>S</sub>.
- 27 - FBSCH\_LIST<sub>S</sub>[i].FSCH\_FREQ = ith occurrence of FSCH\_FREQ<sub>r</sub> (Frequency  
28 assignment of the forward broadcast supplemental channel) if  
29 FSCH\_FREQ\_INCL<sub>r</sub> equals '1'; otherwise, FBSCH\_LIST<sub>S</sub>[i].FSCH\_FREQ =  
30 CDMACH<sub>S</sub>.
- 31 - FBSCH\_LIST<sub>S</sub>[i].FSCH\_CODE\_CHAN = ith occurrence of FSCH\_CODE\_CHAN<sub>r</sub>  
32 (Code channel index of the forward broadcast supplemental channel)
- 33 - FBSCH\_LIST<sub>S</sub>[i].FSCH\_PLCM (Public Long code mask of the Forward Broadcast  
34 Supplemental Channel) shall be set as follows:



- 1           + If FSCH\_PLCM\_SCHEME\_INDr equals '00',  
2           FBSCH\_LISTs[i].FSCH\_PLCM shall be set to PLCM\_42 as specified in  
3           2.6.13.10.1.
- 4           + If FSCH\_PLCM\_SCHEME\_INDr equals '01',  
5           FBSCH\_LISTs[i].FSCH\_PLCM shall be set to PLCM\_42 as specified in  
6           2.6.13.10.2.
- 7           + If FSCH\_PLCM\_SCHEME\_INDr equals '10', the mobile station shall perform  
8           the following:
  - 9           o If FSCH\_PLCM\_INDr equals '0', FBSCH\_LISTs[i].FSCH\_PLCM shall be set  
10           to PLCM\_42 as specified in 2.6.13.10.1.
  - 11           o If FSCH\_PLCM\_INDr equals '1', FBSCH\_LISTs[i].FSCH\_PLCM shall be set  
12           to PLCM\_42 as specified in 2.6.13.10.2.
- 13          - FBSCH\_LISTs[i].FSCH\_MUX\_OPTION = ith occurrence of FSCH\_MUX\_OPTION<sub>r</sub>  
14          (Multiplex Option of the Forward Broadcast Supplemental Channel).
- 15          - FBSCH\_LISTs[i].FSCH\_RC = ith occurrence of FSCH\_RC<sub>r</sub> (Radio configuration of  
16          the forward broadcast supplemental channel).
- 17          - FBSCH\_LISTs[i].FSCH\_CODING = ith occurrence of FSCH\_CODING<sub>r</sub> (Coding  
18          type of the Forward Broadcast Supplemental Channel).
- 19          - FBSCH\_LISTs[i].FSCH\_OUTERCODE\_RATE = ith occurrence of  
20          FSCH\_OUTERCODE\_RATE<sub>r</sub> (Outer Code Rate of the Forward Broadcast  
21          Supplemental Channel) if FSCH\_OUTERCODE\_INCL<sub>r</sub> equals '1'; otherwise,  
22          FBSCH\_LISTs[i].FSCH\_OUTERCODE\_RATE = NULL.
- 23          - FBSCH\_LISTs[i].FSCH\_OUTERCODE\_OFFSET = ith occurrence of  
24          FSCH\_OUTERCODE\_OFFSET<sub>r</sub> (Outer Coding Buffer Offset of the Forward  
25          Broadcast Supplemental Channel) if FSCH\_OUTERCODE\_INCL<sub>r</sub> equals '1';  
26          otherwise, FBSCH\_LISTs[i].FSCH\_OUTERCODE\_OFFSET = NULL.
- 27          - FBSCH\_LISTs[i].FSCH\_NUM\_BITS\_IDX = ith occurrence of  
28          FSCH\_NUM\_BITS\_IDX<sub>r</sub> (Number of information bits index of the forward  
29          broadcast supplemental channel).
- 30          - FBSCH\_LISTs[i].FSCH\_FRAME\_40\_USED = ith occurrence of  
31          FSCH\_FRAME\_40\_USED<sub>r</sub> (40ms frame used indicator of the forward broadcast  
32          supplemental channel).
- 33          - FBSCH\_LISTs[i].FSCH\_FRAME\_80\_USED = ith occurrence of  
34          FSCH\_FRAME\_80\_USED<sub>r</sub> (80ms frame used indicator of the forward broadcast  
35          supplemental channel).

- 1        - FBSCH\_LIST<sub>S</sub>[i].TDM\_STRUCTURE\_IND = ith occurrence of TDM\_  
2        STRUCTURE\_IND<sub>r</sub> (TDM structure used indicator).
- 3        + FBSCH\_LIST<sub>S</sub>[i].TDM\_SLOT\_LENGTH = ith occurrence of  
4        TDM\_SLOT\_LENGTH<sub>r</sub> (TDM slot length).
- 5        + If TDM\_SUPER\_PERIOD\_MASK\_LEN<sub>r</sub> is included, FBSCH\_LIST<sub>S</sub>[i].  
6        TDM\_SUPER\_PERIOD\_MASK\_LEN = ith occurrence of  
7        TDM\_SUPER\_PERIOD\_MASK\_LEN<sub>r</sub> (TDM super period mask length  
8        indicator). Otherwise, set  
9        FBSCH\_LIST<sub>S</sub>[i].TDM\_SUPER\_PERIOD\_MASK\_LEN as specified in Table  
10       3.7.2.3.2.38-3, based on FSCH\_OUTERCODE\_RATE field corresponding to  
11       FSCH\_ID field included in this record
- 12       + If TDM\_MEGA\_PERIOD\_MASK\_LEN<sub>r</sub> is included, FBSCH\_LIST<sub>S</sub>[i].  
13       TDM\_MEGA\_PERIOD\_MASK\_LEN = ith occurrence of  
14       TDM\_MEGA\_PERIOD\_MASK\_LEN<sub>r</sub> (TDM mega period mask length  
15       indicator). Otherwise, set FBSCH\_LIST<sub>S</sub>[i].  
16       TDM\_MEGA\_PERIOD\_MASK\_LEN as specified in Table 3.7.2.3.2.38-6.
- 17       • For i=1 to the number of flows included in this message, store the following:
- 18       - BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ID = ith occurrence of BCMC\_FLOW\_ID  
19       (BCMC flow identifier). See section 2.6.13.11.
- 20       - If REGISTRATION\_REQ\_FLAG\_INCL<sub>r</sub> equals '1', and ith occurrence of  
21       FLOW\_INFO\_ON\_OTHER\_FREQ<sub>r</sub> equals '0',  
22       BCMC\_FLOW\_LIST<sub>S</sub>[i].REGISTRATION\_REQ\_FLAG = ith occurrence of  
23       REGISTRATION\_REQ\_FLAG<sub>r</sub> (Registration required flag).
- 24       - If AUTH\_SIGNATURE\_REQUIRED<sub>r</sub> equals '1',  
25       BCMC\_FLOW\_LIST<sub>S</sub>[i].AUTH\_SIGNATURE\_REQ\_IND = ith occurrence of  
26       AUTH\_SIGNATURE\_REQ\_IND<sub>r</sub> (Authorization signature required indication).
- 27       - If BCMC\_ON\_TRAFFIC\_SUP<sub>r</sub> is set to '1',  
28       BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ON\_TRAFFIC\_IND = ith occurrence of  
29       BCMC\_FLOW\_ON\_TRAFFIC\_IND<sub>r</sub> (BCMC flow on traffic channel supported  
30       identifier); otherwise, BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ON\_TRAFFIC\_IND =  
31       '0'.
- 32       - If the ith occurrence of NUM\_LPM\_ENTRIES<sub>r</sub> equals '000', then  
33       BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ON\_IND = 0; otherwise,  
34       BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ON\_IND = 1 (BCMC flow On or Off  
35       Indicator).
- 36       - For j=1 to NUM\_LPM\_ENTRIES<sub>r</sub>, store the following:

- 1 + BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].FSCH\_ID = jth occurrence of FSCH\_ID<sub>r</sub>  
2 (Forward broadcast supplemental channel identifier).
- 3 + If jth occurrence of TDM\_USED\_IND<sub>r</sub> is set to 1, the mobile station shall  
4 store the following:
  - 5 o BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].TDM\_MASK = jth occurrence of  
6 TDM\_MASK<sub>r</sub> (TDM mask).
  - 7 o If TDM\_SUPER\_PERIOD\_MASK\_INCL<sub>r</sub> is set to '1',  
8 BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].TDM\_SUPER\_PERIOD\_MASK = jth  
9 occurrence of TDM\_SUPER\_PERIOD\_MASK<sub>r</sub> (TDM super period mask).  
10 Otherwise, set all bits of  
11 BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].TDM\_SUPER\_PERIOD\_MASK to '1'.
  - 12 o If TDM\_MEGA\_PERIOD\_MASK\_INCL<sub>r</sub> is set to '1',  
13 BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].TDM\_MEGA\_PERIOD\_MASK = jth  
14 occurrence of TDM\_MEGA\_PERIOD\_MASK<sub>r</sub> (TDM mega period mask).  
15 Otherwise, set all bits of  
16 BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].TDM\_MEGA\_PERIOD\_MASK to '1'.
  - 17 o TDM period for BCMC flow identified by  
18 BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ID on Forward Supplemental  
19 Channel identified by BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].FSCH\_ID is  
20 aligned at system time (t) as specified in section 2.6.13.12.
- 21 + BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].BSR\_ID = jth occurrence of BSR\_ID<sub>r</sub>  
22 (BCMC Service Reference identifier).
- 23 + For k=0 to NUM\_NGHR<sub>r</sub>, store the following:
  - 24 o BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].NGHR\_INFO[k].NGHR\_PN = kth  
25 occurrence of NGHR\_PN<sub>r</sub> (Neighbor pilot PN sequence offset index).
  - 26 o BCMC\_FLOW\_LIST<sub>S</sub>[i].LPM\_INFO[j].NGHR\_INFO[k].  
27 NGHR\_BCMC\_CONFIG = kth occurrence of NGHR\_BCMC\_CONFIG<sub>r</sub>  
28 (Neighbor BCMC flow configuration).
  - 29 o If NGHR\_BCMC\_CONFIG<sub>r</sub> equals '000', BCMC\_FLOW\_LIST<sub>S</sub>[i].  
30 LPM\_INFO[j].NGHR\_INFO[k].NGHR\_FSCH\_BAND\_CLASS = NULL;  
31 otherwise, the mobile station shall store the following:

- 1                   ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '010' or NGHBR\_BCMC\_CONFIG<sub>r</sub>  
2                   equals '001' and NGHBR\_FSCH\_BAND\_CLASS\_INCL<sub>r</sub> equals '0',  
3                   BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
4                   NGHBR\_FSCH\_BAND\_CLASS =  
5                   FBSCH\_LIST<sub>s</sub>[i].NGHBR\_FSCH\_BAND\_CLASS where i corresponds  
6                   to the entry of FBSCH\_LIST<sub>s</sub> where FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals  
7                   FSCH\_ID of this Forward Supplemental Channel.
- 8                   ◇ Otherwise, BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
9                   NGHBR\_FSCH\_BAND\_CLASS = kth occurrence of NGHBR\_  
10                   FSCH\_BAND\_CLASS<sub>r</sub> (Band class of the Forward Supplemental  
11                   Channel in the neighbor base station).
- 12                  o If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '000',  
13                   BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
14                   NGHBR\_FSCH\_CDMA\_FREQ = NULL; otherwise, the mobile station shall  
15                   store the following:
- 16                   ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '010' or NGHBR\_BCMC\_CONFIG<sub>r</sub>  
17                   equals '001' and NGHBR\_FSCH\_FREQ\_INCL<sub>r</sub> equals '0',  
18                   BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
19                   NGHBR\_FSCH\_CDMA\_FREQ =  
20                   FBSCH\_LIST<sub>s</sub>[i].FSCH\_CDMA\_FREQ where i corresponds to the  
21                   entry of FBSCH\_LIST<sub>s</sub> where FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals  
22                   FSCH\_ID of this Forward Supplemental Channel.
- 23                   ◇ Otherwise, BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
24                   NGHBR\_FSCH\_CDMA\_FREQ = kth occurrence of  
25                   NGHBR\_FSCH\_CDMA\_FREQ<sub>r</sub> (Neighbor Frequency assignment of  
26                   the forward broadcast supplemental channel).
- 27                  o If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '000',  
28                   BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
29                   NGHBR\_FSCH\_CODE\_CHAN = NULL; otherwise, the mobile station shall  
30                   store the following:
- 31                   ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '001' or '010' and  
32                   NGHBR\_FSCH\_CODE\_CHAN\_INCL<sub>r</sub> equals '0',  
33                   BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
34                   NGHBR\_FSCH\_CODE\_CHAN =  
35                   FBSCH\_LIST<sub>s</sub>[i].FSCH\_CODE\_CHAN where i corresponds to the  
36                   entry of FBSCH\_LIST<sub>s</sub> where FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals  
37                   FSCH\_ID of this Forward Supplemental Channel.

- 1                   ◇ Otherwise,  $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
2                    $\text{NGHBR\_FSCH\_CODE\_CHAN} = k$ th occurrence of  
3                    $\text{NGHBR\_FSCH\_CODE\_CHAN}_r$  (Neighbor pilot forward broadcast  
4                   supplemental channel code channel index).
- 5                   o If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '000',  
6                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
7                    $\text{NGHBR\_FSCH\_PLCM} = \text{NULL}$ ; otherwise, the mobile station shall store  
8                   the following:
- 9                   ◇ If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '010' or  $\text{NGHBR\_BMC\_CONFIG}_r$   
10                   equals '001' and  $\text{NGHBR\_FSCH\_PARMS\_INCL}_r$  equals '0',  
11                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
12                    $\text{NGHBR\_FSCH\_PLCM} = \text{FBSCH\_LIST}_S[i].\text{FSCH\_PLCM}$  where  $i$   
13                   corresponds to the entry of  $\text{FBSCH\_LIST}_S$  where  
14                    $\text{FBSCH\_LIST}_S[i].\text{FSCH\_ID}$  equals  $\text{FSCH\_ID}$  of this FORWARD  
15                   SUPPLEMENTAL CHANNEL.
- 16                   ◇ Otherwise, the mobile station shall perform the following:
- 17                   o If  $\text{NGHBR\_FSCH\_PLCM\_IND}_r$  equals '0'  
18                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
19                    $\text{NGHBR\_FSCH\_PLCM}$  shall be set to  $\text{PLCM\_42}$  as specified in  
20                   2.6.13.10.1.
- 21                   o If  $\text{NGHBR\_FSCH\_PLCM\_IND}_r$  equals '1'  
22                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
23                    $\text{NGHBR\_FSCH\_PLCM}$  shall be set to  $\text{PLCM\_42}$  as specified in  
24                   2.6.13.10.2.
- 25                   o If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '000',  
26                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
27                    $\text{NGHBR\_FSCH\_MUX\_OPTION} = \text{NULL}$ ; otherwise, the mobile station  
28                   shall store the following:
- 29                   ◇ If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '010' or  $\text{NGHBR\_BMC\_CONFIG}_r$   
30                   equals '001' and  $\text{NGHBR\_FSCH\_PARMS\_INCL}_r$  equals '0',  
31                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
32                    $\text{NGHBR\_FSCH\_MUX\_OPTION} =$   
33                    $\text{FBSCH\_LIST}_S[i].\text{FSCH\_MUX\_OPTION}$  where  $i$  corresponds to the  
34                   entry of  $\text{FBSCH\_LIST}_S$  where  $\text{FBSCH\_LIST}_S[i].\text{FSCH\_ID}$  equals  
35                    $\text{FSCH\_ID}$  of this Forward Supplemental Channel.
- 36                   ◇ Otherwise,  $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
37                    $\text{NGHBR\_FSCH\_MUX\_OPTION} = k$ th occurrence of  
38                    $\text{NGHBR\_FSCH\_MUX\_OPTION}_r$  (Multiplex Option of the Forward  
39                   Broadcast Supplemental Channel in the neighbor base station).

- 1                   o If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '000',  
2                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k]. NGHBR\_FSCH\_RC  
3                    = NULL; otherwise, the mobile station shall store the following:  
  
4                    ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '010' or NGHBR\_BCMC\_CONFIG<sub>r</sub>  
5                    equals '001' and NGHBR\_FSCH\_PARAMS\_INCL<sub>r</sub> equals '0',  
6                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
7                    NGHBR\_FSCH\_RC = FBSCH\_LIST<sub>s</sub>[i].FSCH\_RC where i corresponds  
8                    to the entry of FBSCH\_LIST<sub>s</sub> where FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals  
9                    FSCH\_ID of this Forward Supplemental Channel.  
  
10                  ◇ Otherwise, BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
11                  NGHBR\_FSCH\_RC = kth occurrence of NGHBR\_FSCH\_RC<sub>r</sub> (Neighbor  
12                  Radio configuration of the forward broadcast supplemental channel).  
  
13                  o If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '000',  
14                  BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_CO  
15                  DING = NULL; otherwise, the mobile station shall store the following:  
  
16                  ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '010' or NGHBR\_BCMC\_CONFIG<sub>r</sub>  
17                  equals '001' and NGHBR\_FSCH\_PARAMS\_INCL<sub>r</sub> equals '0',  
18                  BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
19                  CODING = FBSCH\_LIST<sub>s</sub>[i].NGHBR\_FSCH\_CODING where i  
20                  corresponds to the entry of FBSCH\_LIST<sub>s</sub> where  
21                  FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals FSCH\_ID of this Forward  
22                  Supplemental Channel.  
  
23                  ◇ Otherwise,  
24                  BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
25                  CODING = kth occurrence of NGHBR\_FSCH\_CODING<sub>r</sub> (Coding type  
26                  of the Forward Broadcast Supplemental Channel in this neighbor  
27                  base station).  
  
28                  o If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '000',  
29                  BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OU  
30                  TERCODE\_RATE = NULL; otherwise, the mobile station shall store the  
31                  following:  
  
32                  ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '010' or NGHBR\_BCMC\_CONFIG<sub>r</sub>  
33                  equals '001' and NGHBR\_FSCH\_PARAMS\_INCL<sub>r</sub> equals '0',  
34                  BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
35                  OUTERCODE\_RATE =  
36                  FBSCH\_LIST<sub>s</sub>[i].NGHBR\_FSCH\_OUTERCODE\_RATE where i  
37                  corresponds to the entry of FBSCH\_LIST<sub>s</sub> where  
38                  FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals FSCH\_ID of this Forward  
39                  Supplemental Channel.

1                   ◇ Otherwise,  
2                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
3                    OUTERCODE\_RATE = kth occurrence of  
4                    NGHBR\_FSCH\_OUTERCODE\_RATE<sub>r</sub> (Outer Code Rate of the  
5                    Forward Broadcast Supplemental Channel in this neighbor base  
6                    station) if NGHBR\_FSCH\_OUTERCODE\_INCL<sub>r</sub> equals '1' ; otherwise,  
7                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
8                    OUTERCODE\_RATE = NULL.

9                   o If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '000',  
10                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OU  
11                    TERCODE\_OFFSET = NULL; otherwise, the mobile station shall store  
12                    the following:

13                   ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '010' or NGHBR\_BCMC\_CONFIG<sub>r</sub>  
14                    equals '001' and NGHBR\_FSCH\_PARMS\_INCL<sub>r</sub> equals '0',  
15                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
16                    OUTERCODE\_OFFSET =  
17                    FBSCH\_LIST<sub>s</sub>[i].NGHBR\_FSCH\_OUTERCODE\_OFFSET where i  
18                    corresponds to the entry of FBSCH\_LIST<sub>s</sub> where  
19                    FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals FSCH\_ID of this Forward  
20                    Supplemental Channel.

21                   ◇ Otherwise,  
22                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
23                    OUTERCODE\_OFFSET = kth occurrence of  
24                    NGHBR\_FSCH\_OUTERCODE\_OFFSET<sub>r</sub> (Outer Coding Buffer Offset  
25                    of the Forward Broadcast Supplemental Channel in this neighbor  
26                    base station) if NGHBR\_FSCH\_OUTERCODE\_INCL<sub>r</sub> equals '1' ;  
27                    otherwise,  
28                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_  
29                    OUTERCODE\_OFFSET = NULL.

30                   o If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '000',  
31                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
32                    NGHBR\_FSCH\_NUM\_BITS\_IDX = NULL; otherwise, the mobile station  
33                    shall store the following:

34                   ◇ If NGHBR\_BCMC\_CONFIG<sub>r</sub> equals '010' or NGHBR\_BCMC\_CONFIG<sub>r</sub>  
35                    equals '001' and NGHBR\_FSCH\_PARMS\_INCL<sub>r</sub> equals '0',  
36                    BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k].  
37                    NGHBR\_FSCH\_NUM\_BITS\_IDX =  
38                    FBSCH\_LIST<sub>s</sub>[i].FSCH\_NUM\_BITS\_IDX where i corresponds to the  
39                    entry of FBSCH\_LIST<sub>s</sub> where FBSCH\_LIST<sub>s</sub>[i].FSCH\_ID equals  
40                    FSCH\_ID of this Forward Supplemental Channel.

- 1                   ◇ Otherwise,  $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
2                    $\text{NGHBR\_FSCH\_NUM\_BITS\_IDX} = k$ th occurrence of  
3                    $\text{NGHBR\_FSCH\_NUM\_BITS\_IDX}_r$  (Neighbor Number of information  
4                   bits index of the forward broadcast supplemental channel).
- 5                   o If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '000',  
6                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
7                    $\text{NGHBR\_FSCH\_FRAME\_40\_USED} = \text{NULL}$ ; otherwise, the mobile station  
8                   shall store the following:
- 9                   ◇ If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '010' or  $\text{NGHBR\_BMC\_CONFIG}_r$   
10                   equals '001' and  $\text{NGHBR\_FSCH\_PARMS\_INCL}_r$  equals '0',  
11                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
12                    $\text{NGHBR\_FSCH\_FRAME\_40\_USED} =$   
13                    $\text{FBSCH\_LIST}_S[i].\text{FSCH\_FRAME\_40\_USED}$  where  $i$  corresponds to the  
14                   entry of  $\text{FBSCH\_LIST}_S$  where  $\text{FBSCH\_LIST}_S[i].\text{FSCH\_ID}$  equals  
15                    $\text{FSCH\_ID}$  of this FORWARD SUPPLEMENTAL CHANNEL.
- 16                   ◇ Otherwise,  $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
17                    $\text{NGHBR\_FSCH\_FRAME\_40\_USED} = k$ th occurrence of  
18                    $\text{NGHBR\_FSCH\_FRAME\_40\_USED}_r$  (Neighbor 40ms frame used  
19                   indicator of the forward broadcast supplemental channel).
- 20                   o If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '000',  
21                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
22                    $\text{NGHBR\_FSCH\_FRAME\_80\_USED} = \text{NULL}$ ; otherwise, the mobile station  
23                   shall store the following:
- 24                   ◇ If  $\text{NGHBR\_BMC\_CONFIG}_r$  equals '010' or  $\text{NGHBR\_BMC\_CONFIG}_r$   
25                   equals '001' and  $\text{NGHBR\_FSCH\_PARMS\_INCL}_r$  equals '0',  
26                    $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
27                    $\text{NGHBR\_FSCH\_FRAME\_80\_USED} =$   
28                    $\text{FBSCH\_LIST}_S[i].\text{FSCH\_FRAME\_80\_USED}$  where  $i$  corresponds to the  
29                   entry of  $\text{FBSCH\_LIST}_S$  where  $\text{FBSCH\_LIST}_S[i].\text{FSCH\_ID}$  equals  
30                    $\text{FSCH\_ID}$  of this FORWARD SUPPLEMENTAL CHANNEL.
- 31                   ◇ Otherwise,  $\text{BMC\_FLOW\_LIST}_S[i].\text{LPM\_INFO}[j].\text{NGHBR\_INFO}[k].$   
32                    $\text{NGHBR\_FSCH\_FRAME\_80\_USED} = k$ th occurrence of  
33                    $\text{NGHBR\_FSCH\_FRAME\_80\_USED}_r$  (Neighbor 80ms frame used  
34                   indicator of the forward broadcast supplemental channel).
- 35 For each of the neighboring base stations contained in the *BCMC Service Parameters*  
36 *Message* and supports the broadcast control channel, the mobile station shall store the  
37 following informations from the message:
- 38                   • SR1 Non-TD BCCH support indicator ( $\text{BMC\_SR1\_BCCH\_NON\_TD\_INCL}_S =$   
39                    $\text{BMC\_SR1\_BCCH\_NON\_TD\_INCL}_r$ )



- 1 • SR1 TD BCCH support indicator ( $\text{BCMC\_SR1\_TD\_INCL}_S = \text{BCMC\_SR1\_TD\_INCL}_R$ )
- 2 • If  $\text{BCMC\_SR1\_BCCH\_NON\_TD\_INCL}_R$  is equal to '1':
- 3     –  $\text{BCMC\_SR1\_BRAT\_NON\_TD}_S = \text{BCMC\_SR1\_BRAT\_NON\_TD}_R$ ;
- 4     –  $\text{BCMC\_SR1\_CRAT\_NON\_TD}_S = \text{BCMC\_SR1\_CRAT\_NON\_TD}_R$ ;
- 5     –  $\text{BCMC\_BCCH\_CODE\_CHAN\_NON\_TD}_S =$
- 6          $\text{BCMC\_SR1\_BCCH\_CODE\_CHAN\_NON\_TD}_R$ .
- 7 • If  $\text{BCMC\_SR1\_TD\_INCL}_R$  is included and is equal to '1', and the mobile station
- 8     supports the Transmit Diversity indicated by  $\text{BCMC\_SR1\_TD\_MODE}_R$ :
- 9     –  $\text{BCMC\_SR1\_BRAT\_TD}_S = \text{BCMC\_SR1\_BRAT\_TD}_R$ ;
- 10    –  $\text{BCMC\_SR1\_CRAT\_TD}_S = \text{BCMC\_SR1\_CRAT\_TD}_R$ ;
- 11    –  $\text{BCMC\_BCCH\_CODE\_CHAN\_TD}_S = \text{BCMC\_SR1\_BCCH\_CODE\_CHAN\_TD}_R$ .
- 12 • If the mobile station supports the Transmit Diversity,
- 13      $\text{BCMC\_SR1\_BCCH\_NON\_TD\_INCL}_R$  is equal to '1', and  $\text{SR1\_TD\_INCL}_R$  is equal to '0':
- 14     –  $\text{BCMC\_SR1\_BRAT\_TD}_S = \text{BCMC\_SR1\_BRAT\_NON\_TD}_R$ ;
- 15     –  $\text{BCMC\_SR1\_CRAT\_TD}_S = \text{BCMC\_SR1\_CRAT\_NON\_TD}_R$ ;
- 16     –  $\text{BCMC\_BCCH\_CODE\_CHAN\_TD}_S = \text{BCMC\_SR1\_BCCH\_CODE\_CHAN\_NON\_TD}_R$ .

#### 17 2.6.2.2.19 Access Point Pilot Information Message

18 Whenever an *Access Point Pilot Information Message* is received on the Paging Channel or  
 19 the Primary Broadcast Control Channel, the configuration message sequence number,  
 20  $\text{CONFIG\_MSG\_SEQ}_R$ , shall be compared to that stored in  $\text{AP\_PILOT\_INFO\_MSG\_SEQ}_S$ . If  
 21 the comparison results in a match, the mobile station may refresh the lifetime that the  
 22 information in the message remains valid to  $\text{LIFETIME}_S$  minutes after the reception of the  
 23 message. If the comparison results in a mismatch, then the mobile station shall process  
 24 the remaining fields in the message as follows.

25 The mobile station shall store the following parameters:

- 26 • Configuration message sequence number
- 27     ( $\text{CONFIG\_MSG\_SEQ}_S = \text{CONFIG\_MSG\_SEQ}_R$ ,
- 28      $\text{AP\_PILOT\_INFO\_MSG\_SEQ}_S = \text{CONFIG\_MSG\_SEQ}_R$ )
- 29 • Lifetime of the message
- 30     ( $\text{LIFETIME}_S = \text{LIFETIME}_R$ ),

31 For each of the Access Point Pilot Information record contained in the *Access Point Pilot*  
 32 *Information Message*, the mobile station shall perform the following:

- 33 • Set the  $\text{AP\_ASSN\_TYPE}$  field of  $\text{AP\_NGHBR\_REC}_S[i]$  to the  $\text{AP\_ASSN\_TYPE}$  field of
- 34     the  $i^{\text{th}}$  occurrence of  $\text{APPI\_REC}_R$ .
- 35 • If the  $\text{AP\_SID\_SAME\_AS\_PREVIOUS}$  field of the  $i^{\text{th}}$  occurrence of  $\text{APPI\_REC}_R$  is set

to '1', set the AP\_SID field of AP\_NGHBR\_REC<sub>S</sub>[i] to the value of AP\_SID field of AP\_NGHBR\_REC<sub>S</sub>[i-1]. Otherwise, set the AP\_SID field of AP\_NGHBR\_REC[i]<sub>S</sub> to the AP\_SID field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub>.

- If the AP\_NID\_SAME\_AS\_PREVIOUS field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub> is set to '1', set the AP\_NID field of AP\_NGHBR\_REC<sub>S</sub>[i] to the value of AP\_NID field of AP\_NGHBR\_REC<sub>S</sub>[i-1]. Otherwise, set the AP\_NID field of AP\_NGHBR\_REC[i]<sub>S</sub> to the AP\_NID field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub>.

- If the AP\_BAND\_SAME\_AS\_PREVIOUS field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub> is set to '1', set the AP\_BAND field of AP\_NGHBR\_REC<sub>S</sub>[i] to the value of AP\_BAND field of AP\_NGHBR\_REC<sub>S</sub>[i-1]. Otherwise, set the AP\_BAND field of AP\_NGHBR\_REC[i]<sub>S</sub> to the AP\_BAND field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub>.

- If the AP\_FREQ\_SAME\_AS\_PREVIOUS field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub> is set to '1', set the AP\_FREQ field of AP\_NGHBR\_REC<sub>S</sub>[i] to the value of AP\_FREQ field of AP\_NGHBR\_REC<sub>S</sub>[i-1]. Otherwise, set the AP\_FREQ field of AP\_NGHBR\_REC<sub>S</sub>[i] to the AP\_FREQ field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub>.

- If the AP\_PN\_REC\_SAME\_AS\_PREVIOUS field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub> is set to '1', set the AP\_PN\_REC array values of AP\_NGHBR\_REC<sub>S</sub>[i] to the values of AP\_PN\_REC array of AP\_NGHBR\_REC<sub>S</sub>[i-1]. Otherwise, set the AP\_PN\_REC array values (of length AP\_PN\_COUNT) of AP\_NGHBR\_REC<sub>S</sub>[i] as follows:

- If AP\_PN\_REC\_TYPE field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub> is set to '000', set the *k*<sup>th</sup> value of the AP\_PN\_REC array of AP\_NGHBR\_REC<sub>S</sub>[i] to the *k*<sup>th</sup> value of AP\_PN field in the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub>, where *k* is between 0 and AP\_PN\_COUNT-1.

- If AP\_PN\_REC\_TYPE field of the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub> is set to '001', set the *k*<sup>th</sup> value of the AP\_PN\_REC array of AP\_NGHBR\_REC<sub>S</sub>[i] to the AP\_PN\_START + (*k* x AP\_PN\_INC), where AP\_PN\_START and AP\_PN\_INC are fields in the *i*<sup>th</sup> occurrence of APPI\_REC<sub>R</sub>, where *k* is between 0 and AP\_PN\_COUNT-1.

The mobile station may store and use the information in the message if no *Access Point Pilot Information Message* is received within LIFETIME<sub>S</sub> minutes of the reception of the *Access Point Pilot Information Message* that the information is obtained. The mobile station shall not use the information after LIFETIME<sub>S</sub> minutes of the reception of the last *Access Point Pilot Information Message*.

#### 2.6.2.2.20 Access Point Identification Message

Whenever an *Access Point Identification Message* is received on the Paging Channel or the Primary Broadcast Control Channel, the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>R</sub>, shall be compared to that stored in AP\_IDT\_MSG\_SEQ<sub>S</sub>. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

1 The mobile station shall store the following parameters:

- 2 • Configuration message sequence number

3 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,

4 AP\_IDT\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)

- 5 • ASSTN\_TYPE<sub>S</sub> = ASSTN\_TYPE<sub>R</sub>

- 6 • System identification (SID<sub>S</sub> = SID<sub>R</sub>)

- 7 • Network identification (NID<sub>S</sub> = NID<sub>R</sub>)

- 8 • Access Point identification (AP\_ID<sub>S</sub> = AP\_ID<sub>R</sub>)

- 9 • Access Point identification mask (AP\_ID\_MASK<sub>S</sub> = AP\_ID\_MASK<sub>R</sub>)

- 10 • MSC identification of the base station (IOS\_MSC\_ID<sub>S</sub> = IOS\_MSC\_ID<sub>R</sub>)

- 11 • Cell identification of the base station IOS\_CELL\_ID<sub>S</sub> = IOS\_CELL\_ID<sub>R</sub>)

12 If the HRPD\_ACQ\_REC\_INCL field in the message is set to '1', then the mobile station shall  
13 store the following fields:

- 14 • High Rate Packet Data PN (HRPD\_PN<sub>S</sub> = HRPD\_PN<sub>R</sub>)

- 15 • High Rate Packet Data band class (HRPD\_BAND\_CLASS<sub>S</sub> = HRPD\_BAND\_CLASS<sub>R</sub>)

- 16 • High Rate Packet Data channel number (HRPD\_CHANNEL<sub>S</sub> = HRPD\_CHANNEL<sub>R</sub>)

17 Otherwise, the mobile station shall set the HRPD\_BAND\_CLASS<sub>S</sub> and HRPD\_CHANNEL<sub>S</sub>  
18 fields to NULL.

19 If the LOC\_REC\_TYPE field in the message is set to '001' the mobile station shall store the  
20 following:

- 21 • Base station latitude (BASE\_LAT<sub>S</sub> = BASE\_LAT<sub>R</sub>)

- 22 • Base station longitude (BASE\_LONG<sub>S</sub> = BASE\_LONG<sub>R</sub>)

- 23 • Base station height (BASE\_HEIGHT<sub>S</sub> = BASE\_HEIGHT<sub>R</sub>)

- 24 • Base station horizontal uncertainty (LOC\_UNC\_H<sub>S</sub> = LOC\_UNC\_H<sub>R</sub>)

- 25 • Base station horizontal uncertainty (LOC\_UNC\_V<sub>S</sub> = LOC\_UNC\_V<sub>R</sub>)

26 Otherwise, the mobile station shall set the BASE\_LAT<sub>S</sub>, BASE\_LONG<sub>S</sub>, BASE\_HEIGHT<sub>S</sub>,  
27 LOC\_UNC\_H<sub>S</sub> and LOC\_UNC\_V<sub>S</sub> fields to NULL.

28 If the INTRA\_FREQ\_HO\_HYS\_INCL field in the message is set to '1', then the mobile station  
29 shall store the following field:

- 30 • Intra-frequency idle handoff hysteresis (INTRA\_FREQ\_HO\_HYS<sub>S</sub> =  
31 INTRA\_FREQ\_HO\_HYS<sub>R</sub>)

32 Otherwise, the mobile station shall set the INTRA\_FREQ\_HO\_HYS<sub>S</sub> field to NULL.

33 If the INTRA\_FREQ\_HO\_SLOPE\_INCL field in the message is set to '1', then the mobile  
34 station shall store the following field:

• Intra-frequency idle handoff slope ( $\text{INTRA\_FREQ\_HO\_SLOPE}_S = \text{INTRA\_FREQ\_HO\_SLOPE}_T$ )

Otherwise, the mobile station shall set the  $\text{INTRA\_FREQ\_HO\_SLOPE}_S$  field to 8.

If the  $\text{INTER\_FREQ\_HO\_HYS\_INCL}$  field in the message is set to '1', then the mobile station shall store the following field:

• Inter-frequency idle handoff hysteresis ( $\text{INTER\_FREQ\_HO\_HYS}_S = \text{INTER\_FREQ\_HO\_HYS}_T$ )

Otherwise, the mobile station shall set the  $\text{INTER\_FREQ\_HO\_HYS}_S$  field to NULL.

If the  $\text{INTER\_FREQ\_HO\_SLOPE\_INCL}$  field in the message is set to '1', then the mobile station shall store the following field:

• Inter-frequency idle handoff slope ( $\text{INTER\_FREQ\_HO\_SLOPE}_S = \text{INTER\_FREQ\_HO\_SLOPE}_T$ )

Otherwise, the mobile station shall set the  $\text{INTER\_FREQ\_HO\_SLOPE}_S$  field to 8. If the  $\text{INTER\_FREQ\_SRCH\_TH\_INCL}$  field in the message is set to '1', then the mobile station shall store the following field:

• Inter-frequency idle search threshold ( $\text{INTER\_FREQ\_SRCH\_TH}_S = \text{INTER\_FREQ\_SRCH\_TH}_T$ )

Otherwise, the mobile station shall set the  $\text{INTER\_FREQ\_SRCH\_TH}_S$  field to NULL.

#### 2.6.2.2.21 Access Point Identification Text Message

Whenever an *Access Point Identification Text Message* is received on the Paging Channel or the Primary Broadcast Control Channel, the configuration message sequence number,  $\text{CONFIG\_MSG\_SEQ}_T$ , shall be compared to that stored in  $\text{AP\_ID\_TEXT\_MSG\_SEQ}_S$ . If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

The mobile station shall store the following parameters:

- Configuration message sequence number

( $\text{CONFIG\_MSG\_SEQ}_S = \text{CONFIG\_MSG\_SEQ}_T$ ,

$\text{AP\_ID\_TEXT\_MSG\_SEQ}_S = \text{CONFIG\_MSG\_SEQ}_T$ )

- Message Encoding ( $\text{MSG\_ENCODING}_S = \text{MSG\_ENCODING}_T$ )

- Mobile station shall store  $i^{\text{th}}$  occurrence of the  $\text{CHAR}_i$  field as follows

$\text{CHAR}_S[i] = \text{CHAR}_i$

#### 2.6.2.2.22 General Overhead Information Message

Whenever a *General Overhead Information Message* is received on the Paging Channel or the Primary Broadcast Control Channel, the configuration message sequence number,  $\text{CONFIG\_MSG\_SEQ}_T$ , shall be compared to that stored in  $\text{GOI\_MSG\_SEQ}_S$ . If the comparison results in a match, the mobile station may ignore the message. If the

1 comparison results in a mismatch, then the mobile station shall process the remaining  
2 fields in the message as follows.

3 The mobile station shall store the following parameters:

- 4 • Configuration message sequence number  
5 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
6 GOI\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)

7 For each of the General *Overhead* Information record contained in the *General Overhead*  
8 *Information Message*, the mobile station shall perform the following:

- 9 • Set the GOI\_REC\_TYPE<sub>S</sub>[*i*] to the GOI\_REC\_TYPE field of the *i*<sup>th</sup> occurrence of  
10 GOI\_REC\_TYPE<sub>R</sub>.
- 11 • Set the GOI\_REC<sub>S</sub>[*i*] to the GOI\_REC field of the *i*<sup>th</sup> occurrence of GOI\_REC<sub>R</sub>.

#### 12 2.6.2.2.23 Flex Duplex CDMA Channel List Message Overview

13 The mobile station may receive the *Flex Duplex CDMA Channel List Message* from the  
14 Paging Channel or from the Primary Broadcast Control Channel. Whenever a *Flex Duplex*  
15 *CDMA Channel List Message* is received on the Paging Channel, the mobile station shall  
16 compare the configuration message sequence number, CONFIG\_MSG\_SEQ<sub>R</sub>, to that stored  
17 in FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>. If the comparison results in a match, the mobile station  
18 may ignore the message. If the comparison results in a mismatch, then the mobile station  
19 shall process the remaining fields in the message as follows:

20 If the *Flex Duplex CDMA Channel List Message* lists CDMA channels from more than one  
21 band class and the mobile station hashes to a band class other than the current band  
22 class, the mobile station shall process this message after NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
23 EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> and GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> become current.

24 If any of the REMAINING\_FIELD\_INCL fields included in this message is set to '0', the  
25 mobile station shall process the remaining message after EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub> is  
26 current.

27 The mobile station shall store the following parameters:

- 28 • Configuration message sequence number  
29 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,  
30 FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>).
- 31 • If CAND\_BAND\_INFO\_REQ<sub>R</sub> is included, the mobile station shall set  
32 CAND\_BAND\_INFO\_REQ<sub>S</sub> to CAND\_BAND\_INFO\_REQ<sub>R</sub>; otherwise, the mobile  
33 station shall set CAND\_BAND\_INFO\_REQ<sub>S</sub> to '0'.
- 34 • The mobile station shall perform the following for each occurrence of the  
35 CAND\_BAND\_CLASS record:
  - 36 • Set the CAND\_BAND\_CLASS field of CAND\_BAND\_CLASS\_REC[*i*] to the *i*<sup>th</sup>  
37 occurrence of CAND\_BAND\_CLASS<sub>R</sub>.

- 1       • Set the SUBCLASS\_INFO\_INCL field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$   
2       occurrence of SUBCLASS\_INFO\_INCL<sub>r</sub>.
- 3       • If the  $i^{\text{th}}$  occurrence of SUBCLASS\_INFO\_INCL<sub>r</sub> is set to '1', set the  
4       SUBCLASS\_REC\_LEN field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$  occurrence  
5       of SUBCLASS\_REC\_LEN<sub>r</sub>.
- 6       • If the  $i^{\text{th}}$  occurrence of SUBCLASS\_INFO\_INCL<sub>r</sub> is set to '1', the mobile  
7       station shall perform the following for each band subclass indicator  
8       received:
  - 9           – Set the BAND\_SUBCLASS\_IND\_REC[j] field of  
10           CAND\_BAND\_CLASS\_REC[i] to the  $j^{\text{th}}$  occurrence of  
11           BAND\_SUBCLASS\_IND<sub>r</sub> in the  $i^{\text{th}}$  CAND\_BAND\_CLASS\_REC record.
- 12      • Set the TD\_MODE field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$  occurrence of  
13      TD\_MODE<sub>r</sub>
- 14      • Set the BYPASS\_SYS\_DET\_IND field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$   
15      occurrence of BYPASS\_SYS\_DET\_IND<sub>r</sub>.
- 16      • Set the NUM\_FREQ field of CAND\_BAND\_CLASS\_REC[i] to the  $i^{\text{th}}$  occurrence of  
17      NUM\_FREQ<sub>r</sub>.
- 18      • For each FREQ record included in the CAND\_BAND\_CLASS\_REC[i], the mobile  
19      station shall store the following:
  - 20          • Set the CDMA\_FREQ[j] field of CAND\_BAND\_CLASS\_REC[i] to the  $j^{\text{th}}$   
21          occurrence of CDMA\_FREQ<sub>r</sub>.
  - 22          • If the  $j^{\text{th}}$  occurrence of REMAINING\_FIELD\_INCL field of the  
23          CAND\_BAND\_CLASS\_REC[i] is set to '1', the mobile station shall store the  
24          following:
    - 25              • Set the REV\_CDMA\_FREQ[j] field of CAND\_BAND\_CLASS\_REC[i] to the  
26               $j^{\text{th}}$  occurrence of REV\_CDMA\_FREQ<sub>r</sub> in the  $i^{\text{th}}$   
27              CAND\_BAND\_CLASS\_REC record.
    - 28              • Set the RC\_QPCH\_HASH\_IND[j] field of CAND\_BAND\_CLASS\_REC[i] to  
29              the  $j^{\text{th}}$  occurrence of RC\_QPCH\_HASH\_IND<sub>r</sub> if the field corresponding to  
30              the CDMA\_FREQ[j] field of the  $i^{\text{th}}$  CAND\_BAND\_CLASS\_REC record is  
31              included, otherwise set it to '0'.
    - 32              • Set the TD\_HASH\_IND[j] field of CAND\_BAND\_CLASS\_REC[i] to the  $j^{\text{th}}$   
33              occurrence of TD\_HASH\_IND<sub>r</sub> if the field corresponding to the  
34              CDMA\_FREQ[j] field of the  $i^{\text{th}}$  CAND\_BAND\_CLASS\_REC record is  
35              included, otherwise set it to '0'.
    - 36              • Set the TD\_POWER\_LEVEL[j] field of CAND\_BAND\_CLASS\_REC[i] to the  
37               $j^{\text{th}}$  occurrence of TD\_POWER\_LEVEL<sub>r</sub> if the field corresponding to the  
38              CDMA\_FREQ[j] field of the  $i^{\text{th}}$  CAND\_BAND\_CLASS\_REC record is  
39              included, otherwise set it to '0'.

- 1                   • Set the CDMA\_FREQ\_WEIGHT[j] field of CAND\_BAND\_CLASS\_REC[i] to  
2                   the  $j^{\text{th}}$  occurrence of CDMA\_FREQ\_WEIGHT<sub>r</sub> if the field corresponding  
3                   to the CDMA\_FREQ[j] field of the  $i^{\text{th}}$  CAND\_BAND\_CLASS\_REC record is  
4                   included, otherwise set it to '0'.
- 5                   • Otherwise, the mobile station should set these fields as follows:
- 6                   • If the base station is sending the *Extended CDMA Channel List Message*  
7                   and includes CDMA\_FREQ[j] and CAND\_BAND\_CLASS pair the mobile  
8                   station shall store the following:
  - 9                   • Set the REV\_CDMA\_FREQ[j] field of CAND\_BAND\_CLASS\_REC[i]  
10                   according to [45].
  - 11                   • If the RC\_QPCH\_HASH\_IND<sub>r</sub> field corresponding to the  
12                   CDMA\_FREQ[j] and CAND\_BAND\_CLASS pair in the *Extended CDMA*  
13                   *Channel List Message* is included, set the RC\_QPCH\_HASH\_IND[j]  
14                   field of CAND\_BAND\_CLASS\_REC[i] to this value, Otherwise, set it to  
15                   '0'.
  - 16                   • If the TD\_HASH\_IND<sub>r</sub> field corresponding to the CDMA\_FREQ[j] and  
17                   CAND\_BAND\_CLASS pair in the *Extended CDMA Channel List*  
18                   *Message* is included, set the TD\_HASH\_IND[j] field of  
19                   CAND\_BAND\_CLASS\_REC[i] to this value, Otherwise, set it to '0'.
  - 20                   • If the TD\_POWER\_LEVEL<sub>r</sub> field corresponding to the CDMA\_FREQ[j]  
21                   and CAND\_BAND\_CLASS pair in the *Extended CDMA Channel List*  
22                   *Message* is included, set the TD\_POWER\_LEVEL[j] field of  
23                   CAND\_BAND\_CLASS\_REC[i] to this value, Otherwise, set it to '0'.
  - 24                   • If the CDMA\_FREQ\_WEIGHT<sub>r</sub> field corresponding to the  
25                   CDMA\_FREQ[j] and CAND\_BAND\_CLASS pair in the *Extended CDMA*  
26                   *Channel List Message* is included, set the CDMA\_FREQ\_WEIGHT[j]  
27                   field of CAND\_BAND\_CLASS\_REC[i] to this value, Otherwise, set it to  
28                   '0'.
- 29                   • If the base station is not sending the *Extended CDMA Channel List*  
30                   *Message* or if the CDMA\_FREQ[j] and CAND\_BAND\_CLASS pair is not  
31                   included in the *Extended CDMA Channel List Message* the mobile station  
32                   shall set store the following:
  - 33                   • Set the REV\_CDMA\_FREQ[j] field of CAND\_BAND\_CLASS\_REC[i]  
34                   according to [45].
  - 35                   • Set the RC\_QPCH\_HASH\_IND[j] field of CAND\_BAND\_CLASS\_REC[i]  
36                   to '0'.
  - 37                   • Set the TD\_HASH\_IND[j] field of CAND\_BAND\_CLASS\_REC[i] to '0'.
  - 38                   • Set the TD\_POWER\_LEVEL[j] field of CAND\_BAND\_CLASS\_REC[i] to  
39                   '0'.
- 40                   • Set the CDMA\_FREQ\_WEIGHT[j] field of CAND\_BAND\_CLASS\_REC[i] to '0'.

1 If this message is received on the Paging Channel, the mobile station shall process it as  
 2 specified in the section 2.6.2.2.23.1. Otherwise the mobile station shall process the  
 3 message as specified in section 2.6.2.2.23.2.

#### 4 2.6.2.2.23.1 Flex Duplex CDMA Channel List Message on Paging Channel

5 The mobile station shall determine the CDMA Channel (Frequency Assignment) for its  
 6 Paging Channel as follows:

- 7 • Starting from an empty list, the mobile station shall generate the first CDMA  
 8 Channel list from the *Flex Duplex CDMA Channel List Message* as follows:
  - 9 – For each band class record included in this message, the mobile station shall  
 10 perform the following:
    - 11 + If band subclass information is included for this band class record  
 12 (SUBCLASS\_INFO\_INCL<sub>S</sub> = '1'), the mobile station shall add only those  
 13 channels belonging to the band class and band subclasses that are  
 14 supported by both the mobile station and the base station, in the order they  
 15 appear in the *Flex Duplex CDMA Channel List Message*<sup>13</sup>.
    - 16 + Otherwise (SUBCLASS\_INFO\_INCL<sub>S</sub> = '0' or P\_REV\_IN\_USE<sub>S</sub> is less than 11),  
 17 the mobile station shall add only those channels that it supports for the  
 18 associated band class, in the order they appear in the *Flex Duplex CDMA*  
 19 *Channel List Message*.
  - 20 – If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to 11, the mobile station shall sort the  
 21 channels first by the ascending order of band class value, as specified in [30], then  
 22 by the ascending order of CDMA\_FREQ within each band class.
- 23 • If RC\_QPCH\_SEL\_INCL<sub>R</sub> is equal to '1' and the mobile station is capable of RC  
 24 greater than 2 or capable of supporting Quick Paging Channel, the mobile station  
 25 shall eliminate the channels with RC\_QPCH\_HASH\_IND<sub>S</sub> equal to '0' from the first  
 26 CDMA Channel list to generate the second CDMA Channel list while preserving the  
 27 order in the first CDMA Channel list. Otherwise, the mobile station shall set the  
 28 second CDMA Channel list to be equal to the first CDMA Channel list.
- 29 • The mobile station shall generate the third CDMA Channel list as follows.
  - 30 – If CDMA\_FREQ\_WEIGHT\_INCL<sub>R</sub> is equal to '0', the mobile station shall set the  
 31 third CDMA Channel list to be equal to the second CDMA Channel list.

---

<sup>13</sup> The mobile station will not discard frequencies as long as they belong to a subclass that is both listed in the message and supported by the mobile station. If the base station does not list any subclass, the mobile station assumes that all subclasses are supported by the base station. The subclass to frequency mapping is not provided in the *Extended CDMA Channel List Message*; the mobile station needs to refer to [45] to find the mapping.



- 1       – If CDMA\_FREQ\_WEIGHT\_INCL<sub>r</sub> is equal to '1', starting with an empty third
- 2       CDMA Channel list, for each entry "E" in the second CDMA Channel list in the
- 3       order they appear, the mobile station shall append N consecutive entries "E" at
- 4       the end of the third CDMA Channel list, where N is the weight of "E" and equals
- 5       CDMA\_FREQ\_WEIGHT<sub>S</sub>+1.
- 6       • The mobile station shall generate a CDMA band list as follows. Starting with an
- 7       empty CDMA band list, for each channel in the third CDMA Channel list in the
- 8       order they appear, the mobile station shall append an entry equal to the band class
- 9       of that channel, at the end of the CDMA band list.
- 10      • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of
- 11      the CDMA band list to compute the band class for its Paging Channel.
- 12      • The mobile station shall eliminate those channels which are not in the computed
- 13      band class from the third CDMA channel list to generate the final CDMA channel
- 14      list.
- 15      • If the final CDMA Channel list is empty, the mobile station shall proceed with the
- 16      processing of *Extended CDMA Channel List message* and the *CDMA Channel List*
- 17      *message*.
- 18      • The mobile station shall then use the hash algorithm specified in 2.6.7.1 and the
- 19      size of the final CDMA channel list to determine the CDMA Channel (Frequency
- 20      Assignment) for its Paging Channel.

21      Figure 2.6.2.2.12.1-1 shows an example of the hashing procedure.

22      If the CDMA Frequency Assignment has changed but the band class is the same (the  
 23      computed CDMA Channel is different from CDMACH<sub>S</sub> but the computed CDMA band class  
 24      is the same as CDMABAND<sub>S</sub>), the mobile station shall perform the following actions:

- 25      • If the stored configuration parameters is not current (see 2.6.2.2) for the
- 26      corresponding base station and frequency assignment, the mobile station shall
- 27      perform the following actions:
- 28      – Set CDMACH<sub>S</sub> to the new CDMA Channel.
- 29      – Set REVCDMACH<sub>S</sub> to the Reverse CDMA Channel.
- 30      – Set PAGE\_CHAN<sub>S</sub> to '1'.
- 31      – Set PAGECH<sub>S</sub> to the Primary Paging Channel.

- 1       o Set CONFIG\_MSG\_SEQ<sub>s</sub>, SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
2       CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
3       FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
4       GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
5       GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>,  
6       USER\_ZONE\_IDMSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, and  
7       ACC\_MSG\_SEQ<sub>s</sub> to NULL. The mobile station shall keep the parameters  
8       associated with the current overhead messages until they are updated on the  
9       new Paging Channel<sup>14</sup>
- 10      o Tune to the new CDMA Channel.
- 11      • Otherwise, the mobile station shall perform the following actions:  
12      – Set CDMACH<sub>s</sub> to the new CDMA Channel.  
13      – The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a  
14      new Paging Channel number in the range 1 to PAGE\_CHAN<sub>s</sub>, where  
15      PAGE\_CHAN<sub>s</sub> is the value stored for the Paging Channel whose stored  
16      information is current. The mobile station shall store the new Paging Channel  
17      number as PAGECH<sub>s</sub>.  
18      – Tune to the new CDMA Channel and shall begin monitoring the new Paging  
19      Channel.
- 20   If the band class has changed (the computed CDMA band class is different than  
21   CDMABAND<sub>s</sub>), the mobile station shall perform the following actions:  
22      • If BYPASS\_SYS\_DET\_IND<sub>s</sub> is equal to '0' for this CDMA channel, the mobile station  
23      shall perform the following:  
24      – Set NEW\_BAND\_RECORD.NEW\_BAND\_CLASS to the computed band class  
25      – Set NEW\_BAND\_RECORD.NEW\_FREQ to the computed CDMA Channel  
26      – The mobile station shall enter the *System Determination Substate* of the *Mobile*  
27      *Station Initialization State* with a new band indication.  
28      • If BYPASS\_SYS\_DET\_IND<sub>s</sub> is equal to '1' for this CDMA channel, the mobile station  
29      shall perform the following:  
30      – If the stored configuration parameters is not current (see 2.6.2.2) for the  
31      corresponding base station and frequency assignment, the mobile station shall  
32      perform the following actions:  
33      + Set CDMACH<sub>s</sub> to the new CDMA Channel.

---

<sup>14</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).

- 1           + Set REVCDMACH<sub>S</sub> to the Reverse CDMA Channel.
- 2           + Set CDMABAND<sub>S</sub> to the new band class.
- 3           + Set PAGE\_CHAN<sub>S</sub> to '1'.
- 4           + Set PAGECH<sub>S</sub> to the Primary Paging Channel.
- 5           + Set CONFIG\_MSG\_SEQ<sub>S</sub>, SYS\_PAR\_MSG\_SEQ<sub>S</sub>, NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
6           CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
7           FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
8           GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
9           GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>,  
10          USER\_ZONE\_IDMSG\_SEQ<sub>S</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, and  
11          ACC\_MSG\_SEQ<sub>S</sub> to NULL. The mobile station shall keep the parameters  
12          associated with the current overhead messages until they are updated on  
13          the new Paging Channel<sup>15</sup>.
- 14          + Tune to the new CDMA Channel.
- 15          – Otherwise, the mobile station shall perform the following actions:
- 16           + Set CDMACH<sub>S</sub> to the new CDMA Channel.
- 17           + Set CDMABAND<sub>S</sub> to the new band class.
- 18           + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select  
19           a new Paging Channel number in the range 1 to PAGE\_CHAN<sub>S</sub>, where  
20           PAGE\_CHAN<sub>S</sub> is the value stored for the Paging Channel whose stored  
21           information is current. The mobile station shall store the new Paging  
22           Channel number as PAGECH<sub>S</sub>.
- 23          + Tune to the new CDMA Channel and shall begin monitoring the new Paging  
24          Channel.

#### 25   2.6.2.2.23.2 Flex Duplex CDMA Channel List Message on Primary Broadcast Control 26   Channel

27   To determine the CDMA Channel (Frequency Assignment) for its Primary Broadcast  
28   Control Channel, the mobile station shall first select a subset of CDMA channels from the  
29   *Flex Duplex CDMA Channel List Message* that will be used for channel hashing. The  
30   attributes for channel selection are support for that frequency, the band subclass (if  
31   included), RC greater than 2, Quick Paging Channel and transmit diversity. The mobile  
32   station shall first select the entire CDMA channel list for channel hashing. Starting from  
33   an empty list, the mobile station shall then select the first CDMA Channel list as follows:

---

<sup>15</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).

- 1       – For each band class record included in this message, the mobile station shall
- 2       perform the following:
- 3       – If band subclass information is included for this band class record
- 4       (SUBCLASS\_INFO\_INCL<sub>S</sub> = '1'), the mobile station shall add only those channels
- 5       belonging to the band class and band subclasses that are supported by both
- 6       the mobile station and the base station, in the order they appear in the *Flex*
- 7       *Duplex CDMA Channel List Message*<sup>16</sup>.
- 8       – Otherwise (SUBCLASS\_INFO\_INCL<sub>S</sub> = '0' or P\_REV\_IN\_USE<sub>S</sub> is less than 11),
- 9       the mobile station shall add only those channels that it supports for the
- 10       associated band class, in the order they appear in the *Flex Duplex CDMA*
- 11       *Channel List Message*.
- 12       • If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to 11, the mobile station shall sort the
- 13       channels first by the ascending order of band class value as specified in [30], then
- 14       by the ascending order of CDMA\_FREQ within each band class.
- 15       • If TD\_SEL\_INCL<sub>R</sub> is equal to '1', the mobile station shall perform the following:
- 16       – If the mobile station is capable of supporting the transmit diversity mode
- 17       specified by TD\_MODE<sub>S</sub>, the mobile station shall select those CDMA channels
- 18       that have TD\_HASH\_IND<sub>S</sub> set to '1' from the CDMA channel list for the first
- 19       CDMA Channel list while preserving the order.
- 20       – If the mobile station is not capable of supporting the transmit diversity mode
- 21       specified by TD\_MODE<sub>S</sub>, the mobile station shall select those CDMA channels
- 22       that have TD\_HASH\_IND<sub>S</sub> set to '0' from the CDMA channel list for the first
- 23       CDMA Channel list while preserving the order.
- 24       • If TD\_SEL\_INCL<sub>R</sub> is equal to '0', the mobile station shall select the entire list for the
- 25       first CDMA Channel list.
- 26       From this first CDMA Channel list, the mobile station shall select the second CDMA
- 27       Channel list as follows:
- 28       • If RC\_QPCH\_SEL\_INCL<sub>R</sub> is equal to '1' and the mobile station is capable of RC
- 29       greater than 2 or capable of supporting QPCH, the mobile station shall select those
- 30       CDMA channels with RC\_QPCH\_HASH\_IND<sub>S</sub> set to '1' for the second CDMA
- 31       Channel list for CDMA channel hashing while preserving the order. If this list is
- 32       empty, the mobile station shall use the first CDMA Channel list as the second

---

<sup>16</sup> The mobile station will not discard frequencies as long as they belong to a subclass that is both listed in the message and supported by the mobile station. If the base station does not list any subclass, the mobile station assumes that all subclasses are supported by the base station. The subclass to frequency mapping is not provided in the *Extended CDMA Channel List Message*; the mobile station needs to refer to [45] to find the mapping.

1 CDMA Channel list for CDMA channel hashing.

- 2 • Otherwise, the mobile station shall use the first CDMA Channel list as the second  
3 CDMA Channel list for CDMA channel hashing.

4 From this second CDMA Channel list, the mobile station shall select the third CDMA  
5 Channel listsubset as follows:

- 6 • If CDMA\_FREQ\_WEIGHT\_INCL<sub>r</sub> is equal to '0', the mobile station shall set the third  
7 CDMA Channel list to be equal to the second CDMA Channel list  
8 • If CDMA\_FREQ\_WEIGHT\_INCL<sub>r</sub> is equal to '1', starting with an empty third CDMA  
9 Channel list, for each entry "E" in the second CDMA Channel list in the order they  
10 appear, the mobile station shall append N consecutive entries "E" at the end of the  
11 third CDMA Channel, where N is the weight of "E" and equals  
12 CDMA\_FREQ\_WEIGHT<sub>s</sub>+1.

13 The mobile station shall determine the band class for its Primary Broadcast Control  
14 Channel as follows:

- 15 • The mobile station shall generate a CDMA band list as follows. Starting with an  
16 empty CDMA band list, for each channel in the third CDMA Channel list in the  
17 order they appear, the mobile station shall append an entry equal to the band class  
18 of that channel, at the end of the CDMA band list  
19 • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of  
20 the CDMA band list to compute the band class for its Primary Broadcast Control  
21 Channel.

22 After the band class has been selected, the mobile station shall determine the CDMA  
23 Channel (Frequency Assignment) for its Primary Broadcast Control Channel as follows:

- 24 • The mobile station shall eliminate those channels which are not in the computed  
25 band class from the third CDMA Channel list to generate the final CDMA Channel  
26 list.  
27 • If the final CDMA Channel list is empty, the mobile station shall proceed with the  
28 processing of the *Extended CDMA Channel List message*.  
29 • The mobile station shall then use the hash algorithm specified in 2.6.7.1 with the  
30 number of channels in the final CDMA Channel list to determine the CDMA  
31 Channel (Frequency Assignment) for its Primary Broadcast Control Channel.

32 If the CDMA Frequency Assignment has changed but the band class is the same (the  
33 computed CDMA Channel is different from CDMACH<sub>s</sub> but the computed CDMA band class  
34 is CDMABAND<sub>s</sub>), the mobile station shall perform the following:

- 35 • Set CDMACH<sub>s</sub> to the new CDMA Channel.  
36 • Set REVCDMACH<sub>s</sub> to the new Reverse CDMA Channel.

- 1     • Set CONFIG\_MSG\_SEQ<sub>S</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>,  
2       UNI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
3       FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and  
4       PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL. The mobile station  
5       shall keep the parameters associated with the current overhead messages until  
6       they are updated on the new Primary Broadcast Control Channel<sup>17</sup>.
  - 7     • If the mobile station is operating in the Spreading Rate 1:
    - 8       – If the assigned CDMA channel supports transmit diversity, the mobile station  
9         shall set the following fields corresponding to the assigned CDMA channel:
      - 10          + SR1\_TD\_POWER\_LEVEL<sub>S</sub> = TD\_POWER\_LEVEL<sub>R</sub>.
      - 11          + SR1\_TD\_MODE<sub>S</sub> = TD\_MODE<sub>R</sub>.
      - 12          + BRAT<sub>S</sub> = SR1\_BRAT\_TD<sub>S</sub>.
      - 13          + BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_TD<sub>S</sub>.
      - 14          + BCCH<sub>S</sub> = BCCH\_CODE\_CHAN\_TD<sub>S</sub>.
    - 15       – Otherwise, the mobile station shall set the following fields corresponding to the  
16         assigned CDMA channel:
      - 17          + BRAT<sub>S</sub> = SR1\_BRAT\_NON\_TD<sub>S</sub>,
      - 18          + BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_NON\_TD<sub>S</sub>,
      - 19          + BCCH<sub>S</sub> = BCCH\_CODE\_CHAN\_NON\_TD<sub>S</sub>,
  - 20     • Tune to the new CDMA Channel
- 21 If the band class has changed (the computed CDMA band class is different than  
22 CDMABAND<sub>S</sub>), the mobile station shall perform the following actions:
- 23     • If BYPASS\_SYS\_DET\_IND<sub>S</sub> is equal to '0' for this CDMA channel, the mobile station  
24       shall perform the following:
    - 25       – Set NEW\_BAND\_RECORD.NEW\_BAND\_CLASS to the computed band class.
    - 26       – Set NEW\_BAND\_RECORD.NEW\_FREQ to the computed CDMA Channel.
    - 27       – The mobile station shall enter the *System Determination Substate* of the *Mobile*  
28         *Station Initialization State* with a new band indication.
  - 29     • If BYPASS\_SYS\_DET\_IND<sub>S</sub> is equal to '1' for this CDMA channel, the mobile station  
30       shall perform the following:
    - 31       – Set CDMACH<sub>S</sub> to the new CDMA Channel.

---

<sup>17</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).

- 1       – Set REVCDMACH<sub>S</sub> to the new Reverse CDMA Channel.
- 2       – Set CDMABAND<sub>S</sub> to the new band class.
- 3       – Set CONFIG\_MSG\_SEQ<sub>S</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>,
- 4       UNI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,
- 5       FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and
- 6       PRI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL. The mobile
- 7       station shall keep the parameters associated with the current overhead
- 8       messages until they are updated on the new Primary Broadcast Control
- 9       Channel<sup>18</sup>.
- 10      – If the mobile station is operating in the Spreading Rate 1:
  - 11       + If the assigned CDMA channel supports transmit diversity, the mobile
  - 12       station shall set the following fields corresponding to the assigned CDMA
  - 13       channel:
    - 14       o SR1\_TD\_POWER\_LEVEL<sub>S</sub> = TD\_POWER\_LEVEL<sub>R</sub>.
    - 15       o SR1\_TD\_MODE<sub>S</sub> = TD\_MODE<sub>R</sub>.
    - 16       o BRAT<sub>S</sub> = SR1\_BRAT\_TD<sub>S</sub>.
    - 17       o BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_TD<sub>S</sub>.
    - 18       o BCCH<sub>S</sub> = BCCH\_CODE\_CHAN\_TD<sub>S</sub>.
  - 19       – Otherwise, the mobile station shall set the following fields corresponding to the
  - 20       assigned CDMA channel:
    - 21       + BRAT<sub>S</sub> = SR1\_BRAT\_NON\_TD<sub>S</sub>,
    - 22       + BCCH\_CODE\_RATE<sub>S</sub> = SR1\_CRAT\_NON\_TD<sub>S</sub>,
    - 23       + BCCH<sub>S</sub> = BCCH\_CODE\_CHAN\_NON\_TD<sub>S</sub>,
- 24      – Tune to the new CDMA Channel

#### 25   2.6.2.2.24 Alternative Technologies Information Message

26   Whenever a *Alternative Technologies Information Message* is received on the Paging Channel  
 27   or the Primary Broadcast Control Channel, the configuration message sequence number,  
 28   CONFIG\_MSG\_SEQ<sub>R</sub>, shall be compared to that stored in ATIM\_MSG\_SEQ<sub>S</sub>. If the  
 29   comparison results in a match, the mobile station may ignore the message. If the  
 30   comparison results in a mismatch, then the mobile station shall process the remaining  
 31   fields in the message as follows.

---

<sup>18</sup> This is primarily needed when hashing to a band with a different coverage footprint than the current band. The current neighbor list is to be used to search for pilots in the hashed-to band. The search priorities are to be adjusted to take into account the hashed-to frequency (e.g., the pilots in the hashed-to frequency should have the highest priority).

1 The mobile station shall store the following parameters:

- 2 • Configuration message sequence number
- 3 (CONFIG\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>,
- 4 ATIM\_MSG\_SEQ<sub>S</sub> = CONFIG\_MSG\_SEQ<sub>R</sub>)

5 The mobile station shall store all the Radio Interface records contained in the *Alternative*  
6 *Technologies Information Message*.

### 7 2.6.2.3 Mobile Station Page Match Operation

8 The *Mobile Station Page Match Operation* is performed whenever the mobile station receives  
9 a mobile-station-addressed page or a broadcast page. If the mobile station receives a  
10 mobile-station-addressed page that contains the IMSI or TMSI assigned to the mobile  
11 station (see [4]) on the Paging Channel, the mobile station transmits a *Page Response*  
12 *Message* on the Access Channel. If the mobile station receives a mobile-station-addressed  
13 page that contains the IMSI or TMSI assigned to the mobile station (see [4]) on the Forward  
14 Common Control Channel, the mobile station transmits a *Page Response Message* on the  
15 r-csch. If the mobile station is configured to receive broadcast messages and it receives a  
16 *General Page Message* that contains a burst type and broadcast address that the mobile  
17 station has been configured to receive (see [4]) on the Paging Channel, the mobile station  
18 performs the broadcast page procedures as described in 2.6.2.1.1.3.4. If the mobile station  
19 is configured to receive broadcast messages and it receives a *General Page Message* or a  
20 *Universal Page Message* that contains a burst type and broadcast address that the mobile  
21 station has been configured to receive (see [4]) on the Forward Common Control Channel,  
22 the mobile station performs the enhanced broadcast page procedures as described in  
23 2.6.2.1.1.3.6.

24 When the mobile station receives a page message, it shall compare the configuration  
25 message sequence number, CONFIG\_MSG\_SEQ<sub>R</sub>, to CONFIG\_MSG\_SEQ<sub>S</sub>. If the  
26 comparison results in a mismatch, then the mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub>  
27 to CONFIG\_MSG\_SEQ<sub>R</sub>. The mobile station shall also compare the *Access Parameters*  
28 *Message* or the *Enhanced Access Parameters Message* sequence number, ACC\_MSG\_SEQ<sub>R</sub>,  
29 with that stored in ACC\_MSG\_SEQ<sub>S</sub>. If the comparison results in a mismatch, then the  
30 mobile station shall set ACC\_MSG\_SEQ<sub>S</sub> to NULL (see 2.6.2.2). The mobile station shall  
31 set CURR\_ACC\_MSG\_SEQ to ACC\_MSG\_SEQ<sub>S</sub>.

32 The mobile station shall process each record for which it declares a page match (see [4]).

33 If the mobile station receives a broadcast page that contains a burst type and broadcast  
34 address that the mobile station has been configured to receive on the Paging Channel, the  
35 mobile station should perform the broadcast page procedures described in 2.6.2.1.1.3.4. If  
36 the mobile station receives a broadcast page that contains a burst type and broadcast  
37 address that the mobile station has been configured to receive on the Forward Common  
38 Control Channel, the mobile station should perform the enhanced broadcast page  
39 procedures as described in 2.6.2.1.1.3.6.

40 If a page match is declared, the mobile station shall perform the following:



- 1       • The mobile station shall enter the *Update Overhead Information Substate* of the
- 2       *System Access State* (see 2.6.3.2) with a page response indication within  $T_{33m}$
- 3       seconds after the page message is received.

4   If a page match is declared and the mobile station determines that it should be monitoring

5   a neighboring base station, the mobile station may perform an access entry handoff to the

6   neighboring base station, if all of the following conditions hold:

- 7       • The neighboring base station is listed in NGHBR\_REC.
- 8       • The ACCESS\_ENTRY\_HO field of the NGHBR\_REC corresponding to the
- 9       neighboring base station is equal to '1'.
- 10      • If the mobile station performs an access entry handoff on the Access Channel, none
- 11      of CONFIG\_MSG\_SEQ<sub>s</sub>, SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 12      EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 13      CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,
- 14      FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, and
- 15      PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> are equal to NULL.
- 16      • If the mobile station performs an access entry handoff on the Enhanced Access
- 17      Channel, none of CONFIG\_MSG\_SEQ<sub>s</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,
- 18      MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>, UNI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 19      EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,
- 20      USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, and PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> are equal to NULL.

21   Otherwise, the mobile station shall not perform an access entry handoff to the neighboring

22   base station.

23   The mobile station need not perform an access entry handoff to a base station operating on

24   another frequency.

25   If the mobile station performs an access entry handoff, it shall follow the procedures

26   specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the

27   *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2).

28   If PACA is enabled, and if the mobile station performs an access entry handoff, the mobile

29   station shall respond to the mobile-station-addressed page first and shall then re-originate

30   the PACA call on the new base station.

#### 31   2.6.2.4 Mobile Station Order and Message Processing Operation

32   During the *Mobile Station Order and Message Processing Operation*, the mobile station

33   processes all messages except overhead messages (see 2.6.2.2) and page messages (see

34   2.6.2.3).

35   The mobile station shall set CURR\_ACC\_MSG\_SEQ to NULL.

36   The mobile station shall perform address matching as described in [4].

37   If Layer 3 receives a message that requires acknowledgment, the mobile station shall enter

38   the *Update Overhead Information Substate* of the *System Access State* with an

39   order/message response indication within  $T_{33m}$  seconds, unless otherwise specified for a

40   particular message.

If Layer 3 receives a message that does not require acknowledgment, the mobile station shall transmit a response only if it is required by the message or order. If a response is required, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T<sub>33m</sub> seconds, unless otherwise specified for a particular message.

If the mobile station is to enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication and the mobile station determines that it should be monitoring a neighboring base station, the mobile station may perform an access entry handoff to the neighboring base station, if all of the following conditions hold:

- The neighboring base station is listed in NGHBR\_REC.
- The ACCESS\_ENTRY\_HO field of the NGHBR\_REC corresponding to the neighboring base station is equal to '1'.
- ACC\_ENT\_HO\_ORDER<sub>s</sub> is equal to '1'.
- If the mobile station performs an access entry handoff on the Access Channel, none of CONFIG\_MSG\_SEQ<sub>s</sub>, SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, and EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub> are equal to NULL.
- If the mobile station performs an access entry handoff on the Enhanced Access Channel, none of CONFIG\_MSG\_SEQ<sub>s</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>s</sub>, UNI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, and PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub> are equal to NULL.

Otherwise, the mobile station shall not perform an access entry handoff to the neighboring base station.

The mobile station need not perform an access entry handoff to a base station operating on another frequency.

If the mobile station performs an access entry handoff, it shall follow the procedures specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2). If PACA is enabled and the mobile station performs an access entry handoff, the mobile station shall respond to the order/message first and then re-originate the PACA call in the new base station.

The following directed messages and orders can be received. If any field value of the message or order is outside its permissible range, the mobile station shall send a *Mobile Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

1. *Abbreviated Alert Order*: The mobile station may alert the user.
2. *Audit Order*

- 1       3. *Authentication Challenge Message*: The mobile station shall process the message  
2       and shall respond with an *Authentication Challenge Response Message* as specified  
3       in 2.3.12.1.4, regardless of the value of  $AUTH_S$ . The mobile station shall enter the  
4       *Update Overhead Information Substate* of the *System Access State* with an  
5       order/message response indication within  $T_{32m}$  seconds.
- 6       4. *Authentication Request Message*: The mobile station shall process the message  
7       and shall respond as specified in 2.3.12.5.2. The mobile station shall enter the  
8       *Update Overhead Information Substate* of the *System Access State* with an  
9       order/message response indication within  $T_{32m}$  seconds.
- 10      5. *Base Station Challenge Confirmation Order*: The mobile station shall process the  
11      message and shall respond with an *SSD Update Confirmation Order* or *SSD Update*  
12      *Rejection Order* as specified in 2.3.12.1.5. The mobile station shall enter the  
13      *Update Overhead Information Substate* of the *System Access State* with an  
14      order/message response indication within  $T_{32m}$  seconds.
- 15      6. *Base Station Reject Order*: The mobile station shall perform the procedures as  
16      specified in 2.6.11.5.
- 17      7. *Channel Assignment Message*: The mobile station shall process the message as  
18      follows:
  - 19       • If  $ASSIGN\_MODE_R$  equals '001', the mobile station shall perform the following  
20       actions:
    - 21       - If the message requires acknowledgment, the mobile station shall wait until  
22       Layer 3 receives an indication from Layer 2 that the acknowledgment to the  
23       message has been sent and acknowledged.
    - 24       - If a CDMA channel ( $CDMA\_FREQ$ ) is specified in the assignment, the mobile  
25       station shall set  $CDMACH_S = CDMA\_FREQ_R$ , tune to the new Frequency  
26       Assignment, and measure the strength of each pilot listed in the assignment  
27       using the Neighbor Set search procedures specified in 2.6.6.2.1 and  
28       2.6.6.2.2.
    - 29       - The mobile station shall set  $CONFIG\_MSG\_SEQ_S$  and  $ACC\_MSG\_SEQ_S$  to  
30       NULL (see 2.6.2.2) and shall set  $PILOT\_PN_S$  to the pilot PN sequence offset of  
31       the strongest pilot in the list ( $PILOT\_PN_R$ ).

- 1        - If the mobile station has not stored configuration parameters for the Primary  
2        Paging Channel of the new base station, or if the stored information is not  
3        current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
4        NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHRBR\_LST\_MSG\_SEQ<sub>s</sub>,  
5        GEN\_NGHRBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
6        EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
7        EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>,  
8        PRI\_NGHRBR\_LST\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and  
9        EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL. The mobile station shall set  
10        PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the Primary Paging Channel. The  
11        mobile station shall then begin monitoring the Primary Paging Channel of  
12        the selected base station.
- 13       • If ASSIGN\_MODE<sub>r</sub> equals '101' and FREQ\_INCL<sub>r</sub> equals '0', the mobile station  
14       shall perform the following actions:

  - 15       - If the message requires acknowledgment, the mobile station shall wait until  
16       Layer 3 receives an indication from Layer 2 that the acknowledgment to the  
17       message has been sent and acknowledged.
  - 18       - The mobile station shall measure the strength of each pilot listed in the  
19       assignment using the Neighbor Set search procedures specified in 2.6.6.2.1  
20       and 2.6.6.2.2, set PILOT\_PN<sub>s</sub> to the pilot PN sequence offset of the strongest  
21       pilot in the list (PILOT\_PN<sub>r</sub>), and set CONFIG\_MSG\_SEQ<sub>s</sub> and  
22       ACC\_MSG\_SEQ<sub>s</sub> to NULL (see 2.6.2.2).
  - 23       - If the mobile station has not stored configuration parameters for the Primary  
24       Paging Channel of the new base station, or if the stored information is not  
25       current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
26       NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHRBR\_LST\_MSG\_SEQ<sub>s</sub>,  
27       GEN\_NGHRBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
28       EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
29       EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>,  
30       PRI\_NGHRBR\_LST\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and  
31       EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL. The mobile station shall set  
32       PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the Primary Paging Channel. The  
33       mobile station shall then begin monitoring the Primary Paging Channel of  
34       the selected base station.
- 35       • If ASSIGN\_MODE<sub>r</sub> equals '101', FREQ\_INCL<sub>r</sub> equals '1', and the band class is  
36       not supported by the mobile station, the mobile station shall enter the *Update*  
37       *Overhead Information Substate* of the *System Access State* with an  
38       order/message response indication within T<sub>33m</sub> seconds and send a *Mobile*  
39       *Station Reject Order* with ORDQ field set to '00000110' (capability not supported  
40       by the mobile station).
- 41       • If ASSIGN\_MODE<sub>r</sub> equals '101', FREQ\_INCL<sub>r</sub> equals '1', and the band class is  
42       supported by the mobile station, the mobile station shall perform the following  
43       actions:

- 1           - If the message requires acknowledgment, the mobile station shall wait until
- 2           Layer 3 receives an indication from Layer 2 that the acknowledgment to the
- 3           message has been sent and acknowledged.
- 4           - The mobile station shall set  $CDMACH_S = CDMA\_FREQ_R$  and  $CDMABAND_S =$
- 5            $BAND\_CLASS_R$ . Then the mobile station shall tune to the new Frequency
- 6           Assignment, measure the strength of each pilot listed in the assignment
- 7           using the Neighbor Set search procedures specified in 2.6.6.2.1 and
- 8           2.6.6.2.2, set  $PILOT\_PN_S$  to the pilot PN sequence offset of the strongest
- 9           pilot in the list ( $PILOT\_PN_R$ ), and set  $CONFIG\_MSG\_SEQ_S$  and
- 10           $ACC\_MSG\_SEQ_S$  to NULL (see 2.6.2.2).
- 11          - If the mobile station has not stored configuration parameters for the Primary
- 12          Paging Channel of the new base station, or if the stored information is not
- 13          current (see 2.6.2.2), the mobile station shall set  $SYS\_PAR\_MSG\_SEQ_S$ ,
- 14           $NGHBR\_LST\_MSG\_SEQ_S$ ,  $EXT\_NGHBR\_LST\_MSG\_SEQ_S$ ,
- 15           $GEN\_NGHBR\_LST\_MSG\_SEQ_S$ ,  $CHAN\_LST\_MSG\_SEQ_S$ ,
- 16           $EXT\_CHAN\_LST\_MSG\_SEQ_S$ ,  $FD\_CHAN\_LST\_MSG\_SEQ_S$ ,
- 17           $EXT\_SYS\_PAR\_MSG\_SEQ_S$ ,  $USER\_ZONE\_ID\_MSG\_SEQ_S$ ,
- 18           $PRI\_NGHBR\_LST\_MSG\_SEQ_S$ ,  $GLOB\_SERV\_REDIR\_MSG\_SEQ_S$ , and
- 19           $EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ_S$  to NULL. The mobile station shall set
- 20           $PAGE\_CHAN_S$  to '1' and  $PAGECH_S$  to the Primary Paging Channel. The
- 21          mobile station shall then begin monitoring the Primary Paging Channel of
- 22          the selected base station.
- 23          • If  $ASSIGN\_MODE_R$  is not equal to '001' or '101', the mobile station shall enter
- 24          the *Update Overhead Information Substate* of the *System Access State* with an
- 25          order/message response indication within  $T_{33m}$  seconds and send a *Mobile*
- 26          *Station Reject Order* with  $ORDQ$  field set to '00000010' (message not accepted in
- 27          this state).
- 28      8. *Data Burst Message*
- 29      9. *Extended Channel Assignment Message*: The mobile station shall process the
- 30      message as follows:
- 31          • If  $ASSIGN\_MODE_R$  equals '001',  $FREQ\_INCL_R$  equals '0', the mobile station shall
- 32          perform the following actions:
- 33              - If the message requires acknowledgment, the mobile station shall wait until
- 34              Layer 3 receives an indication from Layer 2 that the acknowledgment to the
- 35              message has been sent and acknowledged.
- 36              - The mobile station shall measure the strength of each pilot listed in the
- 37              assignment using the Neighbor Set search procedures specified in 2.6.6.2.1
- 38              and 2.6.6.2.2 set  $PILOT\_PN_S$  to the pilot PN sequence offset of the strongest
- 39              pilot in the list ( $PILOT\_PN_R$ ), and set  $CONFIG\_MSG\_SEQ_S$  and
- 40               $ACC\_MSG\_SEQ_S$  to NULL (see 2.6.2.2).

- 1           - If the mobile station has not stored configuration parameters for the Primary  
2           Paging Channel of the new base station, or if the stored information is not  
3           current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
4           NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHRBR\_LST\_MSG\_SEQ<sub>S</sub>,  
5           GEN\_NGHRBR\_LST\_MSG\_SEQ<sub>S</sub>, CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
6           EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
7           EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>,  
8           PRI\_NGHRBR\_LST\_MSG\_SEQ<sub>S</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, and  
9           EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to NULL. The mobile station shall set  
10          PAGE\_CHAN<sub>S</sub> to '1' and PAGECH<sub>S</sub> to the Primary Paging Channel. If the  
11          mobile station was monitoring Forward Common Control Channel, the  
12          mobile station shall set the PRAT<sub>S</sub> to '00'. The mobile station shall then  
13          begin monitoring the Primary Paging Channel of the selected base station.
- 14          • If ASSIGN\_MODE<sub>R</sub> equals '001', FREQ\_INCL<sub>R</sub> equals '1', and the band class is  
15          not supported by the mobile station, the mobile station shall enter the *Update*  
16          *Overhead Information Substate* of the *System Access State* with an  
17          order/message response indication within T<sub>33m</sub> seconds and send a *Mobile*  
18          *Station Reject Order* with ORDQ field set to '00000110' (capability not supported  
19          by the mobile station).
- 20          • If ASSIGN\_MODE<sub>R</sub> equals '001', FREQ\_INCL<sub>R</sub> equals '1', and the band class is  
21          supported by the mobile station, the mobile station shall perform the following  
22          actions:
- 23               - If the message requires acknowledgment, the mobile station shall wait until  
24               Layer 3 receives an indication from Layer 2 that the acknowledgment to the  
25               message has been sent and acknowledged.
- 26               - The mobile station shall set CDMACH<sub>S</sub> = CDMA\_FREQ<sub>R</sub> and CDMABAND<sub>S</sub> =  
27               BAND\_CLASS<sub>R</sub>. The mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub> and  
28               ACC\_MSG\_SEQ<sub>S</sub> to NULL (see 2.6.2.2). Then the mobile station shall tune  
29               to the new Frequency Assignment, measure the strength of each pilot listed  
30               in the assignment using the Neighbor Set search procedures specified in  
31               2.6.6.2.1 and 2.6.6.2.2, and set PILOT\_PN<sub>S</sub> to the pilot PN sequence offset of  
32               the strongest pilot in the list (PILOT\_PN<sub>R</sub>).

- 1           - If the mobile station has not stored configuration parameters for the Primary  
2           Paging Channel of the new base station, or if the stored information is not  
3           current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>s</sub>,  
4           NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,  
5           GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
6           EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,  
7           EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>,  
8           PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and  
9           EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL. The mobile station shall set  
10          PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the Primary Paging Channel. If the  
11          mobile station was monitoring Forward Common Control Channel, the  
12          mobile station shall set the PRAT<sub>s</sub> to '00'. The mobile station shall then  
13          begin monitoring the Primary Paging Channel of the selected base station.
- 14       • If ASSIGN\_MODE<sub>r</sub> equals '100' or '101', the mobile station shall perform the  
15       following actions:
- 16           - If DIRECT\_CH\_ASSIGN\_IND<sub>r</sub> is included and is set to '1', the mobile station  
17           shall process the message as defined below in the order specified:
- 18               + The mobile station shall set CONFIG\_MSG\_SEQ<sub>s</sub> to  
19               CONFIG\_MSG\_SEQ<sub>r</sub>.
- 20               + If RESPOND\_IND<sub>r</sub> is equal to '1', the mobile station shall process the  
21               message as specified in section 2.6.3.3<sup>19</sup>; otherwise, the mobile station  
22               shall enter the *Update Overhead Information Substate* of the *System*  
23               *Access State* with a direct channel assignment update overhead  
24               indication within T<sub>33m</sub> seconds.
- 25           - Otherwise, the mobile station shall enter the *Update Overhead Information*  
26           *Substate* of the *System Access State* with an order/message response  
27           indication within T<sub>33m</sub> seconds and send a *Mobile Station Reject Order* with  
28           ORDQ field set to '00000010' (message not accepted in this state).
- 29       • If ASSIGN\_MODE<sub>r</sub> is not equal to '001', '100' or '101', the mobile station shall  
30       enter the *Update Overhead Information Substate* of the *System Access State* with  
31       an order/message response indication within T<sub>33m</sub> seconds and send a *Mobile*  
32       *Station Reject Order* with ORDQ field set to '00000010' (message not accepted in  
33       this state).
- 34       10. *Feature Notification Message*
- 35       11. *Local Control Order*
- 36       12. *Lock Until Power-Cycled Order*: The mobile station shall record the reason for the

---

<sup>19</sup> The mobile station processes the message as defined in section 2.6.3.3, but no requirements other than the *Extended Channel Assignment Message* processing requirements in section 2.6.3.3 are applicable.

1        *Lock Until Power-Cycled Order* in the mobile station's semi-permanent memory  
 2        (LCKRSN\_P<sub>S-p</sub> equals the least significant four bits of ORDQ<sub>r</sub>). After a mobile  
 3        station receives this order, it shall not enter the *System Access State* (see 2.6.3)  
 4        until it has received an *Unlock Order* or until after power-cycling the mobile station  
 5        (i.e., after the next mobile station power-up). This requirement shall take  
 6        precedence over any other mobile station requirement specifying entry to the  
 7        *System Access State*. The mobile station should notify the user of the locked  
 8        condition. The mobile station shall exit the *Mobile Station Idle State* and enter the  
 9        *System Determination Substate* of the *Mobile Station Initialization State* with a lock  
 10        indication (see 2.6.1.1). This allows the mobile station to operate in an alternate  
 11        operating mode while locked.

12        13. *Maintenance Required Order*: The mobile station shall record the reason for the  
 13        *Maintenance Required Order* in the mobile station's semi-permanent memory  
 14        (MAINTRSN<sub>S-p</sub> equals the least significant four bits of ORDQ<sub>r</sub>). If the mobile  
 15        station has previously received a *Lock Until Power-Cycled Order*, it shall remain in  
 16        the locked condition; otherwise the mobile station shall remain in the unlocked  
 17        condition. The mobile station should notify the user of the maintenance required  
 18        condition.

19        14. *PACA Message*: If P\_REV\_IN\_USE<sub>S</sub> is less than or equal to four, and if the mobile  
 20        station does not support PACA capability, the mobile station shall send a *Mobile*  
 21        *Station Reject Order* with the ORDQ field set to '00000110' (message requires a  
 22        capability that is not supported by the mobile station); otherwise, the mobile  
 23        station shall process the message as follows:

- 24        • If PACA<sub>S</sub> is equal to disabled, the mobile station shall enter the *Update*  
 25        *Overhead Information Substate* of the *System Access State* with an  
 26        order/message response indication within T<sub>33m</sub> seconds and shall send a  
 27        *Mobile Station Reject Order* with the ORDQ field set to '00000010' (message not  
 28        accepted in this state).
- 29        • If PACA<sub>S</sub> is equal to enabled, the mobile station shall perform the following:
  - 30        – If the purpose of the message is to respond to an *Origination Message*  
 31        (PURPOSE<sub>r</sub> is equal to '0000'), the mobile station shall enter the *Update*  
 32        *Overhead Information Substate* of the *System Access State* with an  
 33        order/message response indication within T<sub>33m</sub> seconds and send a *Mobile*  
 34        *Station Reject Order* with the ORDQ field set to '00000010' (message not  
 35        accepted in this state).
  - 36        – If the purpose of the message is to provide the queue position of the PACA  
 37        call (PURPOSE<sub>r</sub> is equal to '0001'), the mobile station shall set the PACA  
 38        state timer to the duration shown in Table 3.7.2.3.2.20-2, corresponding to  
 39        the value of PACA\_TIMEOUT<sub>S</sub>, should indicate to the user that the PACA  
 40        call is still queued, and should indicate the current queue position (Q\_POS<sub>r</sub>)  
 41        of the call.



- 1           – If the purpose of the message is to instruct the mobile station to re-originate  
2           the PACA call (PURPOSE<sub>r</sub> is equal to '0010'), the mobile station shall set the  
3           PACA state timer to the duration shown in Table 3.7.2.3.2.20-2  
4           corresponding to the value of PACA\_TIMEOUT<sub>s</sub>, and the mobile station shall  
5           enter the *Update Overhead Information Substate* of the *System Access State*  
6           (see 2.6.3) with a PACA response indication within T<sub>33m</sub> seconds to re-  
7           originate the PACA call.
- 8           – If the purpose of the message is to cancel the PACA call (PURPOSE<sub>r</sub> is equal  
9           to '0011'), the mobile station shall set PACA<sub>s</sub> to disabled and PACA\_CANCEL  
10          to '0', shall disable the PACA state timer, and should indicate to the user  
11          that the PACA call has been canceled.
- 12       15. *Registration Accepted Order*: The mobile station shall perform the procedures as  
13       specified in 2.6.11.1.
- 14       16. *Registration Rejected Order*: This order indicates that normal service is not  
15       available on this system. The mobile station shall disable the full-TMSI timer. If  
16       the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile  
17       station shall set all the bits of the TMSI\_CODE<sub>s-p</sub> to '1'. The mobile station shall  
18       enter the *System Determination Substate* of the *Mobile Station Initialization State*  
19       with a registration rejected indication (see 2.6.1.1).
- 20       17. *Registration Request Order*: The mobile station shall process the message and  
21       perform registration procedures as specified in 2.6.5.5.2.3.
- 22       18. *Security Mode Command Message*: The mobile station shall perform the  
23       procedures as specified in 2.6.11.4.
- 24       19. *Service Redirection Message*: The mobile station shall process the message as  
25       follows:
- 26       • If the mobile station is directed to an unsupported operation mode or band  
27       class, the mobile station shall respond with a *Mobile Station Reject Order* with  
28       ORDQ equal to '00000110' (message requires a capability that is not supported  
29       by the mobile station).
  - 30       • If DELETE\_TMSI<sub>r</sub> is equal to '1', the mobile station shall set all the bits of  
31       TMSI\_CODE<sub>s-p</sub> to '1'. The mobile station shall disable the full-TMSI timer.
  - 32       • The mobile station shall set RETURN\_IF\_FAIL<sub>s</sub> = RETURN\_IF\_FAIL<sub>r</sub>.
  - 33       • If RECORD\_TYPE<sub>r</sub> is equal to '00000000', the mobile station shall enter the  
34       *System Determination Substate* of the *Mobile Station Initialization State* with an  
35       NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the  
36       redirection record received in the message as REDIRECT\_REC<sub>s</sub> and shall enter  
37       the *System Determination Substate* of the *Mobile Station Initialization State* with  
38       a redirection indication (see 2.6.1.1).
- 39       20. *Retry Order*: The mobile station shall process the message as follows:

- 1       • If  $\text{RETRY\_TYPE}_R$  is equal to '000', the mobile station shall set
- 2        $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  to 0, where  $\text{RETRY\_TYPE}$  is equal to '001', '010',
- 3       '011', '100', or '101'.
- 4       • If  $\text{RETRY\_TYPE}_R$  is equal to '001', , '100', or '101', the mobile station shall
- 5       perform the following:
- 6       – If  $\text{RETRY\_DELAY}_R$  is equal to '00000000', then the mobile station shall set
- 7        $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}_R]$  to 0.
- 8       – If  $\text{RETRY\_DELAY}_R$  is not equal to '00000000', the mobile station shall set
- 9        $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}_R]$  as follows:
- 10       + If the most significant bit of the  $\text{RETRY\_DELAY}_R$  is '0', set
- 11        $\text{RETRY\_DELAY\_UNIT}_S$  to 1000ms. If the most significant bit of the
- 12        $\text{RETRY\_DELAY}_R$  is '1', set  $\text{RETRY\_DELAY\_UNIT}_S$  to 60000ms.
- 13       + The mobile station shall set  $\text{RETRY\_DELAY\_VALUE}_S$  to the seven least
- 14       significant bits of  $\text{RETRY\_DELAY}_R$ .
- 15       + The mobile station shall store the next system time 80 ms boundary +
- 16        $\text{RETRY\_DELAY\_VALUE}_S \times \text{RETRY\_DELAY\_UNIT}_S$  ms as
- 17        $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}_R]$ .

- 18       21. *Slotted Mode Order*: After receiving this order, the mobile station shall set
- 19        $\text{SLOTTED}_S$  to YES. The mobile station shall disable the  $T_{\text{MS\_Slotted}}$  timer.
- 20       22. *SSD Update Message*: The mobile station shall process the message and shall
- 21       respond with a *Base Station Challenge Order* as specified in 2.3.12.1.5. The
- 22       mobile station shall enter the *Update Overhead Information Substate* of the *System*
- 23       *Access State* with an order/message response indication within  $T_{32m}$  seconds.
- 24       23. *Status Request Message*: The mobile station shall process the message. If
- 25        $\text{P\_REV\_IN\_USE}_S$  is less than or equal to three, the mobile station shall respond
- 26       with a *Status Response Message*. If  $\text{P\_REV\_IN\_USE}_S$  is greater than three, the
- 27       mobile station shall respond with an *Extended Status Response Message*. The
- 28       mobile station shall enter the *Update Overhead Information Substate* of the *System*
- 29       *Access State* with an order/message response indication within  $T_{33m}$  seconds. If
- 30       the message does not specify any qualification information ( $\text{QUAL\_INFO\_TYPE}_R$  is
- 31       equal to '00000000'), the mobile station shall include the requested information
- 32       records in the response. If the message specifies a band class ( $\text{QUAL\_INFO\_TYPE}_R$
- 33       is equal to '00000001'), the mobile station shall only include the requested
- 34       information records for the specified band class ( $\text{BAND\_CLASS}_R$ ) in the response.
- 35       If the message specifies a band class and an operating mode ( $\text{QUAL\_INFO\_TYPE}_R$
- 36       is equal to '00000010'), the mobile station shall only include the requested
- 37       information records for the specified band class ( $\text{BAND\_CLASS}_R$ ) and operating
- 38       mode ( $\text{OP\_MODE}_R$ ) in the response. If the message specifies a band class or a
- 39       band class and an operating mode which is not supported by the mobile station,
- 40       the mobile station shall send a *Mobile Station Reject Order* with  $\text{ORDQ}$  set to
- 41       '00000110' (message requires a capability that is not supported by the mobile
- 42       station). If the response to this message exceeds the allowable length, the mobile

station shall send a *Mobile Station Reject Order* with ORDQ set to '00001000' (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001' (information record is not supported for the specified band class and operating mode).

24. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code as follows:

- The mobile station shall store the length of the TMSI zone field by setting ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> to TMSI\_ZONE\_LEN<sub>r</sub>,
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> least significant octets of ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> to TMSI\_ZONE<sub>r</sub>, and
- The mobile station shall store the TMSI code by setting TMSI\_CODE<sub>s-p</sub> to TMSI\_CODE<sub>r</sub>.

The mobile station shall set the TMSI expiration time by setting TMSI\_EXP\_TIME<sub>s-p</sub> to TMSI\_EXP\_TIME<sub>r</sub>. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within T<sub>56m</sub> seconds.

25. *Unlock Order*: After receiving this order, the mobile station is no longer locked. The mobile station should notify the user that the locked condition has been removed. The mobile station shall enter the *System Determination Substate of the Mobile Station Initialization State* with an *unlock indication* (see 2.6.1.1).

26. *User Zone Reject Message*

27. *Fast Call Setup Order*:

- If ORDQ<sub>r</sub> is equal to '00000000', the mobile station shall process the message and respond with a *Fast Call Setup Order* as specified in 2.6.12.1. The mobile station shall enter the *Update Overhead Information Substate of the System Access State* with an order/message response indication within T<sub>32m</sub> seconds.
- If ORDQ<sub>r</sub> is equal to '00000001', the mobile station shall process the message as specified in 2.6.12.1.

28. *General Extension Message*: The mobile station shall process this message as specified in section 2.6.18.

The mobile station shall ignore all other messages and orders.

#### 2.6.2.5 Mobile Station Origination Operation

The *Mobile Station Origination Operation* is performed when the mobile station is directed by the user to initiate a call, or if the *Mobile Station Idle State* is entered with NDSS\_ORIG<sub>s</sub> enabled.

1 If the mobile station is directed by the user to initiate a call, the mobile station shall  
2 perform the following:

- 3 • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and  
4 PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the  
5 user that the PACA call has been canceled.
- 6 • The mobile station shall set CURR\_ACC\_MSG\_SEQ to NULL.

7 The mobile station shall enter the *Update Overhead Information Substate* of the *System*  
8 *Access State* (see 2.6.3) with an origination indication within T<sub>33m</sub> seconds.

#### 9 2.6.2.6 Mobile Station Message Transmission Operation

10 Support of this operation is optional. If the mobile station supports the *Mobile Station*  
11 *Message Transmission Operation*, the operation is performed when the user directs the  
12 mobile station to transmit a *Data Burst Message*, or when the mobile station detects a  
13 change in hook status since the last time when the mobile station sent hook status  
14 information and the mobile station supports the *Device Information Message* on the r-csch,  
15 or when the mobile station determines that a *Radio Environment Message* is to be  
16 transmitted on the r-csch, or when the mobile station requests to operate in reduced slot  
17 cycle mode.

18 If the mobile station supports this operation, the mobile station shall set  
19 CURR\_ACC\_MSG\_SEQ to NULL.

20 If the mobile station supports this operation and the operation is performed when the user  
21 directs the mobile station to transmit a *Data Burst Message*, the mobile station shall enter  
22 the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a  
23 message transmission indication within T<sub>33m</sub> seconds.

24 If the mobile station supports this operation and the operation is performed when the  
25 mobile station detects a change in hook status since the last time when the mobile station  
26 sent hook status information, the mobile station shall enter the *Update Overhead*  
27 *Information Substate* of the *System Access State* (see 2.6.3.2) with a hook status indication  
28 within T<sub>33m</sub> seconds.

29 If the mobile station supports this operation and the operation is performed when the  
30 mobile station determines that a *Radio Environment Message* is to be transmitted on the r-  
31 csch, the mobile station shall perform the following:

- 32 • If RER\_MODE\_ENABLED is set to YES, the mobile station shall enter the *Update*  
33 *Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a radio  
34 environment report indication within T<sub>33m</sub> seconds.
- 35 • Otherwise, if TKZ\_MODE\_ENABLED is set to YES, the mobile station shall enter  
36 the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2)  
37 with a tracking zone indication within T<sub>33m</sub> seconds.

38 If the mobile station supports this operation and the operation is performed when the  
39 mobile station requests to operate in reduced slot cycle mode, the mobile station shall  
40 enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2)

1 with a fast call setup indication within  $T_{33m}$  seconds.

## 2 2.6.2.7 Mobile Station Power-Down Operation

3 The *Mobile Station Power-Down Operation* is performed when the user directs the mobile  
4 station to power down.

5 The mobile station shall update stored parameters and perform other registration  
6 procedures as specified in 2.6.5.5.2.4.

7 If no power-down registration is performed (see 2.6.5.5.2.4), the mobile station may power  
8 down.

## 9 2.6.2.8 Mobile Station PACA Cancel Operation

10 The *Mobile Station PACA Cancel Operation* is performed when the user directs the mobile  
11 station to cancel a PACA call.

12 If  $PACA_S$  is equal to enabled, the mobile station shall perform the following:

- 13 • The mobile station shall set  $PACA_S$  to disabled.
- 14 • The mobile station shall set  $PACA\_CANCEL$  to '0', if  $PACA\_CANCEL$  is equal to '1'.
- 15 • The mobile station shall disable the PACA state timer.
- 16 • The mobile station should indicate to the user that the PACA call has been  
17 canceled.
- 18 • The mobile station shall set  $CURR\_ACC\_MSG\_SEQ$  to NULL.
- 19 • The mobile station shall enter the *Update Overhead Information Substate* of the  
20 *System Access State* (see 2.6.3) with a PACA cancel indication within  $T_{33m}$   
21 seconds.

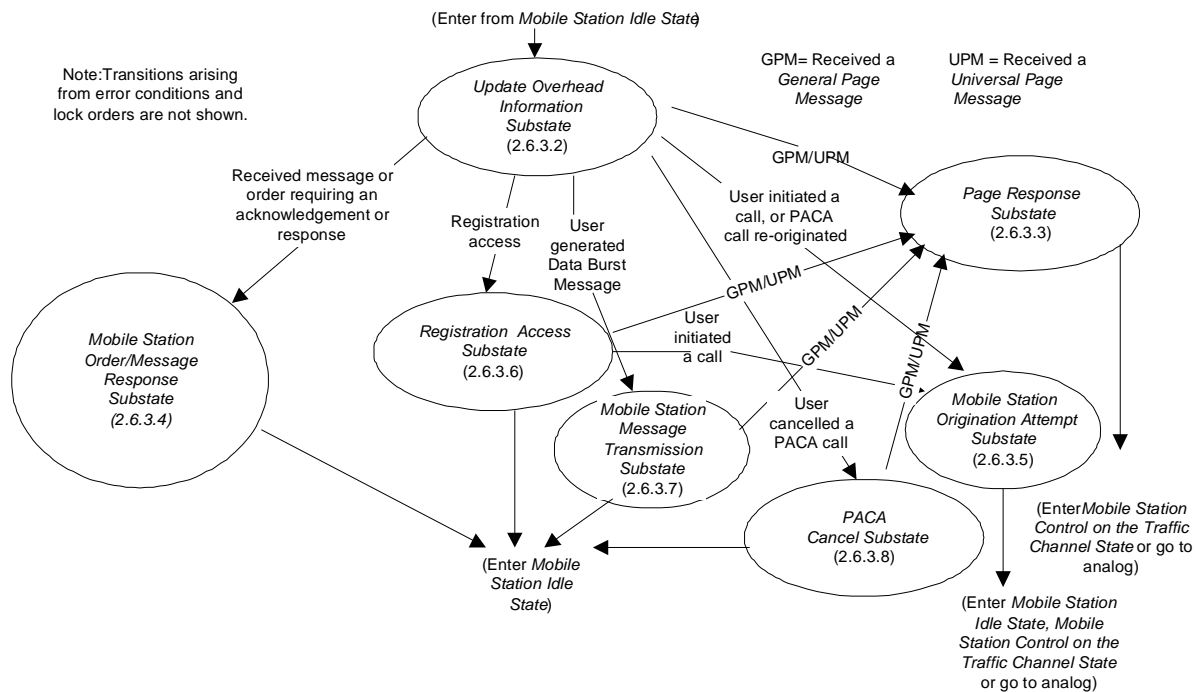
## 22 2.6.3 System Access State

23 In this state, the mobile station sends messages to the base station on the r-csch and  
24 receives messages from the base station on the f-csch.

25 As illustrated in Figure 2.6.3-1, the *System Access State* consists of the following  
26 substates:

- 27 • *Update Overhead Information Substate* - In this substate, if the base station  
28 supports the Primary Broadcast Control Channel for Spreading Rate 1 or if both the  
29 base station and mobile station supports the Primary Broadcast Control Channel  
30 for Spreading Rate 3 and if the protocol revision level in use is greater than six, the  
31 mobile station will monitor the Primary Broadcast Control Channel until it has  
32 received a current set of overhead messages; otherwise, the mobile station will  
33 monitor the Paging Channel until it has a current set of overhead messages.
- 34 • *Mobile Station Origination Attempt Substate* - In this substate, the mobile station  
35 sends an *Origination Message*, *Call Recovery Request Message* or a *Reconnect*  
36 *Message* (with  $ORIG\_IND$  set to '1') to the base station.

- *Page Response Substate* - In this substate, the mobile station sends a *Page Response Message* or a *Reconnect Message* (with ORIG\_IND set to '0') to the base station.
- *Mobile Station Order/Message Response Substate* - In this substate, the mobile station sends a response to a message received from the base station.
- *Registration Access Substate* - In this substate, the mobile station sends a *Registration Message* to the base station.
- *Mobile Station Message Transmission Substate* - In this substate, the mobile station sends a *Data Burst Message* or a *Device Information Message* to the base station.
- *PACA Cancel Substate* - In this substate, the mobile station sends a *PACA Cancel Message* to the base station.



**Figure 2.6.3-1. System Access State**

### 2.6.3.1 Access Procedures

#### 2.6.3.1.1 Access Attempts

If the mobile station monitors the Paging Channel, the mobile station transmits on the Access Channel using a random access procedure. Many parameters of the random access procedure are supplied by the base station in the *Access Parameters Message*. The random access procedure is described in [4] and [3].

If the mobile station monitors the Forward Common Control Channel/ Primary Broadcast Control Channel, the mobile station transmits on the Enhanced Access Channel using a random access procedure. Many parameters of the random access procedure are supplied by the base station in the *Enhanced Access Parameters Message*.

If Layer 3 receives an indication from Layer 2 that the system access is denied, the mobile station shall update its registration variables using  $SID_S$ ,  $NID_S$ ,  $REG\_ZONE_S$ , and  $ZONE\_TIMER_S$  that were stored from the first base station to which the mobile station sent an Access Probe, as specified in 2.6.5.5.3.2, and enter the *System Determination Substate* of the *Mobile Station Initialization State* with an access denied indication (see 2.6.1.1).

If Layer 3 receives an indication from Layer 2 that the system is lost, the mobile station shall update its registration variables using  $SID_S$ ,  $NID_S$ ,  $REG\_ZONE_S$ , and  $ZONE\_TIMER_S$  that were stored from the first base station to which the mobile station transmitted an Access Probe, as specified in 2.6.5.5.3.2 and enter the *System Determination Substate* of the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1)

#### 2.6.3.1.2 Reserved

#### 2.6.3.1.3 Handoffs

While in the *System Access State*, the mobile station shall continue its pilot search (see 2.6.3.1.3.1), and may perform access handoffs (see 2.6.3.1.3.2) and/or access probe handoffs (see 2.6.3.1.3.3).

If the mobile station performs access handoffs and/or access probe handoffs, the mobile station shall maintain the following variables:

- $CURRENT\_ACTIVE\_PILOT_S$
- $PREVIOUS\_ACTIVE\_PILOT_S$
- $FIRST\_ACTIVE\_PILOT_S$

Upon entering the *System Access State* the mobile station shall set  $CURRENT\_ACTIVE\_PILOT_S$ ,  $PREVIOUS\_ACTIVE\_PILOT_S$  and  $FIRST\_ACTIVE\_PILOT_S$  to NULL. Prior to starting an access attempt, the mobile station shall set  $CURRENT\_ACTIVE\_PILOT_S$  and  $PREVIOUS\_ACTIVE\_PILOT_S$  to NULL. When the mobile station selects a base station for transmission of an access probe, the mobile station shall proceed as follows:

- If  $CURRENT\_ACTIVE\_PILOT_S$  is not the same as the pilot of the selected base station, the mobile station shall set  $PREVIOUS\_ACTIVE\_PILOT_S$  to the value of  $CURRENT\_ACTIVE\_PILOT_S$ .
- The mobile station shall set  $CURRENT\_ACTIVE\_PILOT_S$  to the identity of the pilot corresponding to the selected base station.
- If  $FIRST\_ACTIVE\_PILOT_S$  is NULL, the mobile station shall set  $FIRST\_ACTIVE\_PILOT_S$  to the value of  $CURRENT\_ACTIVE\_PILOT_S$ .

Before the mobile station transmits an access probe to a new base station on the Access Channel, the mobile station shall update parameters based on the *System Parameters Message*, the *Access Parameters Message* and the *Extended System Parameters Message* on the associated new Paging Channel and process parameters from the messages (see 2.6.2.2.1, 2.6.2.2.2, and 2.6.2.2.5).

Before the mobile station transmits an access probe to a new base station on the Enhanced Access Channel, the mobile station shall update parameters based on the *ANSI-41 System Parameters Message*, the *Enhanced Access Parameters Message*, and the *MC-RR Parameters Message* on the associated new Primary Broadcast Control Channel and process parameters from the messages (see 2.6.2.2.13, 2.6.2.2.14, and 2.6.2.2.15).

If the mobile station monitors the Paging Channel, the mobile station shall update parameters based on the *Neighbor List Message*, the *Extended Neighbor List Message*, or the *General Neighbor List Message* on the associated new Paging Channel and process parameters from the message (see 2.6.2.2.3, 2.6.2.2.7, and 2.6.2.2.8).

If the mobile station monitors the Forward Common Control Channel/ Primary Broadcast Control Channel, the mobile station shall update parameters based on the *Universal Neighbor List Message* on the associated new Primary Broadcast Control Channel and process parameters from the message (see 2.6.2.2.17).

If the mobile station receives the *User Zone Identification Message* or the *Private Neighbor List Message*, the mobile station shall update parameters based on these messages on the associated new Paging Channel or Primary Broadcast Control Channel and process parameters from the messages (see 2.6.2.2.9 and 2.6.2.2.10). If the mobile station receives a *Global Service Redirection Message* (see 2.6.2.2.6) which directs the mobile station away from the new base station, the mobile station shall not access the new base station. If the mobile station receives an *Extended Global Service Redirection Message* (see 2.6.2.2.11) which directs the mobile station away from the new base station, the mobile station shall not access the new base station. The mobile station shall process these messages only once after each access handoff.

#### 2.6.3.1.3.1 Pilot Search

The following sets of pilot offsets are defined for a mobile station in the *System Access State*. Each pilot offset is a member of only one set.

- Active Set: The pilot offset of the Forward CDMA Channel whose Paging Channel or Forward Common Control Channel/ Primary Broadcast Control Channel is being monitored.
- Neighbor Set: The pilots that are not currently in the Active Set and are likely candidates for access handoff or access probe handoff. The members of the Neighbor Set are specified in the *Neighbor List Message*, the *Extended Neighbor List Message*, and the *General Neighbor List Message on the Paging Channel*. The members of the Neighbor Set are specified in the *Universal Neighbor List Message* on the Primary Broadcast Control Channel.



- 1       • Remaining Set: The set of all possible pilot offsets in the current system (integer  
2       multiples of  $\text{PILOT\_INC}_S$ ) on the current CDMA Frequency Assignment, excluding  
3       the pilots in the Neighbor Set and the Active Set.

#### 4   2.6.3.1.3.2 Access Handoff

5   The mobile station is permitted to perform an access handoff to use the Paging Channel  
6   with the best pilot strength and an associated Access Channel. The mobile station is  
7   permitted to perform an access handoff to use the Forward Common Control Channel with  
8   the best pilot strength and an associated Enhanced Access Channel. The mobile station  
9   is permitted to perform an access handoff when waiting for a response from the base  
10   station or before sending a response to the base station. An access handoff is permitted  
11   after an access attempt while the mobile station is in the *Page Response Substate* or the  
12   *Mobile Station Origination Attempt Substate*.

13   When the mobile station declares a loss of the Paging Channel or the Forward Common  
14   Control Channel while waiting for a response from the base station in the *Page Response*  
15   *Substate* or in the *Mobile Station Origination Attempt Substate*, the mobile station shall  
16   perform an access handoff, if all of the following conditions hold:

- 17       • The pilot corresponding to the new base station is in the list  $\text{ACCESS\_HO\_LIST}$ ,
- 18       •  $\text{ACCESS\_HO}_S$  is equal to '1', and
- 19       • The mobile station is not already in the process of performing an access attempt.

20   When the mobile station declares a loss of the Paging Channel or the Forward Common  
21   Control Channel, after receiving a message but before responding to that message while in  
22   the *Page Response Substate* or in the *Mobile Station Origination Attempt Substate*, the  
23   mobile station shall perform an access handoff if the following conditions hold:

- 24       • The pilot corresponding to the new base station is in the list  $\text{ACCESS\_HO\_LIST}$ ,
- 25       •  $\text{ACCESS\_HO}_S$  is equal to '1',
- 26       •  $\text{ACCESS\_HO\_MSG\_RSP}_S$  is equal to '1', and
- 27       • The mobile station is not already in the process of performing an access attempt.

28   When the mobile station declares an insufficiency of the Paging Channel<sup>20</sup> or the Forward  
29   Common Control Channel, while waiting for a response from the base station in the *Page*  
30   *Response Substate* or in the *Mobile Station Origination Attempt Substate*, the mobile station  
31   may perform an access handoff if all of the following conditions hold:

- 32       • The pilot corresponding to the new base station is in the list  $\text{ACCESS\_HO\_LIST}$ ,
- 33       •  $\text{ACCESS\_HO}_S$  is equal to '1', and
- 34       • The mobile station is not already in the process of performing an access attempt.

---

<sup>20</sup> Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

When the mobile station declares an insufficiency of the Paging Channel<sup>21</sup> or the Forward Common Control Channel, after receiving a message but before responding to that message while in the *Page Response Substate* or in the *Mobile Station Origination Attempt Substate*, the mobile station may perform an access handoff if all of the following conditions hold:

- The pilot corresponding to the new base station is in the list ACCESS\_HO\_LIST,
- ACCESS\_HO<sub>S</sub> is equal to '1',
- ACCESS\_HO\_MSG\_RSP<sub>S</sub> is equal to '1', and
- The mobile station is not already in the process of performing an access attempt.

If ACCESS\_PROBE\_HO<sub>S</sub> is equal to '0' and ACCESS\_HO<sub>S</sub> is equal to '1', and the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel during an access attempt, after sending at least one complete access probe, the mobile station may monitor other Paging Channels or the Forward Common Control Channels which are in ACCESS\_HO\_LIST for T<sub>42m</sub> seconds after the loss of the Paging Channel or the Forward Common Control Channel on which the access attempt was made<sup>22</sup>.

#### 2.6.3.1.3.3 Access Probe Handoff

The mobile station is permitted to perform an access probe handoff when the mobile station is in the *Page Response Substate* or the *Mobile Station Origination Attempt Substate*.

The mobile station may perform an access probe handoff during an access attempt to a pilot in ACCESS\_HO\_LIST when the message being sent is the *Origination Message*, *Reconnect Message*, *Call Recovery Request Message* or the *Page Response Message*, if all of the following conditions hold:

- ACCESS\_PROBE\_HO<sub>S</sub> is equal to '1',
- The mobile station is in the *Page Response Substate* or the *Mobile Station Origination Attempt Substate*, and
- The mobile station has performed fewer than (MAX\_NUM\_PROBE\_HO<sub>S</sub> + 1) access probe handoffs during the current access attempt.

The mobile station may also perform an access probe handoff during an access attempt to a pilot in ACCESS\_HO\_LIST when the message being sent is a message other than the *Origination Message*, *Reconnect Message*, *Call Recovery Request Message* or the *Page Response Message*, if all of the preceding conditions hold and ACC\_PROBE\_HO\_OTHER\_MSG<sub>S</sub> is equal to '1'.

---

<sup>21</sup> Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

<sup>22</sup> The mobile station would be waiting for a response to the message transmitted in the access probe.

1 The mobile station may also perform an access probe handoff during an access attempt to  
 2 a pilot not in ACCESS\_HO\_LIST when the message being sent is the *Origination Message*,  
 3 *Reconnect Message*, *Call Recovery Request Message* or the *Page Response Message*, if all of  
 4 the following conditions hold:

- 5 • ACC\_HO\_LIST\_UPD<sub>S</sub> is equal to '1',
- 6 • ACCESS\_PROBE\_HO<sub>S</sub> is equal to '1',
- 7 • The new pilot is stronger than any pilot in ACCESS\_HO\_LIST,
- 8 • The new pilot has the corresponding ACCESS\_HO\_ALLOWED field in the  
 9 NGHBR\_REC equal to '1',
- 10 • Inclusion of the new pilot in ACCESS\_HO\_LIST does not cause the Access Channel  
 11 or Enhanced Access Channel message to exceed the maximum capsule size,
- 12 • Inclusion of the new pilot in ACCESS\_HO\_LIST does not cause the number of  
 13 members to exceed N<sub>13m</sub>,
- 14 • The mobile station is in the *Page Response Substate* or the *Mobile Station*  
 15 *Origination Attempt Substate*, and
- 16 • The mobile station has performed fewer than (MAX\_NUM\_PROBE\_HO<sub>S</sub> + 1) access  
 17 probe handoffs during the current access attempt.

18 The mobile station may also perform an access probe handoff during an access attempt to  
 19 a pilot not in ACCESS\_HO\_LIST when the message being sent is a message other than the  
 20 *Origination Message*, *Reconnect Message*, *Call Recovery Request Message* or the *Page*  
 21 *Response Message*, if all of the preceding conditions hold and  
 22 ACC\_PROBE\_HO\_OTHER\_MSG<sub>S</sub> is equal to '1'.

23 If the above conditions are met, the mobile station may perform an access probe handoff  
 24 when the mobile station declares a loss of the Paging Channel or Forward Common  
 25 Control Channel (see 2.6.3.1.8); the mobile station may also perform an access probe  
 26 handoff after getting an indication that the TA timer expired (see [4]) and the mobile  
 27 station declares an insufficiency of the Paging Channel<sup>23</sup> or the Forward Common Control  
 28 Channel.

29 If the mobile station performs an access probe handoff, the mobile station shall suspend  
 30 the access attempt on the old pilot and shall restart the access attempt on the new pilot  
 31 (i.e. starting with the first probe of the first probe sequence of the access sub-attempt), as  
 32 specified in [4]. The mobile station shall record the identity of the pilots to which access  
 33 probes have been transmitted within the current access attempt.

34 The mobile station shall not reset its access probe handoff count until the access attempt  
 35 ends.

---

<sup>23</sup> Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to cancel the access attempt if the length of the message to be sent exceeds MAX\_CAP\_SIZE of the new base station. The mobile station may monitor other Paging Channels or Forward Common Control Channels which are in ACCESS\_HO\_LIST for  $T_{42m}$  seconds after aborting the access attempt<sup>24</sup>.

#### 2.6.3.1.4 System Access State Exit Procedures

Upon exiting the *System Access State*, the mobile station shall direct Layer 2 to cancel (see [4]) any access attempt in progress and discard the associated message. The mobile station shall then disable the *System Access State* timer.

#### 2.6.3.1.5 Reserved

#### 2.6.3.1.6 Full-TMSI Timer

Whenever the mobile station sends its full TMSI, the mobile station enables a timer, called the full-TMSI timer. If the full-TMSI timer expires, the mobile station deletes the TMSI by setting all of the bits in the TMSI\_CODE<sub>s-p</sub> field to '1'.

The mobile station shall maintain the full-TMSI timer. The mobile station shall provide a means for enabling or disabling the full-TMSI timer.

If the mobile station sends a message with an address including the ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> and the full-TMSI timer is disabled, the mobile station shall enable the full-TMSI timer with a duration equal to  $T_{69m} + 2.56 \times 2^i$  seconds where  $i$  is equal to SLOT\_CYCLE\_INDEX<sub>s</sub>.

#### 2.6.3.1.7 Monitoring Pilots

The mobile station assists the base station in the Traffic Channel assignment process by monitoring and reporting (see [4]) the pilot strength of the pilot in the mobile station's Paging Channel or Forward Common Control Channel Active Set (see 2.6.3.1.3.1). The mobile station can also monitor and report (see [4]) other pilots on the same frequency; in such cases, the mobile station shall create ACCESS\_HO\_LIST and OTHER\_REPORTED\_LIST and shall monitor the pilots on those lists, if any.

For each monitored pilot, the mobile station shall record the pilot PN phase and the pilot strength PS, using the most recent measurements from the searcher element (see [2]), as they become available. The mobile station shall identify each pilot through its pilot PN phase (the phase of the pilot PN sequence, in units of one chip, relative to the zero offset pilot PN sequence of the pilot (see 2.6.6.2.4)). The mobile station shall determine the pilot strength, PS, as specified in 2.6.6.2.2.

---

<sup>24</sup> The mobile station would be waiting for a response to the message transmitted in the access probe.

#### 2.6.3.1.7.1 Generation of the Initial Access Handoff List

ACCESS\_HO\_LIST is created immediately before transmitting the first access probe after entering the *System Access State*. When it is created, ACCESS\_HO\_LIST is defined as a set of at most  $N_{13m}$  pilots, having the greatest pilot strength in comparison with other qualifying pilots and for which all of the following apply:

- The strength of each member exceeds  $T_{ADD_S}$ .
- Each member, other than the Active Set pilot, has the corresponding ACCESS\_HO\_ALLOWED field in the NGHBR\_REC equal to '1'.
- The Active Set pilot that the mobile station monitors when the mobile station enters the *System Access State* is a member.
- All members can be contained in the Access Channel or Enhanced Access Channel message without exceeding the maximum capsule size.

#### 2.6.3.1.7.2 Update of the Access Handoff List

When the mobile station performs an access probe handoff to a pilot which was not previously included in ACCESS\_HO\_LIST (see 2.6.3.1.3.3), it adds the pilot to ACCESS\_HO\_LIST.

If ACC\_HO\_LIST\_UPD<sub>S</sub> is equal to '1', the mobile station can update ACCESS\_HO\_LIST, as follows:

- The mobile station can add one or more new pilots other than the Active Set pilot to ACCESS\_HO\_LIST before transmitting an access probe.
- The mobile station can also drop from ACCESS\_HO\_LIST pilots to which access probes have not been transmitted since entering the *System Access State* and whose strength have fallen below  $T_{ADD_S}$ .

When it is updated before transmitting a subsequent access probe, ACCESS\_HO\_LIST is defined as a set of at most  $N_{13m}$  pilots, having the greatest pilot strength in comparison with other qualifying pilots and for which all of the following apply:

- The strength of each member to which access probes have not been transmitted exceeds  $T_{ADD_S}$ .
- Each member other than the pilot to which the first access probe in the *System Access State* was transmitted has the corresponding ACCESS\_HO\_ALLOWED field in the NGHBR\_REC equal to '1'.
- The Active Set pilot to which the next access probe is to be transmitted is a member.
- All pilots to which access probes have been transmitted since entering the *System Access State* are members.
- All members can be contained in the Access Channel or Enhanced Access Channel message without exceeding the maximum capsule size.

#### 2.6.3.1.7.3 Generation of the Other Reported List

OTHER\_REPORTED\_LIST (specified by NUM\_ADD\_PILOTS and NUM\_AUX\_PILOTS, see [4]) is defined as a set of no more than  $N_{13m}$  minus the number of pilots in ACCESS\_HO\_LIST pilots, having the greatest pilot strength in comparison with other qualifying pilots and for which all of the following apply:

- The strength of each member exceeds  $T_{ADD_s}$ .
- No member is included in ACCESS\_HO\_LIST.
- All members can be contained in the Access Channel or Enhanced Access Channel message without exceeding the maximum capsule size.

#### 2.6.3.1.7.4 Update of OTHER\_REPORTED\_LIST

Before transmitting each access probe, the mobile station shall generate OTHER\_REPORTED\_LIST according to section 2.6.3.1.7.3, using the most recent pilot strength information available from its searcher element (see [2]). If the mobile station updates ACCESS\_HO\_LIST before transmitting an access probe, it shall update OTHER\_REPORTED\_LIST after updating ACCESS\_HO\_LIST.

#### 2.6.3.1.8 Paging Channel and Forward Common Control Channel/ Primary Broadcast Control Channel Monitoring

When in the *System Access State*, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel/ Primary Broadcast Control Channel at all times.

The mobile station shall set a timer for  $T_{72m}$  seconds, when it begins to monitor the Paging Channel or the Forward Common Control Channel/ Primary Broadcast Control Channel and whenever it gets an indication that a valid message was received on the Paging Channel or the Forward Common Control Channel/ Primary Broadcast Control Channel, whether addressed to the mobile station or not (see [4]).

If the  $T_{72m}$  timer expires:

- The mobile station shall first finish transmitting the access probe in progress, if any.
- If by declaring a loss of the Paging Channel or the Forward Common Control Channel, the eligibility requirements for performing access handoff are met (see 2.6.3.1.3.2), then the mobile station shall declare a loss of the Paging Channel or the Forward Common Control Channel, and perform an access handoff. If by declaring a loss of the Paging Channel or the Forward Common Control Channel, the eligibility requirements for performing access probe handoff are met (see 2.6.3.1.3.3), then the mobile station may declare a loss of the Paging Channel or the Forward Common Control Channel, and perform an access probe handoff. If the mobile station performs an access handoff or an access probe handoff, the mobile station restarts the Paging Channel or the Forward Common Control Channel/ Primary Broadcast Control Channel monitoring procedure for the new base station.

- 1       • If an access attempt was in progress when the timer expired and that access  
2       attempt had already been suspended and resumed previously (see below), the  
3       mobile station shall declare a loss of the Paging Channel<sup>25</sup> or the Forward Common  
4       Control Channel and shall disable its transmitter.
- 5       • If an access attempt was in progress when the timer expired and that access  
6       attempt had not been suspended and resumed before and the mobile station does  
7       not perform access probe handoff, the mobile station shall declare a temporary loss  
8       of the Paging Channel or the Forward Common Control Channel, shall direct Layer  
9       2 to suspend the access attempt (see [4]), and shall perform the following:
  - 10      – The mobile station shall set the timer to (T<sub>40m</sub>-T<sub>72m</sub>) seconds.
  - 11      – If the mobile station receives an indication that a valid message on the Paging  
12      Channel or the Forward Common Control Channel, whether addressed to the  
13      mobile station or not, was received (see [4]) prior to the expiration of the (T<sub>40m</sub>-  
14      T<sub>72m</sub>) timer, the mobile station shall re-enable the transmitter, shall direct  
15      Layer 2 to resume operation from the beginning of the interrupted access probe  
16      sequence of the access sub-attempt (see [4]), and shall transmit the first probe  
17      of the new access probe sequence immediately after re-enabling the transmitter.
  - 18      – If the (T<sub>40m</sub>-T<sub>72m</sub>) timer expires, the mobile station shall direct Layer 2 to  
19      cancel any access attempt (see [4]) and shall declare a loss of the Paging  
20      Channel or the Forward Common Control Channel.
- 21       • If an access attempt was not in progress when the timer expired and the mobile  
22       station does not perform access handoff, the mobile station shall perform the  
23       following:
  - 24      – The mobile station shall set the timer to (T<sub>40m</sub>-T<sub>72m</sub>) seconds.
  - 25      – If the (T<sub>40m</sub>-T<sub>72m</sub>) timer expires, the mobile station shall declare a loss of the  
26      Paging Channel or the Forward Common Control Channel/ Primary Broadcast  
27      Control Channel.

#### 28   2.6.3.2 Update Overhead Information Substate

29   In this substate, if the base station supports the Primary Broadcast Control Channel for  
30   Spreading Rate 1, or if both the mobile station and base station support Spreading Rate 3  
31   on the common channels, then the mobile station shall monitor the Primary Broadcast  
32   Control Channel until it has received the current configuration messages; otherwise, the  
33   mobile station shall monitor the Paging Channel until it has received the current  
34   configuration messages. The mobile station compares sequence numbers to determine  
35   whether all of the configuration messages are up-to-date. To make sure it has the latest  
36   access parameters, the mobile station receives at least one message containing the

---

<sup>25</sup> Requirements for processing the loss of Paging Channel are given separately for each substate of the *System Access State*, in the sections describing the substates.

ACC\_MSG\_SEQ field (except in case where the mobile station enters this substate with a page response indication, since the initiating page contains ACC\_MSG\_SEQ), and waits, if necessary, for an *Access Parameters Message* or an *Enhanced Access Parameters Message*. In addition, if the mobile station is monitoring the Primary Broadcast Control Channel and SENDING\_RAND<sub>s</sub> is equal to '1', then it shall also wait for an *ANSI-41 RAND Message*.

Upon entering the *Update Overhead Information Substate*, the mobile station shall set the *System Access State* timer to a value of T<sub>41m</sub> seconds. The mobile station shall set PAGED to NO.

If the *System Access State* timer expires while in this substate, the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

If the mobile station declares a loss of the Paging Channel or the Primary Broadcast Control Channel (see 2.6.3.1.8), the mobile station shall perform the following:

- If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- The mobile station shall declare an access attempt failure and update its registration variables as specified in 2.6.5.5.3.2.
- The mobile station shall enter the *Mobile Station Idle State*.

If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA\_CANCEL to '1' when the user directs the mobile station to cancel a PACA call.

If the mobile station receives any of the following messages, it shall process the message as follows:

1. *System Parameters Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.1).
2. *Access Parameters Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.2).
3. *Neighbor List Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.3).
4. *CDMA Channel List Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.4).
5. *Extended System Parameters Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.5).
6. *Global Service Redirection Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.6).
7. *Extended Neighbor List Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.7).
8. *General Neighbor List Message*: The mobile station shall process the parameters from the message (see 2.6.2.2.8).



- 1       9. *Lock Until Power-Cycled Order*: The mobile station shall record the reason for the  
2       *Lock Until Power-Cycled Order* in the mobile station's semi-permanent memory  
3       (LCKRSN\_P<sub>S-P</sub> equals the least-significant four bits of ORDQ<sub>R</sub>). The mobile station  
4       should notify the user of the locked condition. The mobile station shall then enter  
5       the *System Determination Substate* of the *Mobile Station Initialization State* with a  
6       lock indication (see 2.6.1.1), and shall not enter the *System Access State* again  
7       until after the next mobile station power-up or until it has received an *Unlock*  
8       *Order*. This requirement shall take precedence over any other mobile station  
9       requirement specifying entry to the *System Access State*.
- 10      10. *General Page Message* or *Universal Page Message*: If CURR\_ACC\_MSG\_SEQ is  
11      equal to NULL, the mobile station shall set CURR\_ACC\_MSG\_SEQ to  
12      ACC\_MSG\_SEQ<sub>R</sub>. The mobile station shall compare CONFIG\_MSG\_SEQ<sub>S</sub> to  
13      CONFIG\_MSG\_SEQ<sub>R</sub>. If the comparison results in a mismatch, the mobile station  
14      shall set CONFIG\_MSG\_SEQ<sub>S</sub> to CONFIG\_MSG\_SEQ<sub>R</sub>. The mobile station may  
15      ignore the rest of the message. If this substate was not entered with an origination  
16      indication, page response indication, direct channel assignment update overhead  
17      indication, direct channel assignment respond indication, or direct channel  
18      assignment failure indication, the mobile station may also determine whether  
19      there is a page match. If the mobile station attempts to determine whether there is  
20      a page match, it shall use the procedure as defined in 2.6.2.3. If a match is  
21      declared, the mobile station shall set PAGED to YES.
- 22      11. *User Zone Identification Message*: The mobile station shall process the parameters  
23      from the message (see 2.6.2.2.9).
- 24      12. *Private Neighbor List Message*: The mobile station shall process the parameters  
25      from the message (see 2.6.2.2.10).
- 26      13. *Extended Global Service Redirection Message*: The mobile station shall process the  
27      parameters from the message (see 2.6.2.2.11).
- 28      14. *Extended CDMA Channel List Message*: The mobile station shall process the  
29      parameters from the message (see 2.6.2.2.12).
- 30      15. *ANSI-41 System Parameters Message*: The mobile station shall process the  
31      parameters from the message (see 2.6.2.2.13).
- 32      16. *MC-RR Parameters Message*: The mobile station shall process the parameters from  
33      the message (see 2.6.2.2.14).
- 34      17. *Enhanced Access Parameters Message*: The mobile station shall process the  
35      parameters from the message (see 2.6.2.2.15).
- 36      18. *ANSI-41 RAND Message*: The mobile station shall process the parameters from the  
37      message (see 2.6.2.2.16).
- 38      19. *Universal Neighbor List Message*: The mobile station shall process the parameters  
39      from the message (see 2.6.2.2.17).
- 40      20. *Extended Channel Assignment Message*: If this substate was entered with an  
41      origination indication, or a direct channel assignment update overhead indication,

or a direct channel assignment respond indication, or a direct channel assignment failure indication, or if the `DIRECT_CH_ASSIGN_INDr` is not included, or the `DIRECT_CH_ASSIGN_INDr` is included and is set to '0', the mobile station shall ignore this message. Otherwise, the mobile station shall process the message as follows:

- If `RESPOND_INDr` is equal to '0', the mobile station shall perform the following in the order specified:
  - The mobile station shall set `CONFIG_MSG_SEQs` to `CONFIG_MSG_SEQr`.
  - The mobile station shall wait till stored configuration parameters are current (see 2.6.2.2).
  - Once the stored configuration parameters are current, the mobile station shall disable the System Access State timer and process the message as specified in section 2.6.3.3.
- If `RESPOND_INDr` is equal to '1', the mobile station shall perform the following in the order specified:
  - The mobile station shall set `CONFIG_MSG_SEQs` to `CONFIG_MSG_SEQr`.
  - When all of the following conditions are met:
    - + the stored configuration parameters are current (see 2.6.2.2)
    - + `CURR_ACC_MSG_SEQs` and `ACC_MSG_SEQs` are equal and are not NULL, and
    - + if the mobile station is monitoring the Primary Broadcast Control Channel and `SENDING_RANDs` is equal to '1', the *ANSI-41 RAND Message* has been received,
  - the mobile station shall disable the System Access State timer and process the message as specified in section 2.6.3.3.

21. *General Extension Message*: The mobile station shall process this message as specified in section 2.6.18.

If the mobile station receives a message which is not included in the above list, the mobile station shall ignore the message.

If this substate was entered with a direct channel assignment update overhead indication, the mobile station shall perform the following in the order specified:

- The mobile station shall wait till the stored configuration parameters are current (see 2.6.2.2).
- Once the stored configuration parameters are current, the mobile station shall perform the following:
  - The mobile station shall disable the System Access State timer.
  - The mobile station shall process the *Extended Channel Assignment Message* received in *Mobile Station Idle State* as specified in section 2.6.3.3.

1 When all of the following conditions are met:

- 2 • The stored configuration parameters are current (see 2.6.2.2)
- 3 • CURR\_ACC\_MSG\_SEQ<sub>s</sub> and ACC\_MSG\_SEQ<sub>s</sub> are equal and are not NULL, and
- 4 • If the mobile station is monitoring the Primary Broadcast Control Channel and
- 5 SENDING\_RAND<sub>s</sub> is equal to '1', the *ANSI-41 RAND Message* has been received,

6 then the mobile station shall disable the System Access State timer and shall perform one  
7 of the following:

- 8 • If PAGED is equal to YES, the mobile station shall determine whether the message  
9 resulting in the page match was received on the current Paging Channel or Forward  
10 Common Control Channel. If the message was received on the current Paging  
11 Channel or Forward Common Control Channel, the mobile station shall enter the  
12 *Page Response Substate*; otherwise, the mobile station shall enter the *Mobile*  
13 *Station Idle State*.
- 14 • If this substate was entered with a page response indication, direct channel  
15 assignment respond indication, or direct channel assignment failure indication,  
16 and the mobile station has not performed an access entry handoff, the mobile  
17 station shall determine whether the message resulting in the page response was  
18 received on the current Paging Channel or Forward Common Control Channel. If  
19 the message was received on the current Paging Channel or Forward Common  
20 Control Channel, the mobile station shall enter the *Page Response Substate*;  
21 otherwise, the mobile station shall enter the *Mobile Station Idle State* with the  
22 corresponding indication.
- 23 • If this substate was entered with a page response indication, direct channel  
24 assignment respond indication, or direct channel assignment failure indication,  
25 and the mobile station has performed an access entry handoff, the mobile station  
26 shall enter the *Page Response Substate* with the corresponding indication.
- 27 • If this substate was entered with a page response retransmission indication, the  
28 mobile station shall enter the *Page Response Substate*.
- 29 • If this substate was entered with an origination indication, the mobile station shall  
30 enter the *Mobile Station Origination Attempt Substate* with an origination indication.
- 31 • If this substate was entered with a PACA response indication, the mobile station  
32 shall enter the *Mobile Station Origination Attempt Substate* with a PACA response  
33 indication.
- 34 • If this substate was entered with an order/message response indication and the  
35 mobile station has not performed an access entry handoff, the mobile station shall  
36 determine whether the message resulting in the response was received on the  
37 current Paging Channel or Forward Common Control Channel. If the message was  
38 received on the current Paging Channel or Forward Common Control Channel, the  
39 mobile station shall enter the *Mobile Station Order/Message Response Substate*;  
40 otherwise, the mobile station shall discard the response and enter the *Mobile*  
41 *Station Idle State*.

- 1 • If this substate was entered with an order/message response indication and the  
2 mobile station has performed an access entry handoff, the mobile station shall  
3 enter the *Mobile Station Order/Message Response Substate*.
- 4 • If this substate was entered with a registration indication, the mobile station shall  
5 enter the *Registration Access Substate*.
- 6 • If this substate was entered with a message transmission indication, the mobile  
7 station shall enter the *Mobile Station Message Transmission Substate* with a  
8 message transmission indication.
- 9 • If this substate was entered with a hook status indication, the mobile station shall  
10 enter the *Mobile Station Message Transmission Substate* with a hook status  
11 indication.
- 12 • If this substate was entered with a PACA cancel indication, the mobile station shall  
13 enter the *PACA Cancel Substate*.
- 14 • If this substate was entered with a radio environment report indication, the mobile  
15 station shall enter the *Mobile Station Message Transmission Substate* with a radio  
16 environment report indication.
- 17 • If this substate was entered with a tracking zone indication, the mobile station  
18 shall enter the *Mobile Station Message Transmission Substate* with a tracking zone  
19 indication.
- 20 • If this substate was entered with a fast call setup indication, the mobile station  
21 shall enter the *Mobile Station Message Transmission Substate* with a fast call setup  
22 indication.

### 23 2.6.3.3 Page Response Substate

24 In this substate, the mobile station sends a *Page Response Message* or a *Reconnect*  
25 *Message* in response to a mobile-station-addressed page or direct channel assignment  
26 from a base station. If the mobile station sends a *Reconnect Message*, it shall set the  
27 ORIG\_IND field of the message to '0'.

28 If directed by the user to transmit a message, the mobile station may perform either of the  
29 following:

- 30 • The mobile station may transmit a *Data Burst Message* to the base station in this  
31 substate if all of the following conditions are true:
  - 32 – The mobile station has received confirmation of delivery of the *Page Response*  
33 *Message* or a *Reconnect Message*, and
  - 34 – ACCT is not enabled for the service option number associated with the *Data*  
35 *Burst Message* as follows:
    - 36 + The service option number associated with the *Data Burst Message* is not  
37 equal to any ACCT\_SO entry in ACCT\_SO\_LIST, and
    - 38 + The service option group number of the service option associated with the  
39 *Data Burst Message* is not equal to any ACCT\_SO\_GRP entry in

1 ACCT\_SO\_GRP\_LIST.

2 • If the mobile station sends a *Reconnect Message* in assured mode in this substate,  
 3 the mobile station may include a Short Data Burst (see [30]) in the *Reconnect*  
 4 *Message* by setting the SDB\_INCL field to '1', if all of the following conditions are  
 5 true:

6 – SDB\_SUPPORTED<sub>s</sub> and SDB\_IN\_RCNM\_IND<sub>s</sub> are equal to '1', and

7 – ACCT is not enabled for the service option number associated with the Short  
 8 Data Burst as follows:

9 + The service option number associated with the Short Data Burst is not  
 10 equal to any ACCT\_SO entry in ACCT\_SO\_LIST, and

11 + The service option group number of the service option associated with the  
 12 Short Data Burst is not equal to any ACCT\_SO\_GRP entry in  
 13 ACCT\_SO\_GRP\_LIST.

14 The mobile station shall not send the *Reconnect Message* if RECONNECT\_MSG\_IND<sub>s</sub>  
 15 equals '0' or if this message is not being sent to reconnect a dormant packet data service  
 16 instance.

17 If a base station responds to the *Page Response Message* or the *Reconnect Message* with  
 18 an authentication request, the mobile station responds in this substate.

19 If a message received from the base station requires a Layer 2 acknowledgment and does  
 20 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is  
 21 outstanding (see [4]).

22 If a message received from the base station requires a Layer 2 acknowledgment and also a  
 23 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

24 When transmitting a response to a message received from the base station, Layer 3 shall  
 25 indicate to Layer 2 that the type of the message is a response (see [4]).

26 When transmitting an autonomous message (i.e., a message that is not sent as a response  
 27 to a message received from the base station) other than the *Data Burst Message*, Layer 3  
 28 shall indicate to Layer 2 that the type of the message is a request other than a registration  
 29 request or a message transmission request (see [4]).

30 When transmitting an autonomous *Data Burst Message*, Layer 3 shall indicate to Layer 2  
 31 that the type of the message is a message transmission request (see [4]).

32 If the mobile station has a stored service configuration (that is, parameters conveyed by  
 33 both the Service Configuration information record and the Non-negotiable Service  
 34 Configuration information record) and corresponding SYNC\_ID with associated SID and  
 35 NID that are equal to the SID<sub>s</sub> and NID<sub>s</sub> respectively, and USE\_SYNC\_ID<sub>s</sub> is equal to '1',  
 36 the mobile station may include the SYNC\_ID field in the *Page Response Message* or the  
 37 *Reconnect Message* and, if included, shall set it to the SYNC\_ID corresponding to the  
 38 stored service configuration. If the mobile station includes SYNC\_ID field in the *Page*  
 39 *Response Message* or the *Reconnect Message*, the mobile station shall store the value of  
 40 the SYNC\_ID field in SYNC\_ID<sub>s</sub>.

1 If the mobile station enters the *Page Response Substate* with a direct channel assignment  
 2 respond indication, the mobile station shall perform the following:

- 3 • The mobile station shall send a *Page Response Message* or a *Reconnect Message* in  
 4 unassured mode, and shall then enter the *Traffic Channel Initialization Substate* of  
 5 the *Mobile Station Control on the Traffic Channel State*,
- 6 • While in the *Page Response Substate*, the mobile station shall ignore all received  
 7 messages, and
- 8 • The mobile station shall not perform any other procedures in this section.

9 Upon entering the *Page Response Substate* for any reason other than with a direct channel  
 10 assignment respond indication, the mobile station shall perform the following:

- 11 • Set RL\_GAIN\_ADJ<sub>S</sub> to '0000'.
- 12 • If P\_REV\_IN\_USE<sub>S</sub> is less than 11, set PLCM\_TYPE<sub>S</sub> to '0000'; otherwise set  
 13 PLCM\_TYPE<sub>S</sub> to '0100'.
- 14 • Send a *Page Response Message* or a *Reconnect Message*.

15 While in this substate, the mobile station shall monitor the Paging Channel or the Forward  
 16 Common Control Channel. The mobile station may perform an access probe handoff or  
 17 access handoff as described in 2.6.3.1.3.2 and 2.6.3.1.3.3. If the mobile station declares a  
 18 loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8) during  
 19 an access attempt, the mobile station may perform an access probe handoff; otherwise, it  
 20 shall declare an access attempt failure and shall perform the following actions:

- 21 • The mobile station shall update its registration variables as specified in 2.6.5.5.3.2,
- 22 • If the mobile station is monitoring the Paging Channel, the mobile station shall set  
 23 SYS\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL,
- 24 • If the mobile station is monitoring the Forward Common Control Channel, the  
 25 mobile station shall set MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL.
- 26 • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and  
 27 PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the  
 28 user that the PACA call has been canceled.
- 29 • The mobile station shall disable its transmitter, and
- 30 • The mobile station shall enter the *Mobile Station Idle State*.

31 If the mobile station receives confirmation of delivery of any message sent by the mobile  
 32 station in this substate, the mobile station shall perform an access handoff if all of the  
 33 following conditions hold:

- 34 • The mobile station declares a loss of the Paging Channel or the Forward Common  
 35 Control Channel, and
- 36 • The mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2), and  
 37 there are pilots other than the active pilot in the access handoff list (see  
 38 2.6.3.1.3.2).

If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel and does not perform an access handoff, the mobile station shall perform the following:

- If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL.
- If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL.
- If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to 0, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled,
- The mobile station shall disable its transmitter, and
- The mobile station shall enter the *Mobile Station Idle State*.

If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA\_CANCEL to '1' when the user directs the mobile station to cancel a PACA call.

If the mobile station receives confirmation of delivery of the *Page Response Message* or the *Reconnect Message* sent in this substate, the mobile station shall update its registration variables with respect to the base station to which the first access probe was transmitted after entering the *System Access State*, as specified in 2.6.5.5.3.1.

If the *System Access State* timer expires while in this substate, the mobile station shall perform the following:

- If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL, and shall enter the *Mobile Station Idle State*.
- If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL and enter the *Mobile Station Idle State*.

The mobile station shall set and disable the *System Access State* timer as follows:

- The mobile station shall disable the timer whenever it begins an access attempt.
- The mobile station shall set the timer to T<sub>42m</sub> seconds whenever it ends an access attempt.
- The mobile station shall disable the timer whenever it exits the *System Access State*.

If the mobile station receives a *Channel Assignment Message* or the *Extended Channel Assignment Message*, Layer 3 shall send a *dedicated channel assignment* indication to Layer 2 (see [4]). If the mobile station has not received confirmation of delivery of the *Page Response Message* or the *Reconnect Message*, before receiving the *Channel Assignment*

1 *Message* or the *Extended Channel Assignment Message*, the mobile station shall update its  
 2 registration variables with respect to the base station to which the first access probe was  
 3 transmitted after entering the *System Access State*, as specified in 2.6.5.5.3.1. If the mobile  
 4 station has not received confirmation of delivery of a *Data Burst Message* before receiving  
 5 the *Channel Assignment Message* or the *Extended Channel Assignment Message*, Layer 3  
 6 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in  
 7 progress and the mobile station may store the *Data Burst Message* for later transmission  
 8 on the r-dsch.

9 If the mobile station is to exit the *System Access State* as a result of processing Layer 3  
 10 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*  
 11 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to  
 12 the message has been sent and acknowledged.

13 If Layer 3 receives a message other than a *Channel Assignment Message* or an *Extended*  
 14 *Channel Assignment Message* with an indication from Layer 2 that an access attempt for a  
 15 message being transmitted was not terminated as a result of processing the Layer 2 fields  
 16 of the received message, the mobile station shall ignore the received message.

17 The following directed messages and orders can be received. If any field value of the  
 18 message or order is outside its permissible range, the mobile station may send a *Mobile*  
 19 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 20 1. *Authentication Challenge Message*: The mobile station shall respond to the  
 21 message as specified in 2.3.12.1.4, regardless of the value of AUTH<sub>S</sub>.
- 22 2. *Authentication Request Message*: The mobile station shall process the message and  
 23 shall respond as specified in 2.3.12.5.2.
- 24 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the  
 25 message as specified in 2.3.12.1.5.
- 26 4. *Base Station Reject Order*: The mobile station shall perform the procedures as  
 27 specified in 2.6.11.5.
- 28 5. *Channel Assignment Message*: The mobile station shall process the message as  
 29 follows:
  - 30 • If ASSIGN\_MODE<sub>r</sub> equals '000', the mobile station shall perform the following  
 31 actions:
    - 32 – The mobile station shall set CH\_IND<sub>S</sub> to '01'.
    - 33 – The mobile station shall store the frame offset (FRAME\_OFFSET<sub>S</sub> =  
 34 FRAME\_OFFSET<sub>r</sub>), the message encryption mode indicator  
 35 (ENCRYPT\_MODE<sub>S</sub> = ENCRYPT\_MODE<sub>r</sub>), and, if FREQ\_INCL<sub>r</sub> equals '1', the  
 36 Frequency Assignment (CDMACH<sub>S</sub> = CDMA\_FREQ<sub>r</sub>).
    - 37 – The mobile station shall set SERV\_NEG<sub>S</sub> to disabled.
    - 38 – If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled  
 39 and PACA\_CANCEL to '0', shall disable the PACA state timer, and should  
 40 indicate to the user that the PACA call has been canceled.



- 1           – The mobile station shall initialize CODE\_CHAN\_LIST as described in 2.6.8.
- 2           – If the mobile station is currently monitoring the Paging Channel, the mobile
- 3           station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile station
- 4           shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set
- 5           IDLE\_CDMA\_CHAN to CDMACH<sub>S</sub>, IDLE\_CDMABAND to CDMABAND<sub>S</sub>,
- 6           IDLE\_SID to SID<sub>S</sub>, IDLE\_NID to NID<sub>S</sub>, and IDLE\_P\_REV to P\_REV<sub>S</sub>.
- 7           – The mobile station shall enter the *Traffic Channel Initialization Substate* of
- 8           the *Mobile Station Control on the Traffic Channel State*.
- 9           • If ASSIGN\_MODE<sub>r</sub> equals '001', the mobile station shall perform the following
- 10          actions:
- 11          – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall perform the following:
- 12           + If the message requires acknowledgment, the mobile station shall wait
- 13           until Layer 3 receives an indication from Layer 2 that the
- 14           acknowledgment to the message has been sent and acknowledged.
- 15           + The mobile station shall set CDMACH<sub>S</sub> to CDMA\_FREQ<sub>r</sub>, tune to the
- 16           new Frequency Assignment, and measure the strength of each pilot
- 17           listed in the assignment using the Neighbor Set search procedures
- 18           specified in 2.6.6.2.1 and 2.6.6.2.2.
- 19          – The mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to
- 20          NULL (see 2.6.2.2) and shall set PILOT\_PN<sub>S</sub> to the pilot PN sequence offset of
- 21          the strongest pilot in the list (PILOT\_PN<sub>r</sub>).
- 22          – If the mobile station has not stored configuration parameters for the Primary
- 23          Paging Channel of the new base station, or if the stored information is not
- 24          current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>S</sub>,
- 25          NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,
- 26          GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>,
- 27          PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, CHAN\_LST\_MSG\_SEQ<sub>S</sub>,
- 28          EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub> EQ<sub>S</sub>,
- 29          EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, and
- 30          EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to NULL.
- 31          – The mobile station shall set PAGE\_CHAN<sub>S</sub> to '1' and PAGECH<sub>S</sub> to the
- 32          Primary Paging Channel. The mobile station shall then begin monitoring
- 33          the Primary Paging Channel of the selected base station.
- 34          – If RESPOND<sub>r</sub> is equal to '1', the mobile station shall enter the *Update*
- 35          *Overhead Information Substate* with a page response retransmission
- 36          indication within T<sub>34m</sub> seconds after receiving the *Channel Assignment*
- 37          *Message*.
- 38          – If RESPOND<sub>r</sub> is equal to '0', the mobile station shall enter the *Mobile Station*
- 39          *Idle State* within T<sub>34m</sub> seconds after receiving the *Channel Assignment*
- 40          *Message*.

- 1       • If ASSIGN\_MODE<sub>r</sub> equals '100', the mobile station shall perform the following  
2       actions:
  - 3       – The mobile station shall set CH\_IND<sub>s</sub> to '01'.
  - 4       – If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> to disabled  
5       and PACA\_CANCEL to '0', shall disable the PACA state timer, and should  
6       indicate to the user that the PACA call has been canceled.
  - 7       – If GRANTED\_MODE<sub>r</sub> equals '00', and the multiplex option and radio  
8       configuration combination specified in the DEFAULT\_CONFIG field is not  
9       supported by the mobile station, the mobile station shall send a *Mobile*  
10      *Station Reject Order* with ORDQ field set to '00000110' (capability not  
11      supported by the mobile station) and remain in the *Page Response Substate*.
  - 12      – If FREQ\_INCL<sub>r</sub> equals '0', the mobile station shall perform the following  
13      actions:
    - 14      + The mobile station shall store the frame offset (FRAME\_OFFSET<sub>s</sub> =  
15      FRAME\_OFFSET<sub>r</sub>), the message encryption mode indicator  
16      (ENCRYPT\_MODE<sub>s</sub> = ENCRYPT\_MODE<sub>r</sub>), the granted mode  
17      (GRANTED\_MODE<sub>s</sub> = GRANTED\_MODE<sub>r</sub>), and default configuration  
18      (DEFAULT\_CONFIG<sub>s</sub> = DEFAULT\_CONFIG<sub>r</sub>).
    - 19      + The mobile station shall set SERV\_NEG<sub>s</sub> to enabled.
    - 20      + If the mobile station is currently monitoring the Paging Channel, the  
21      mobile station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile  
22      station shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set  
23      IDLE\_CDMA\_CHAN to CDMACH<sub>s</sub>, IDLE\_CDMABAND to CDMABAND<sub>s</sub>,  
24      IDLE\_SID to SID<sub>s</sub>, IDLE\_NID to NID<sub>s</sub>, and IDLE\_P\_REV to P\_REV<sub>s</sub>.
    - 25      + The mobile station shall initialize CODE\_CHAN\_LIST as described in  
26      2.6.8 and shall then enter the *Traffic Channel Initialization Substate* of  
27      the *Mobile Station Control on the Traffic Channel State*.
  - 28      – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall perform the following  
29      actions:
    - 30      + If the band class is not supported by the mobile station, the mobile  
31      station shall send a *Mobile Station Reject Order* with ORDQ field set to  
32      '00000110' (capability not supported by the mobile station) and shall  
33      remain in the *Page Response Substate*.
    - 34      + If the band class is supported by the mobile station, the mobile station  
35      shall perform the following actions:

- 1                   o The mobile station shall store the frame offset ( $\text{FRAME\_OFFSET}_S =$   
2                    $\text{FRAME\_OFFSET}_T$ ), the message encryption mode indicator  
3                   ( $\text{ENCRYPT\_MODE}_S = \text{ENCRYPT\_MODE}_T$ ), the bypass indicator  
4                   ( $\text{BYPASS\_ALERT\_ANSWER}_S = \text{BYPASS\_ALERT\_ANSWER}_T$ ), the  
5                   granted mode ( $\text{GRANTED\_MODE}_S = \text{GRANTED\_MODE}_T$ ), the default  
6                   configuration ( $\text{DEFAULT\_CONFIG}_S = \text{DEFAULT\_CONFIG}_T$ ), the idle  
7                   Frequency Assignment ( $\text{IDLE\_CDMA\_CHAN} = \text{CDMACH}_S$ ), the idle  
8                   band class ( $\text{IDLE\_CDMABAND} = \text{CDMABAND}_S$ ), the band class  
9                   ( $\text{CDMABAND}_S = \text{BAND\_CLASS}_T$ ), and the Frequency Assignment  
10                  ( $\text{CDMACH}_S = \text{CDMA\_FREQ}_T$ ).
- 11               o The mobile station shall initialize  $\text{CODE\_CHAN\_LIST}$  as described in  
12               2.6.8, and shall set  $\text{SERV\_NEG}_S$  to enabled.
- 13               o If the mobile station is currently monitoring the Paging Channel, the  
14               mobile station shall set  $\text{IDLE\_BCCH\_CHAN}$  to '0'; otherwise, the  
15               mobile station shall set  $\text{IDLE\_BCCH\_CHAN}$  to '1'. The mobile station  
16               shall set  $\text{IDLE\_SID}$  to  $\text{SID}_S$ ,  $\text{IDLE\_NID}$  to  $\text{NID}_S$ , and  $\text{IDLE\_P\_REV}$  to  
17                $\text{P\_REV}_S$ .
- 18               o The mobile station shall then tune to the new Frequency Assignment  
19               and shall enter the *Traffic Channel Initialization Substate* of the  
20               *Mobile Station Control on the Traffic Channel State*.
- 21       • If  $\text{ASSIGN\_MODE}_T$  equals '101', the mobile station shall perform the following  
22       actions:
  - 23       – If  $\text{FREQ\_INCL}_T$  equals '0', the mobile station shall perform the following  
24       actions:
    - 25       + If the message requires acknowledgment, the mobile station shall wait  
26       until Layer 3 receives an indication from Layer 2 that the  
27       acknowledgment to the message has been sent and acknowledged.
    - 28       + The mobile station shall set  $\text{CONFIG\_MSG\_SEQ}_S$  and  $\text{ACC\_MSG\_SEQ}_S$   
29       to NULL (see 2.6.2.2) and shall set  $\text{PILOT\_PN}_S$  to the pilot PN sequence  
30       offset of the strongest pilot in the list ( $\text{PILOT\_PN}_T$ ).
    - 31       + If the mobile station has not stored configuration parameters for the  
32       Primary Paging Channel of the new base station, or if the stored  
33       information is not current (see 2.6.2.2), the mobile station shall set  
34        $\text{SYS\_PAR\_MSG\_SEQ}_S$ ,  $\text{NGHBR\_LST\_MSG\_SEQ}_S$ ,  
35        $\text{EXT\_NGHBR\_LST\_MSG\_SEQ}_S$ ,  $\text{GEN\_NGHBR\_LST\_MSG\_SEQ}_S$ ,  
36        $\text{USER\_ZONE\_ID\_MSG\_SEQ}_S$ ,  $\text{PRI\_NGHBR\_LST\_MSG\_SEQ}_S$ ,  
37        $\text{CHAN\_LST\_MSG\_SEQ}_S$ ,  $\text{EXT\_CHAN\_LST\_MSG\_SEQ}_S$ ,  
38        $\text{FD\_CHAN\_LST\_MSG\_SEQ}_S$ ,  $\text{EXT\_SYS\_PAR\_MSG\_SEQ}_S$ ,  
39        $\text{GLOB\_SERV\_REDIR\_MSG\_SEQ}_S$ , and  
40        $\text{EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ}_S$  to NULL.

- 1           + The mobile station shall set PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the
- 2           Primary Paging Channel. The mobile station shall then begin
- 3           monitoring the Primary Paging Channel of the selected base station.
- 4           + If RESPOND<sub>r</sub> is equal to '1', the mobile station shall perform the
- 5           following:
- 6           o If the *Channel Assignment Message* does not require an
- 7           acknowledgment, the mobile station shall enter the *Update Overhead*
- 8           *Information Substate* with a page response retransmission indication
- 9           within T<sub>34m</sub> seconds after receiving the *Channel Assignment*
- 10          *Message*.
- 11          o If the *Channel Assignment Message* requires an acknowledgment,
- 12          the mobile station shall enter the *Update Overhead Information*
- 13          *Substate* with a page response retransmission indication within
- 14          T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2 that
- 15          the acknowledgment to the *Channel Assignment Message* has been
- 16          sent and acknowledged.
- 17          + If RESPOND<sub>r</sub> is equal to '0', the mobile station shall perform the
- 18          following:
- 19          o If the *Channel Assignment Message* does not require an
- 20          acknowledgment, the mobile station shall enter the *Mobile Station*
- 21          *Idle State* within T<sub>34m</sub> seconds after receiving the *Channel*
- 22          *Assignment Message*.
- 23          o If the *Channel Assignment Message* requires an acknowledgment,
- 24          the mobile station shall enter the *Mobile Station Idle State* within
- 25          T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2 that
- 26          the acknowledgment to the *Channel Assignment Message* has been
- 27          sent and acknowledged.
- 28          – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall perform the following
- 29          actions:
- 30          + If the band class is not supported by the mobile station, the mobile
- 31          station shall send a *Mobile Station Reject Order* with ORDQ field set to
- 32          '00000110' (capability not supported by the mobile station) and shall
- 33          remain in the *Page Response Substate*.
- 34          + If the band class is supported by the mobile station, the mobile station
- 35          shall perform the following actions:
- 36          o If the message requires acknowledgment, the mobile station shall
- 37          wait until Layer 3 receives an indication from Layer 2 that the
- 38          acknowledgment to the message has been sent and acknowledged.

- 1           o The mobile station shall set CDMACH<sub>S</sub> to CDMA\_FREQ<sub>r</sub> and

2           CDMABAND<sub>S</sub> to BAND\_CLASS<sub>r</sub>. Then the mobile station shall tune

3           to the new Frequency Assignment, measure the strength of each

4           pilot listed in the assignment using the Neighbor Set search

5           procedures specified in 2.6.6.2.1 and 2.6.6.2.2, set PILOT\_PN<sub>S</sub> to the

6           pilot PN sequence offset of the strongest pilot in the list (PILOT\_PN<sub>r</sub>),

7           and set CONFIG\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL (see

8           2.6.2.2).
- 9           o If the mobile station has not stored configuration parameters for the

10          Primary Paging Channel of the new base station, or if the stored

11          information is not current (see 2.6.2.2), the mobile station shall set

12          SYS\_PAR\_MSG\_SEQ<sub>S</sub>, NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,

13          EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,

14          USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,

15          CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,

16          FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>,

17          GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, and

18          EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to NULL.
- 19          o The mobile station shall set PAGE\_CHAN<sub>S</sub> to '1' and PAGECH<sub>S</sub> to the

20          Primary Paging Channel. The mobile station shall then begin

21          monitoring the Primary Paging Channel of the selected base station.
- 22          o If RESPOND<sub>r</sub> is equal to '1', the mobile station shall perform the

23          following:

  - 24               ◇ If the *Channel Assignment Message* does not require an

25               acknowledgment, the mobile station shall enter the *Update*

26               *Overhead Information Substate* with a page response

27               retransmission indication within T<sub>34m</sub> seconds after receiving

28               the *Channel Assignment Message*.
  - 29               ◇ If the *Channel Assignment Message* requires an acknowledgment,

30               the mobile station shall enter the *Update Overhead Information*

31               *Substate* with a page response retransmission indication within

32               T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2

33               that the acknowledgment to the *Channel Assignment Message*

34               has been sent and acknowledged.
- 35          o If RESPOND<sub>r</sub> is equal to '0', the mobile station perform the following:

  - 36               ◇ If the *Channel Assignment Message* does not require an

37               acknowledgment, the mobile station shall enter the *Mobile*

38               *Station Idle State* within T<sub>34m</sub> seconds after receiving the

39               *Channel Assignment Message*.

- 1                   ◇ If the *Channel Assignment Message* requires an acknowledgment,  
 2                   the mobile station shall enter the *Mobile Station Idle State* within  
 3                   T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2  
 4                   that the acknowledgment to the *Channel Assignment Message*  
 5                   has been sent and acknowledged.

## 6. *Data Burst Message*

### 7. *Extended Channel Assignment Message*: The mobile station shall process the message as follows:

- 9           • If the *Extended Channel Assignment Message* requires an acknowledgment and  
 10           the mobile station is to enter the *Mobile Station Control on the Traffic Channel*  
 11           *State* as a result of processing Layer 3 fields of this message, the mobile station  
 12           shall enter the *Mobile Station Control on the Traffic Channel State* only after  
 13           Layer 3 receives an indication from Layer 2 that the acknowledgment to the  
 14           message has been sent and acknowledged.
- 15          • The mobile station shall set RTC\_NOM\_PWR\_USE\_IND to '0'.
- 16          • The mobile station shall set DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>S</sub> to '0'.
- 17          • If the mobile station is in *Page Response Substate* and has sent<sup>26</sup> a *Page*  
 18           *Response Message* or a *Reconnect Message* the mobile station shall set  
 19           RESPOND\_IND<sub>S</sub> to '0'; otherwise the mobile station shall set RESPOND\_IND<sub>S</sub> to  
 20           RESPOND\_IND<sub>R</sub>.
- 21          • If ASSIGN\_MODE<sub>R</sub> equals '000', the mobile station shall perform the following  
 22           actions:
  - 23           – The mobile station shall set CH\_IND<sub>S</sub> to '01'.
  - 24           – If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled  
 25           and PACA\_CANCEL to '0', shall disable the PACA state timer, and should  
 26           indicate to the user that the PACA call has been canceled.
  - 27           – If GRANTED\_MODE<sub>R</sub> equals '00', and the multiplex option and radio  
 28           configuration specified in the DEFAULT\_CONFIG field are not supported by  
 29           the mobile station, the mobile station shall send a *Mobile Station Reject*  
 30           *Order* with ORDQ field set to '00000110' (capability not supported by the  
 31           mobile station) and shall remain in the current state<sup>27</sup>.

---

<sup>26</sup> A message is considered sent when the mobile station transmits the message at least once, no matter whether the L2 acknowledgment is received or not.

<sup>27</sup> The current state may be *Page Response Substate* or *Mobile Station Idle State*. The mobile station remains in the state in which *Extended Channel Assignment Message* is received.

- 1           – If GRANTED\_MODE<sub>r</sub> is equal to '00' and DEFAULT\_CONFIG<sub>r</sub> is not equal to
- 2           '100', the mobile station shall send a *Mobile Station Reject Order* with ORDQ
- 3           field set to '00001110' (RC does not match with DEFAULT\_CONFIG<sub>r</sub>) and
- 4           shall remain in the current state if any of the following conditions is true:
- 5           + FOR\_FCH\_RC<sub>r</sub> is not equal to the RC associated with
- 6           DEFAULT\_CONFIG<sub>r</sub> (see Table 3.7.2.3.2.21-2).
- 7           + REV\_FCH\_RC<sub>r</sub> is not equal to the RC associated with
- 8           DEFAULT\_CONFIG<sub>r</sub> (see Table 3.7.2.3.2.21-2).
- 9           – If the mobile station does not support either of the Fundamental Channel
- 10          Radio Configurations (FOR\_FCH\_RC or REV\_FCH\_RC), the mobile shall
- 11          send a *Mobile Station Reject Order* with the ORDQ field set to '00000110'
- 12          (capability not supported by the mobile station) and remain in the current
- 13          state.
- 14          – If PLCM\_TYPE<sub>r</sub> equals '0010' and IMSI\_O is derived from IMSI\_T, or if
- 15          PLCM\_TYPE<sub>r</sub> equals '0011' and IMSI\_O is derived from IMSI\_M, the mobile
- 16          station shall send a *Mobile Station Reject Order* with the ORDQ field
- 17          set to '00011100' (PLCM\_TYPE mismatch) and remain in the current state.
- 18          – If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than 6, the mobile station shall
- 19          store the Forward Fundamental Channel Radio Configuration
- 20          (FOR\_FCH\_RC<sub>s</sub> = FOR\_FCH\_RC<sub>r</sub>) and the Reverse Fundamental Channel
- 21          Radio Configuration (REV\_FCH\_RC<sub>s</sub> = REV\_FCH\_RC<sub>r</sub>).
- 22          – If FREQ\_INCL<sub>r</sub> equals '0', and the band class is supported by the mobile
- 23          station, the mobile station shall perform the following actions:
- 24          + The mobile station shall store the frame offset (FRAME\_OFFSET<sub>s</sub> =
- 25          FRAME\_OFFSET<sub>r</sub>); the message encryption mode indicator
- 26          (ENCRYPT\_MODE<sub>s</sub> = ENCRYPT\_MODE<sub>r</sub>); the bypass indicator
- 27          (BYPASS\_ALERT\_ANSWER<sub>s</sub> = BYPASS\_ALERT\_ANSWER<sub>r</sub>); the granted
- 28          mode (GRANTED\_MODE<sub>s</sub> = GRANTED\_MODE<sub>r</sub>); the default
- 29          configuration (DEFAULT\_CONFIG<sub>s</sub> = DEFAULT\_CONFIG<sub>r</sub>); and the
- 30          occurrences of PILOT\_PN and PWR\_COMB for each included member of
- 31          the Active Set.
- 32          + The mobile station shall perform the procedures in 2.6.11.2.
- 33          + If C\_SIG\_ENCRYPT\_MODE is included, the mobile station shall set
- 34          C\_SIG\_ENCRYPT\_MODE<sub>s</sub> to C\_SIG\_ENCRYPT\_MODE<sub>r</sub>.
- 35          + The mobile station shall initialize CODE\_CHAN\_LIST as described in
- 36          2.6.8, and shall set SERV\_NEG<sub>s</sub> to enabled.

- 1           + The mobile station shall set FPC\_FCH\_INIT\_SETPT<sub>S</sub> to
- 2           FPC\_FCH\_INIT\_SETPT<sub>R</sub>, FPC\_FCH\_CURR\_SETPT<sub>S</sub> to
- 3           FPC\_FCH\_INIT\_SETPT<sub>S</sub>, FPC\_FCH\_FER<sub>S</sub> to FPC\_FCH\_FER<sub>R</sub>,
- 4           FPC\_FCH\_MIN\_SETPT<sub>S</sub> to FPC\_FCH\_MIN\_SETPT<sub>R</sub>,
- 5           FPC\_FCH\_MAX\_SETPT<sub>S</sub> to FPC\_FCH\_MAX\_SETPT<sub>R</sub>, and
- 6           FPC\_PRI\_CHAN<sub>S</sub> to '0' if the mobile station supports any Radio
- 7           Configuration greater than 2.
- 8           + The mobile station shall set FPC\_SUBCHAN\_GAIN<sub>S</sub> to
- 9           FPC\_SUBCHAN\_GAIN<sub>R</sub>.
- 10          + The mobile station shall set RLGAIN\_ADJ<sub>S</sub> to RLGAIN\_ADJ<sub>R</sub>.
- 11          + The mobile station shall set REV\_FCH\_GATING\_MODE<sub>S</sub> to
- 12          REV\_FCH\_GATING\_MODE<sub>R</sub>.
- 13          + The mobile station shall set REV\_PWR\_CNTL\_DELAY<sub>S</sub> to
- 14          REV\_PWR\_CNTL\_DELAY<sub>R</sub> if REV\_PWR\_CNTL\_DELAY\_INCL<sub>R</sub> is equal to
- 15          '1'.
- 16          + The mobile station shall set PLCM\_TYPE<sub>S</sub> to PLCM\_TYPE<sub>R</sub> if
- 17          PLCM\_TYPE\_INCL<sub>R</sub> is equal to '1'; otherwise, the mobile station shall set
- 18          PLCM\_TYPE<sub>S</sub> as follows:
  - 19           o If P\_REV\_IN\_USE<sub>S</sub> is less than 11, set PLCM\_TYPE<sub>S</sub> to '0000';
  - 20           otherwise set PLCM\_TYPE<sub>S</sub> to '0100'.
- 21          + The mobile station shall set PLCM\_39<sub>S</sub> to PLCM\_39<sub>R</sub> if PLCM\_TYPE<sub>R</sub> is
- 22          equal to '0001'.
- 23          + If the mobile station is currently monitoring the Paging Channel, the
- 24          mobile station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile
- 25          station shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set
- 26          IDLE\_CDMA\_CHAN to CDMACH<sub>S</sub>, IDLE\_CDMABAND to CDMABAND<sub>S</sub>,
- 27          IDLE\_SID to SID<sub>S</sub>, IDLE\_NID to NID<sub>S</sub>, and IDLE\_P\_REV to P\_REV<sub>S</sub>.
- 28          + The mobile station shall then enter the *Traffic Channel Initialization*
- 29          *Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 30          – If FREQ\_INCL<sub>R</sub> equals '1', and the band class is not supported by the mobile
- 31          station, the mobile station shall send a *Mobile Station Reject Order* with
- 32          ORDQ field set to '00000110' (capability not supported by the mobile
- 33          station) and remain in the current state.
- 34          – If FREQ\_INCL<sub>R</sub> equals '1', and the band class is supported by the mobile
- 35          station, the mobile station shall perform the following actions:



- 1           + The mobile station shall store the frame offset ( $FRAME\_OFFSET_S =$   
2            $FRAME\_OFFSET_R$ ); the message encryption mode indicator  
3           ( $ENCRYPT\_MODE_S = ENCRYPT\_MODE_R$ ); the bypass indicator  
4           ( $BYPASS\_ALERT\_ANSWER_S = BYPASS\_ALERT\_ANSWER_R$ ); the granted  
5           mode ( $GRANTED\_MODE_S = GRANTED\_MODE_R$ ); the default  
6           configuration ( $DEFAULT\_CONFIG_S = DEFAULT\_CONFIG_R$ ); the idle  
7           Frequency Assignment ( $IDLE\_CDMA\_CHAN = CDMACH_S$ ); the idle band  
8           class ( $IDLE\_CDMABAND = CDMABAND_S$ ); the band class ( $CDMABAND_S$   
9            $= BAND\_CLASS_R$ ); the Frequency Assignment  
10          ( $CDMACH_S = CDMA\_FREQ_R$ ); and the occurrences of  $PILOT\_PN$  and  
11           $PWR\_COMB\_IND$  for each included member of the Active Set.
- 12         + The mobile station shall perform the procedures in 2.6.11.2.
- 13         + The mobile station shall set  $FPC\_FCH\_INIT\_SETPT_S$  to  
14          $FPC\_FCH\_INIT\_SETPT_R$ ,  $FPC\_FCH\_CURR\_SETPT_S$  to  
15          $FPC\_FCH\_INIT\_SETPT_S$ ,  $FPC\_FCH\_FER_S$  to  $FPC\_FCH\_FER_R$ ,  
16          $FPC\_FCH\_MIN\_SETPT_S$  to  $FPC\_FCH\_MIN\_SETPT_R$ ,  
17          $FPC\_FCH\_MAX\_SETPT_S$  to  $FPC\_FCH\_MAX\_SETPT_R$ , and  
18          $FPC\_PRI\_CHAN_S$  to '0' if the mobile station supports any Radio  
19         Configuration greater than 2.
- 20         + The mobile station shall set  $FPC\_SUBCHAN\_GAIN_S$  to  
21          $FPC\_SUBCHAN\_GAIN_R$ .
- 22         + The mobile station shall set  $RLGAIN\_ADJ_S$  to  $RLGAIN\_ADJ_R$ .
- 23         + The mobile station shall set  $REV\_FCH\_GATING\_MODE_S$  to  
24          $REV\_FCH\_GATING\_MODE_R$ .
- 25         + The mobile station shall set  $REV\_PWR\_CNTL\_DELAY_S$  to  
26          $REV\_PWR\_CNTL\_DELAY_R$  if  $REV\_PWR\_CNTL\_DELAY\_INCL_R$  is equal to  
27         '1'.
- 28         + The mobile station shall set  $PLCM\_TYPE_S$  to  $PLCM\_TYPE_R$  if  
29          $PLCM\_TYPE\_INCL_R$  is equal to '1'; otherwise, the mobile station shall set  
30          $PLCM\_TYPE_S$  as follows:
  - 31           o If  $P\_REV\_IN\_USE_S$  is less than 11, set  $PLCM\_TYPE_S$  to '0000';  
32           otherwise set  $PLCM\_TYPE_S$  to '0100'.
- 33         + The mobile station shall set  $PLCM\_39_S$  to  $PLCM\_39_R$  if  $PLCM\_TYPE_R$  is  
34         equal to '0001'.
- 35         + The mobile station shall initialize  $CODE\_CHAN\_LIST$  as described in  
36         2.6.8, and shall set  $SERV\_NEG_S$  to enabled.
- 37         + If the mobile station is currently monitoring the Paging Channel, the  
38         mobile station shall set  $IDLE\_BCCH\_CHAN$  to '0'; otherwise, the mobile  
39         station shall set  $IDLE\_BCCH\_CHAN$  to '1'. The mobile station shall set  
40          $IDLE\_SID$  to  $SID_S$ ,  $IDLE\_NID$  to  $NID_S$ , and  $IDLE\_P\_REV$  to  $P\_REV_S$ .

- 1           + The mobile station shall then tune to the new Frequency Assignment
- 2           and shall enter the *Traffic Channel Initialization Substate* of the *Mobile*
- 3           *Station Control on the Traffic Channel State*.
- 4       • If ASSIGN\_MODE<sub>r</sub> equals '001', the mobile station shall perform the following
- 5       actions:
- 6       – If FREQ\_INCL<sub>r</sub> equals '0', the mobile station shall perform the following
- 7       actions:
- 8       + If the message requires acknowledgment, the mobile station shall wait
- 9       until Layer 3 receives an indication from Layer 2 that the
- 10       acknowledgment to the message has been sent and acknowledged.
- 11       + The mobile station shall set CONFIG\_MSG\_SEQ<sub>s</sub> and ACC\_MSG\_SEQ<sub>s</sub>
- 12       to NULL (see 2.6.2.2) and shall set PILOT\_PN<sub>s</sub> to the pilot PN sequence
- 13       offset of the strongest pilot in the list (PILOT\_PN<sub>r</sub>).
- 14       + If the mobile station has not stored configuration parameters for the
- 15       Primary Paging Channel of the new base station, or if the stored
- 16       information is not current (see 2.6.2.2), the mobile station shall set
- 17       SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 18       EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 19       USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>
- 20       CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,
- 21       FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub> EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,
- 22       GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and
- 23       EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL.
- 24       + The mobile station shall set PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the
- 25       Primary Paging Channel. If the mobile station was monitoring the
- 26       Forward Common Control Channel, the mobile station shall set the
- 27       PRAT<sub>s</sub> to '00'. The mobile station shall then begin monitoring the
- 28       Primary Paging Channel of the selected base station.
- 29       + If RESPOND<sub>r</sub> is equal to '1', the mobile station shall perform the
- 30       following:
- 31       o If the *Extended Channel Assignment Message* does not require an
- 32       acknowledgment, the mobile station shall enter the *Update Overhead*
- 33       *Information Substate* with a page response retransmission indication
- 34       within T<sub>34m</sub> seconds after receiving the *Extended Channel*
- 35       *Assignment Message*.
- 36       o If the *Extended Channel Assignment Message* requires an
- 37       acknowledgment, the mobile station shall enter the *Update Overhead*
- 38       *Information Substate* with a page response retransmission indication
- 39       within T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer
- 40       2 that the acknowledgment to the *Extended Channel Assignment*
- 41       *Message* has been sent and acknowledged.

- 1           + If RESPOND<sub>r</sub> is equal to '0', the mobile station shall perform the
- 2           following:
- 3           o If the *Extended Channel Assignment Message* does not require an
- 4           acknowledgment, the mobile station shall enter the *Mobile Station*
- 5           *Idle State* within T<sub>34m</sub> seconds after receiving the *Extended Channel*
- 6           *Assignment Message*.
- 7           o If the *Extended Channel Assignment Message* requires an
- 8           acknowledgment, the mobile station shall enter the *Mobile Station*
- 9           *Idle State* within T<sub>34m</sub> seconds after Layer 3 receives an indication
- 10          from Layer 2 that the acknowledgment to the *Extended Channel*
- 11          *Assignment Message* has been sent and acknowledged.
- 12        – If FREQ\_INCL<sub>r</sub> equals '1', and the band class is not supported by the mobile
- 13        station, the mobile station shall send a *Mobile Station Reject Order* with
- 14        ORDQ field set to '00000110' (capability not supported by the mobile
- 15        station) and remain in the current state.
- 16        – If FREQ\_INCL<sub>r</sub> equals '1', and the band class is supported by the mobile
- 17        station, the mobile station shall perform the following actions:
- 18           + If the message requires acknowledgment, the mobile station shall wait
- 19           until Layer 3 receives an indication from Layer 2 that the
- 20           acknowledgment to the message has been sent and acknowledged.
- 21           + The mobile station shall set CDMACH<sub>s</sub> to CDMA\_FREQ<sub>r</sub> and
- 22           CDMABAND<sub>s</sub> to BAND\_CLASS<sub>r</sub>. Then the mobile station shall tune to
- 23           the new Frequency Assignment, measure the strength of each pilot
- 24           listed in the assignment using the Neighbor Set search procedures
- 25           specified in 2.6.6.2.1 and 2.6.6.2.2, set PILOT\_PN<sub>s</sub> to the pilot PN
- 26           sequence offset of the strongest pilot in the list (PILOT\_PN<sub>r</sub>), and set
- 27           CONFIG\_MSG\_SEQ<sub>s</sub> and ACC\_MSG\_SEQ<sub>s</sub> to NULL (see 2.6.2.2).
- 28           + If the mobile station has not stored configuration parameters for the
- 29           Primary Paging Channel of the new base station, or if the stored
- 30           information is not current (see 2.6.2.2), the mobile station shall set
- 31           SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 32           EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 33           USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>
- 34           CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,
- 35           FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,
- 36           GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and
- 37           EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL.
- 38           + The mobile station shall set PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the
- 39           Primary Paging Channel. If the mobile station was monitoring Forward
- 40           Common Control Channel, the mobile station shall set the PRAT<sub>s</sub> to '00'.
- 41           The mobile station shall then begin monitoring the Primary Paging
- 42           Channel of the selected base station.

- 1           + If RESPOND<sub>r</sub> is equal to '1', the mobile station shall perform the
- 2           following:
- 3           o If the *Extended Channel Assignment Message* does not require an
- 4           acknowledgment, the mobile station shall enter the *Update Overhead*
- 5           *Information Substate* with a page response retransmission indication
- 6           within T<sub>34m</sub> seconds after receiving the *Extended Channel*
- 7           *Assignment Message*.
- 8           o If the *Extended Channel Assignment Message* requires an
- 9           acknowledgment, the mobile station shall enter the *Update Overhead*
- 10          *Information Substate* with a page response retransmission indication
- 11          within T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer
- 12          2 that the acknowledgment to the *Extended Channel Assignment*
- 13          *Message* has been sent and acknowledged.
- 14       + If RESPOND<sub>r</sub> is equal to '0', the mobile station shall perform the
- 15       following:
- 16       o If the *Extended Channel Assignment Message* does not require an
- 17       acknowledgment, the mobile station shall enter the *Mobile Station*
- 18       *Idle State* within T<sub>34m</sub> seconds after receiving the *Extended Channel*
- 19       *Assignment Message*.
- 20       o If the *Extended Channel Assignment Message* requires an
- 21       acknowledgment, the mobile station shall enter the *Mobile Station*
- 22       *Idle State* within T<sub>34m</sub> seconds after Layer 3 receives an indication
- 23       from Layer 2 that the acknowledgment to the *Extended Channel*
- 24       *Assignment Message* has been sent and acknowledged.
- 25   • If ASSIGN\_MODE<sub>r</sub> equals '100', the mobile station shall perform the following
- 26   actions:
- 27   – If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> to disabled and
- 28   PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to
- 29   the user that the PACA call has been canceled.
- 30   – If GRANTED\_MODE<sub>r</sub> equals '00' and the multiplex option and radio
- 31   configuration specified in the DEFAULT\_CONFIG<sub>r</sub> field are not supported by the
- 32   mobile station, the mobile station shall send a *Mobile Station Reject Order* with
- 33   ORDQ field set to '00000110' (capability not supported by the mobile station)
- 34   and shall remain in the current state.
- 35   – If GRANTED\_MODE<sub>r</sub> equals '11', P\_REV\_IN\_USE<sub>s</sub> is less than 11, and the
- 36   mobile station did not include a SYNC\_ID field in the *Page Response Message*
- 37   or *Reconnect Message* that was transmitted in this substate, the mobile station
- 38   shall send a *Mobile Station Reject Order* with ORDQ field set to '00000110'
- 39   (capability not supported by the mobile station) and shall remain in the current
- 40   state.

- 1       – If SYNC\_ID\_INCL<sub>r</sub> is included and equals '1', and the mobile station does not  
2       have a stored service configuration corresponding to SYNC\_ID<sub>r</sub> for the current  
3       SID<sub>s</sub> and NID<sub>s</sub> pair, the mobile station shall send a *Mobile Station Reject Order*  
4       with ORDQ field set to '00011011' (Requested stored service configuration is  
5       not available) and shall remain in the current state.
- 6       – If GRANTED\_MODE<sub>r</sub> equals '11', SR\_ID\_RESTORE<sub>r</sub> is not equal to '111', and a  
7       service option connection record corresponding to SR\_ID\_RESTORE<sub>r</sub> is not  
8       contained in the stored service configuration, the mobile station shall send a  
9       *Mobile Station Reject Order* with ORDQ field set to '00000110' (capability not  
10      supported by the mobile station) and shall remain in the current state.
- 11      – If GRANTED\_MODE<sub>r</sub> equals '00' and DEFAULT\_CONFIG<sub>r</sub> is not equal to '100',  
12      the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set  
13      to '00001110' (RC does not match with DEFAULT\_CONFIG) and shall remain in  
14      the current state if one of the following conditions is true:
  - 15       + FOR\_RC<sub>r</sub> is not equal to the RC associated with DEFAULT\_CONFIG<sub>r</sub> as  
16       specified in Table 3.7.2.3.2.21-2.
  - 17       + REV\_RC<sub>r</sub> is not equal to the RC associated with DEFAULT\_CONFIG<sub>r</sub> as  
18       specified in Table 3.7.2.3.2.21-2.
- 19      – If the mobile station does not support either of the Radio Configurations  
20      (FOR\_RC or REV\_RC), the mobile station shall send a *Mobile Station Reject*  
21      *Order* with the ORDQ field set to '00000110' (capability not supported by the  
22      mobile station) and remain in the current state.
- 23      – If CH\_IND<sub>r</sub> = '01' and the mobile station does not support Fundamental  
24      Channel, the mobile station shall send a *Mobile Station Reject Order* with the  
25      ORDQ field set to '00000110' (capability not supported by the mobile station)  
26      and remain in the current state.
- 27      – If CH\_IND<sub>r</sub> = '10' and the mobile station does not support the Dedicated Control  
28      Channel, the mobile station shall send a *Mobile Station Reject Order* with the  
29      ORDQ field set to '00000110' (capability not supported by the mobile station)  
30      and remain in the current state.
- 31      – If CH\_IND<sub>r</sub> = '11' and the mobile station does not support the Dedicated Control  
32      Channel and Fundamental Channel concurrently, the mobile station shall send  
33      a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (capability  
34      not supported by the mobile station) and remain in the current state.
- 35      – If FREQ\_INCL<sub>r</sub> equals '1' and if the band class (BAND\_CLASS<sub>r</sub>) is not supported  
36      by the mobile station, the mobile station shall send a *Mobile Station Reject*  
37      *Order* with ORDQ field set to '00000110' (capability not supported by the mobile  
38      station) and remain in the current state.

- 1       – If  $PLCM\_TYPE_r$  equals '0010' and  $IMSI\_O$  is derived from  $IMSI\_T$ , or if  
2        $PLCM\_TYPE_r$  equals '0011' and  $IMSI\_O$  is derived from  $IMSI\_M$ , the mobile  
3       station shall send a *Mobile Station Reject Order* with the  $ORDQ$  field set to  
4       '00011100' ( $PLCM\_TYPE$  mismatch) and remain in the current state.
- 5       – If  $FUNDICATED\_BCMC\_IND_r$  equals '1', and the mobile station does not  
6       support BCMC reception on the Forward Fundicated Channels assigned in this  
7       message, the mobile station shall send a *Mobile Station Reject Order* with the  
8        $ORDQ$  field set to '00000110' (capability not supported by the mobile station)  
9       and remain in the current state.
- 10      – If the mobile station does not send a Mobile Station Reject Order as specified  
11      above, it shall continue to perform the actions specified below.
- 12      – The mobile station shall set
  - 13       +  $IDLE\_CDMABAND = CDMABAND_s$
  - 14       +  $IDLE\_CDMACH = CDMACH_s$
- 15      – If  $FREQ\_INCL_r$  equals '1', the mobile station shall set
  - 16       +  $CDMABAND_s = BAND\_CLASS_r$
  - 17       +  $CDMACH_s = CDMA\_FREQ_r$
- 18      – The mobile station shall store the bypass indicator ( $BYPASS\_ALERT\_ANSWER_s$   
19      =  $BYPASS\_ALERT\_ANSWER_r$ ).
- 20      – The mobile station shall store granted mode ( $GRANTED\_MODE_s =$   
21       $GRANTED\_MODE_r$ ). If  $GRANTED\_MODE_r$  equals '11', the mobile station shall  
22      perform the following:
  - 23       + The mobile station shall store the service reference to be restored  
24       ( $SR\_ID\_RESTORE_s = SR\_ID\_RESTORE_r$ ).
  - 25       + If  $SR\_ID\_RESTORE_r$  equals '000', the mobile station shall store bitmap of  
26       service reference identifiers to be restored ( $SR\_ID\_RESTORE\_BITMAP_s =$   
27        $SR\_ID\_RESTORE\_BITMAP_r$ ).
  - 28       + If  $SYNC\_ID\_INCL_r$  is included and equals '1', the mobile station shall store  
29       the service configuration synchronization identifier ( $SYNC\_ID_s =$   
30        $SYNC\_ID_r$ ).
- 31      – The mobile station shall store the default configuration ( $DEFAULT\_CONFIG_s =$   
32       $DEFAULT\_CONFIG_r$ ).
- 33      – The mobile station shall store the Forward Traffic Channel Radio Configuration  
34      ( $FOR\_RC_s = FOR\_RC_r$ ) and the Reverse Traffic Channel Radio Configuration  
35      ( $REV\_RC_s = REV\_RC_r$ ).
- 36      – The mobile station shall store the frame offset ( $FRAME\_OFFSET_s =$   
37       $FRAME\_OFFSET_r$ ).

- 1       – The mobile station shall store the message encryption mode indicator  
2       (ENCRYPT\_MODE<sub>S</sub> = ENCRYPT\_MODE<sub>R</sub>).
- 3       – The mobile station shall perform the procedures in 2.6.11.2.
- 4       – The mobile station shall store the Forward power control subchannel relative  
5       gain [FPC\_SUBCHAN\_GAIN<sub>S</sub> = FPC\_SUBCHAN\_GAIN<sub>R</sub>].
- 6       – The mobile station shall set RL\_GAIN\_ADJ<sub>S</sub> to RL\_GAIN\_ADJ<sub>R</sub>.
- 7       – The mobile station shall set PLCM\_TYPE<sub>S</sub> to PLCM\_TYPE<sub>R</sub> if PLCM\_TYPE\_INCL<sub>R</sub>  
8       is equal to '1'; otherwise, the mobile station shall set PLCM\_TYPE<sub>S</sub> as follows:
  - 9       + If P\_REV\_IN\_USE<sub>S</sub> is less than 11, set PLCM\_TYPE<sub>S</sub> to '0000'; otherwise set  
10       PLCM\_TYPE<sub>S</sub> to '0100'.
- 11      – The mobile station shall set PLCM\_39<sub>S</sub> to PLCM\_39<sub>R</sub> if PLCM\_TYPE<sub>R</sub> is equal to  
12      '0001'.
- 13      – If FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>R</sub> is included, the mobile station shall set  
14      FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> to FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>R</sub>;  
15      otherwise, the mobile station shall set FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> to  
16      '0'. If FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> equals '1', the mobile station shall  
17      set FIXED\_NUM\_PREAMBLE<sub>S</sub> to FIXED\_NUM\_PREAMBLE<sub>R</sub>.
- 18      – The mobile station shall set REV\_FCH\_GATING\_MODE<sub>S</sub> to  
19      REV\_FCH\_GATING\_MODE<sub>R</sub>.
- 20      – The mobile station shall set REV\_PWR\_CNTL\_DELAY<sub>S</sub> to  
21      REV\_PWR\_CNTL\_DELAY<sub>R</sub> if REV\_PWR\_CNTL\_DELAY\_INCL<sub>R</sub> is equal to '1'.
- 22      – If 3XFL\_1XRL\_INCL<sub>R</sub> is equal to '1', the mobile station shall set  
23      1XRL\_FREQ\_OFFSET<sub>S</sub> to 1XRL\_FREQ\_OFFSET<sub>R</sub>.
- 24      – If DIRECT\_CH\_ASSIGN\_IND<sub>R</sub> is equal to '1', the mobile station shall perform the  
25      following:
  - 26      + The mobile station shall set RTC\_NOM\_PWR<sub>S</sub> to RTC\_NOM\_PWR<sub>R</sub>.
  - 27      + If the mobile station has not received confirmation of delivery of the *Page*  
28      *Response Message* or the *Reconnect Message* sent in this substate, the  
29      mobile station shall perform the following:
    - 30      o Set RTC\_NOM\_PWR\_USE\_IND to '1'.
    - 31      o Set DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>S</sub> to  
32      DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>R</sub>.
- 33      – The mobile station shall set EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> to  
34      EARLY\_RL\_TRANSMIT\_IND<sub>R</sub>.
- 35      – If TX\_PWR\_LIMIT\_INCL<sub>R</sub> is set to '1', the mobile station shall perform the  
36      following:

- 1           + If the mobile station is being assigned to operate in the 1915MHz –
- 2           1920MHz block of the PCS band, the mobile station shall store the transmit
- 3           power limit  $TX\_PWR\_LIMIT_S = (TX\_PWR\_LIMIT_R - 30dB)$ ;
- 4           + Otherwise, the mobile station shall set  $TX\_PWR\_LIMIT_S$  to the limit defined
- 5           in [11] for the target base station.
- 6       – The mobile station shall store the channel indicator ( $CH\_IND_S = CH\_IND_R$ ) and
- 7       the mobile station shall perform the following actions:
- 8           + If  $CH\_IND_R$  equals '01', the mobile station shall set  $FPC\_FCH\_INIT\_SETPT_S$
- 9           to  $FPC\_FCH\_INIT\_SETPT_R$ ,  $FPC\_FCH\_CURR\_SETPT_S$  to
- 10           $FPC\_FCH\_INIT\_SETPT_S$ ,  $FPC\_FCH\_FER_S$  to  $FPC\_FCH\_FER_R$ ,
- 11           $FPC\_FCH\_MIN\_SETPT_S$  to  $FPC\_FCH\_MIN\_SETPT_R$ ,  $FPC\_FCH\_MAX\_SETPT_S$
- 12          to  $FPC\_FCH\_MAX\_SETPT_R$ , and  $FPC\_PRI\_CHAN_S$  to '0' if the mobile station
- 13          supports any Radio Configuration greater than 2. Then for each included
- 14          member of the Active Set, the mobile station shall store the following:
- 15           o Set the  $PILOT\_PN$  field to  $PILOT\_PN_R$ .
- 16           o Set the  $ADD\_PILOT\_REC\_INCL$  field to  $ADD\_PILOT\_REC\_INCL_R$ . If
- 17            $ADD\_PILOT\_REC\_INCL_R$  equals '1', the mobile station shall store the
- 18           following:
- 19           ◇ Set the  $PILOT\_REC\_TYPE$  field of  $PILOT\_REC$  to  $PILOT\_REC\_TYPE_R$ .
- 20           ◇ If  $PILOT\_REC\_TYPE_R$  equals '000', the mobile station shall set the
- 21            $TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to  $TD\_POWER\_LEVEL_R$  and
- 22           set the  $TD\_MODE$  field of  $PILOT\_REC$  to  $TD\_MODE_R$ .
- 23           ◇ If  $PILOT\_REC\_TYPE_R$  is equal to '001', the mobile station shall.
- 24           – Set the  $AUX\_PILOT\_QOF$  field of  $PILOT\_REC$  to  $QOF_R$ .
- 25           – Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 26            $AUX\_PILOT\_WALSH_R$  with the Walsh Code length specified by
- 27            $WALSH\_LENGTH_R$ .
- 28           ◇ If  $PILOT\_REC\_TYPE_R$  is equal to '010', the mobile station shall:
- 29           – Set the  $AUX\_PILOT\_TD\_QOF$  field of  $PILOT\_REC$  to  $QOF_R$ .
- 30           – Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 31            $AUX\_WALSH_R$  with the Walsh Code length specified by
- 32            $WALSH\_LENGTH_R$ .
- 33           – Set the  $AUX\_TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to
- 34            $AUX\_TD\_POWER\_LEVEL_R$ .
- 35           – Set the  $TD\_MODE$  field of  $NGHBR\_PILOT\_REC$  to  $TD\_MODE_R$ .
- 36           ◇ If  $PILOT\_REC\_TYPE_R$  is equal to '011', the mobile station shall:
- 37           – Set the  $SR3\_PRIMARY\_PILOT$  field of  $PILOT\_REC$  to
- 38            $SR3\_PRIMARY\_PILOT_R$ .



- 1                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 2                   SR3\_PILOT\_POWER1<sub>r</sub>.
- 3                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 4                   SR3\_PILOT\_POWER2<sub>r</sub>.
- 5           ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
- 6                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 7                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 8                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 9                   SR3\_PILOT\_POWER1<sub>r</sub>.
- 10                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 11                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 12                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 13                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 14                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 15                  WALSH\_LENGTH<sub>r</sub>.
- 16                  – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1
- 17                  field of PILOT\_REC to QOF1<sub>r</sub> and set the
- 18                  AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 19                  AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length specified by
- 20                  WALSH\_LENGTH1<sub>r</sub>.
- 21                  – Otherwise, set the AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF<sub>r</sub>
- 22                  and set the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 23                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 24                  WALSH\_LENGTH<sub>r</sub>.
- 25                  – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2
- 26                  field of PILOT\_REC to QOF2<sub>r</sub> and set the
- 27                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 28                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length specified by
- 29                  WALSH\_LENGTH2<sub>r</sub>.
- 30                  – Otherwise, set the AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>r</sub>
- 31                  and set the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 32                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 33                  WALSH\_LENGTH<sub>r</sub>.
- 34           ○ Set the PWR\_COMB\_IND field to PWR\_COMB\_IND<sub>r</sub>.
- 35           ○ Set the CODE\_CHAN\_FCH field to CODE\_CHAN\_FCH<sub>r</sub>.
- 36           ○ Set the QOF\_MASK\_ID\_FCH field to QOF\_MASK\_ID\_FCH<sub>r</sub>.
- 37   + If CH\_IND<sub>r</sub> equals '01' and 3X\_FCH\_INFO\_INCL<sub>r</sub> equals '1', for each
- 38   included member of the Active Set, the mobile station store the following:

- 1           o If  $3X\_FCH\_LOW\_INCL_r$  equals '1', set the  $QOF\_MASK\_ID\_FCH\_LOW$  field
- 2           to  $QOF\_MASK\_ID\_FCH\_LOW_r$  and the  $CODE\_CHAN\_FCH\_LOW$  field to
- 3            $CODE\_CHAN\_FCH\_LOW_r$ . Otherwise, set the  $QOF\_MASK\_ID\_FCH\_LOW$
- 4           field to  $QOF\_MASK\_ID\_FCH_r$  and the  $CODE\_CHAN\_FCH\_LOW$  to
- 5            $CODE\_CHAN\_FCH_r$ .
- 6           o If  $3X\_FCH\_HIGH\_INCL_r$  equals '1', set the  $QOF\_MASK\_ID\_FCH\_HIGH$
- 7           field to  $QOF\_MASK\_ID\_FCH\_HIGH_r$  and the  $CODE\_CHAN\_FCH\_HIGH$
- 8           field to  $CODE\_CHAN\_FCH\_HIGH_r$ . Otherwise, set the
- 9            $QOF\_MASK\_ID\_FCH\_HIGH$  field to  $QOF\_MASK\_ID\_FCH_r$  and the
- 10           $CODE\_CHAN\_FCH\_HIGH$  to  $CODE\_CHAN\_FCH_r$ .
- 11       + If  $CH\_IND_r$  equals '10', the mobile station shall set  $FPC\_DCCH\_INIT\_SETPT_s$
- 12       to  $FPC\_DCCH\_INIT\_SETPT_r$ ,  $FPC\_DCCH\_CURR\_SETPT_s$  to
- 13        $FPC\_DCCH\_INIT\_SETPT_s$ ,  $FPC\_DCCH\_FER_s$  to  $FPC\_DCCH\_FER_r$ ,
- 14        $FPC\_DCCH\_MIN\_SETPT_s$  to  $FPC\_DCCH\_MIN\_SETPT_r$ ,
- 15        $FPC\_DCCH\_MAX\_SETPT_s$  to  $FPC\_DCCH\_MAX\_SETPT_r$ ,
- 16        $FUNDICATED\_BCMC\_IND_s$  to  $FUNDICATED\_BCMC\_IND_r$ , and
- 17        $FPC\_PRI\_CHAN_s$  to '1' if the mobile station supports any Radio
- 18       Configuration greater than 2. Then for each included member of the Active
- 19       Set, the mobile station shall store the following:
- 20       o Set the  $PILOT\_PN$  to  $PILOT\_PN_r$ .
- 21       o Set the  $ADD\_PILOT\_REC\_INCL$  field to  $ADD\_PILOT\_REC\_INCL_r$ . If
- 22        $ADD\_PILOT\_REC\_INCL$  is equal to '1', the mobile station shall store the
- 23       following:
- 24       ◇ Set the  $PILOT\_REC\_TYPE$  field of  $PILOT\_REC$  to  $PILOT\_REC\_TYPE_r$ .
- 25       ◇ If  $PILOT\_REC\_TYPE_r$  equals '000', the mobile station shall set the
- 26        $TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to  $TD\_POWER\_LEVEL_r$  and
- 27       set the  $TD\_MODE$  field of  $PILOT\_REC$  to  $TD\_MODE_r$ .
- 28       ◇ If  $PILOT\_REC\_TYPE_r$  is equal to '001', the mobile station shall.
- 29       – Set the  $AUX\_PILOT\_QOF$  field of  $PILOT\_REC$  to  $QOF_r$ .
- 30       – Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 31        $AUX\_PILOT\_WALSH_r$  with the Walsh Code length specified by
- 32        $WALSH\_LENGTH_r$ .
- 33       ◇ If  $PILOT\_REC\_TYPE_r$  is equal to '010', the mobile station shall:
- 34       – Set the  $AUX\_PILOT\_TD\_QOF$  field of  $PILOT\_REC$  to  $QOF_r$ .
- 35       – Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 36        $AUX\_WALSH_r$  with the Walsh Code length specified by
- 37        $WALSH\_LENGTH_r$ .
- 38       – Set the  $AUX\_TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to
- 39        $AUX\_TD\_POWER\_LEVEL_r$ .
- 40       – Set the  $TD\_MODE$  field of  $PILOT\_REC$  to  $TD\_MODE_r$ .

- 1                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:
- 2                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 3                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 4                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 5                   SR3\_PILOT\_POWER1<sub>r</sub>.
- 6                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 7                   SR3\_PILOT\_POWER2<sub>r</sub>.
- 8                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
- 9                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 10                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 11                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 12                  SR3\_PILOT\_POWER1<sub>r</sub>.
- 13                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 14                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 15                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 16                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 17                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 18                  WALSH\_LENGTH<sub>r</sub>.
- 19                  – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1
- 20                  field of PILOT\_REC to QOF1<sub>r</sub> and set the
- 21                  AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 22                  AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length specified by
- 23                  WALSH\_LENGTH1<sub>r</sub>.
- 24                  – Otherwise, set the AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF<sub>r</sub>
- 25                  and set the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 26                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 27                  WALSH\_LENGTH<sub>r</sub>.
- 28                  – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2
- 29                  field of PILOT\_REC to QOF2<sub>r</sub> and set the
- 30                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 31                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length specified by
- 32                  WALSH\_LENGTH2<sub>r</sub>.
- 33                  – Otherwise, set the AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>r</sub>
- 34                  and set the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 35                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 36                  WALSH\_LENGTH<sub>r</sub>.
- 37                  ○ Set the PWR\_COMB\_IND field to PWR\_COMB\_IND<sub>r</sub>.
- 38                  ○ Set the CODE\_CHAN\_FCH field to CODE\_CHAN\_FCH<sub>r</sub>.
- 39                  ○ Set the QOF\_MASK\_ID\_FCH field to QOF\_MASK\_ID\_FCH<sub>r</sub>.

- 1           o Set the DCCH\_INCL field to DCCH\_INCL<sub>r</sub>. If DCCH\_INCL<sub>r</sub> equals '1', the
- 2           mobile station shall store the following:
- 3           ◇ Set the CODE\_CHAN\_DCCH field to CODE\_CHAN\_DCCH<sub>r</sub>.
- 4           ◇ Set the QOF\_MASK\_ID\_DCCH field to QOF\_MASK\_ID\_DCCH<sub>r</sub>.
- 5       + If CH\_IND<sub>r</sub> equals '10' and 3X\_DCCH\_INFO\_INCL<sub>r</sub> equals '1', for each
- 6       included member of the Active Set, the mobile station store the following:
- 7           o If 3X\_DCCH\_LOW\_INCL<sub>r</sub> equals '1', set the QOF\_MASK\_ID\_DCCH\_LOW
- 8           field to QOF\_MASK\_ID\_DCCH\_LOW<sub>r</sub> and the CODE\_CHAN\_DCCH\_LOW
- 9           field to CODE\_CHAN\_DCCH\_LOW<sub>r</sub>. Otherwise, set the
- 10          QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the
- 11          CODE\_CHAN\_DCCH\_LOW to CODE\_CHAN\_FCH<sub>r</sub>.
- 12          o If 3X\_DCCH\_HIGH\_INCL<sub>r</sub> equals '1', set the
- 13          QOF\_MASK\_ID\_DCCH\_HIGH field to QOF\_MASK\_ID\_DCCH\_HIGH<sub>r</sub> and
- 14          the CODE\_CHAN\_DCCH\_HIGH field to CODE\_CHAN\_DCCH\_HIGH<sub>r</sub>.
- 15          Otherwise, set the QOF\_MASK\_ID\_DCCH\_HIGH field to
- 16          QOF\_MASK\_ID\_FCH<sub>r</sub> and the CODE\_CHAN\_DCCH\_HIGH to
- 17          CODE\_CHAN\_FCH<sub>r</sub>.
- 18       + If CH\_IND<sub>r</sub> equals '10', and FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1', for each
- 19       included member of the Active Set, the mobile station shall store the
- 20       following:
- 21           o Set FOR\_CPCCH\_WALSH<sub>s</sub> to FOR\_CPCCH\_WALSH<sub>r</sub>.
- 22           o Set FOR\_CPCSCH<sub>s</sub> to FOR\_CPCSCH<sub>r</sub>.
- 23       + If CH\_IND<sub>r</sub> equals '11', the mobile station shall set FPC\_FCCH\_INIT\_SETPT<sub>s</sub>
- 24       to FPC\_FCH\_INIT\_SETPT<sub>r</sub>, FPC\_FCH\_CURR\_SETPT<sub>s</sub> to
- 25       FPC\_FCH\_INIT\_SETPT<sub>s</sub>, FPC\_FCH\_FER<sub>s</sub> to FPC\_FCH\_FER<sub>r</sub>,
- 26       FPC\_FCH\_MIN\_SETPT<sub>s</sub> to FPC\_FCH\_MIN\_SETPT<sub>r</sub>, FPC\_FCH\_MAX\_SETPT<sub>s</sub>
- 27       to FPC\_FCH\_MAX\_SETPT<sub>r</sub>, FPC\_DCCH\_INIT\_SETPT<sub>s</sub> to
- 28       FPC\_DCCH\_INIT\_SETPT<sub>r</sub>, FPC\_DCCH\_CURR\_SETPT<sub>s</sub> to
- 29       FPC\_DCCH\_INIT\_SETPT<sub>s</sub>, FPC\_DCCH\_FER<sub>s</sub> to FPC\_DCCH\_FER<sub>r</sub>,
- 30       FPC\_DCCH\_MIN\_SETPT<sub>s</sub> to FPC\_DCCH\_MIN\_SETPT<sub>r</sub>,
- 31       FPC\_DCCH\_MAX\_SETPT<sub>s</sub> to FPC\_DCCH\_MAX\_SETPT<sub>r</sub>, FPC\_PRI\_CHAN<sub>s</sub> to
- 32       FPC\_PRI\_CHAN<sub>r</sub>, and FUNDICATED\_BCNC\_IND<sub>s</sub> to
- 33       FUNDICATED\_BCNC\_IND<sub>r</sub>. Then for each included member of the Active
- 34       Set, the mobile station shall store the following:
- 35           o Set the PILOT\_PN to PILOT\_PN<sub>r</sub>.
- 36           o Set the ADD\_PILOT\_REC\_INCL field to ADD\_PILOT\_REC. If
- 37           ADD\_PILOT\_REC\_INCL is equal to '1', the mobile station shall store the
- 38           following:
- 39           ◇ Set the PILOT\_REC\_TYPE field of PILOT\_REC to PILOT\_REC\_TYPE<sub>r</sub>.

- 1                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> equals '000', the mobile station shall set the  
2                   TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL<sub>r</sub> and  
3                   set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 4                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station shall:  
5                   – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.  
6                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
7                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
8                   WALSH\_LENGTH<sub>r</sub>.
- 9                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station shall:  
10                  – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.  
11                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
12                  AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by  
13                  WALSH\_LENGTH<sub>r</sub>.  
14                  – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to  
15                  AUX\_TD\_POWER\_LEVEL<sub>r</sub>.  
16                  – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 17                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:  
18                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to  
19                  SR3\_PRIMARY\_PILOT<sub>r</sub>.  
20                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to  
21                  SR3\_PILOT\_POWER1<sub>r</sub>.  
22                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to  
23                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 24                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:  
25                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to  
26                  SR3\_PRIMARY\_PILOT<sub>r</sub>.  
27                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to  
28                  SR3\_PILOT\_POWER1<sub>r</sub>.  
29                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to  
30                  SR3\_PILOT\_POWER2<sub>r</sub>.  
31                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.  
32                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
33                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
34                  WALSH\_LENGTH<sub>r</sub>.

- 1                   – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1  
2                   field of PILOT\_REC to QOF1<sub>r</sub> and set the  
3                   AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to  
4                   AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length specified by  
5                   WALSH\_LENGTH1<sub>r</sub>.
- 6                   – Otherwise, set the AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF<sub>r</sub>  
7                   and set the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to  
8                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
9                   WALSH\_LENGTH<sub>r</sub>.
- 10                  – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2  
11                  field of PILOT\_REC to QOF2<sub>r</sub> and set the  
12                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to  
13                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length specified by  
14                  WALSH\_LENGTH2<sub>r</sub>.
- 15                  – Otherwise, set the AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>r</sub>  
16                  and set the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to  
17                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
18                  WALSH\_LENGTH<sub>r</sub>.
- 19                  o Set the PWR\_COMB\_IND field to PWR\_COMB\_IND<sub>r</sub>.
- 20                  o Set the CODE\_CHAN\_FCH field to CODE\_CHAN\_FCH<sub>r</sub>.
- 21                  o Set the QOF\_MASK\_ID\_FCH field to QOF\_MASK\_ID\_FCH<sub>r</sub>.
- 22                  o Set the CODE\_CHAN\_DCCH field to CODE\_CHAN\_DCCH<sub>r</sub>.
- 23                  o Set the QOF\_MASK\_ID\_DCCH field to QOF\_MASK\_ID\_DCCH.
- 24                  + If CH\_IND<sub>r</sub> equals '11' and 3X\_FCH\_INFO\_INCL<sub>r</sub> equals '1', for each  
25                  included member of the Active Set, the mobile station store the following:
  - 26                  o If 3X\_FCH\_LOW\_INCL<sub>r</sub> equals '1', set the QOF\_MASK\_ID\_FCH\_LOW field  
27                  to QOF\_MASK\_ID\_FCH\_LOW<sub>r</sub> and the CODE\_CHAN\_FCH\_LOW field to  
28                  CODE\_CHAN\_FCH\_LOW<sub>r</sub>. Otherwise, set the QOF\_MASK\_ID\_FCH\_LOW  
29                  field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the CODE\_CHAN\_FCH\_LOW to  
30                  CODE\_CHAN\_FCH<sub>r</sub>.
  - 31                  o If 3X\_FCH\_HIGH\_INCL<sub>r</sub> equals '1', set the QOF\_MASK\_ID\_FCH\_HIGH  
32                  field to QOF\_MASK\_ID\_FCH\_HIGH<sub>r</sub> and the CODE\_CHAN\_FCH\_HIGH  
33                  field to CODE\_CHAN\_FCH\_HIGH<sub>r</sub>. Otherwise, set the  
34                  QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the  
35                  CODE\_CHAN\_FCH\_HIGH to CODE\_CHAN\_FCH<sub>r</sub>.
- 36                  + If CH\_IND<sub>r</sub> equals '11' and 3X\_DCCH\_INFO\_INCL<sub>r</sub> equals '1', for each  
37                  included member of the Active Set, the mobile station store the following:

- 1           o If 3X\_DCCH\_LOW\_INCL<sub>r</sub> equals '1', set the QOF\_MASK\_ID\_DCCH\_LOW
- 2           field to QOF\_MASK\_ID\_DCCH\_LOW<sub>r</sub> and the CODE\_CHAN\_DCCH\_LOW
- 3           field to CODE\_CHAN\_DCCH\_LOW<sub>r</sub>. Otherwise, set the
- 4           QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the
- 5           CODE\_CHAN\_DCCH\_LOW to CODE\_CHAN\_FCH<sub>r</sub>.
- 6           o If 3X\_DCCH\_HIGH\_INCL<sub>r</sub> equals '1', set the
- 7           QOF\_MASK\_ID\_DCCH\_HIGH field to QOF\_MASK\_ID\_DCCH\_HIGH<sub>r</sub> and
- 8           the CODE\_CHAN\_DCCH\_HIGH field to CODE\_CHAN\_DCCH\_HIGH<sub>r</sub>.
- 9           Otherwise, set the QOF\_MASK\_ID\_DCCH\_HIGH field to
- 10          QOF\_MASK\_ID\_FCH<sub>r</sub> and the CODE\_CHAN\_DCCH\_HIGH to
- 11          CODE\_CHAN\_FCH<sub>r</sub>.
- 12       + If CH\_IND<sub>r</sub> equals '11' and FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1', the mobile
- 13       station shall store the following:
- 14       o Set REV\_FCH\_ASSIGNED<sub>s</sub> to REV\_FCH\_ASSIGNED<sub>r</sub>.
- 15       + If CH\_IND<sub>r</sub> equals '11' and FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1', the mobile
- 16       station shall set FCH\_BCMC\_IND to '1'; otherwise, the mobile station shall
- 17       set FCH\_BCMC\_IND to '0'.
- 18       + If CH\_IND<sub>r</sub> equals '11' and FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1' and
- 19       FOR\_CPCCH\_INFO\_INCL<sub>r</sub> is included and is set to '1', for each included
- 20       member of the Active Set, the mobile station shall store the following:
- 21       o Set FOR\_CPCCH\_WALSH<sub>s</sub> to FOR\_CPCCH\_WALSH<sub>r</sub>.
- 22       o Set FOR\_CPCSCH<sub>s</sub> to FOR\_CPCSCH<sub>r</sub>.
- 23       + If CH\_IND<sub>r</sub> equals '11' and FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1' and
- 24       ADD\_PLCM\_FOR\_FCH\_INCL<sub>r</sub> is included and is set to '1', the mobile station
- 25       shall store the following:
- 26       o Set ADD\_PLCM\_FOR\_FCH\_TYPE<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub>.
- 27       o Set ADD\_PLCM\_FOR\_FCH\_39<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_39<sub>r</sub> if
- 28       ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub> is equal to '1'.
- 29       – The mobile station shall initialize CODE\_CHAN\_LIST as described in 2.6.8, and
- 30       shall set SERV\_NEG<sub>s</sub> to enabled.
- 31       – If the mobile station is currently monitoring the Paging Channel, the mobile
- 32       station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile station shall
- 33       set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set IDLE\_SID to SID<sub>s</sub>,
- 34       IDLE\_NID to NID<sub>s</sub>, and IDLE\_P\_REV to P\_REV<sub>s</sub>.
- 35       – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall then tune to the new
- 36       frequency assignment.
- 37       – If DIRECT\_CH\_ASSIGN\_IND<sub>r</sub> is equal to '1' and RESPOND\_IND<sub>r</sub> is equal to '1',
- 38       the mobile station shall perform the following:
- 39       + If the mobile station is in *Mobile Station Idle State*, then the mobile station

shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a direct channel assignment respond indication within  $T_{33m}$  seconds after the *Extended Channel Assignment Message* is received; otherwise, the mobile station shall enter the *Page Response Substate* with a direct channel assignment respond indication.

Otherwise, the mobile station shall enter the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*.

- If  $ASSIGN\_MODE_r$  equals '101', the mobile station shall perform the following actions:
  - If  $PACA_s$  is equal to enabled, the mobile station shall set  $PACA_s$  to disabled and  $PACA\_CANCEL$  to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
  - If  $GRANTED\_MODE_r$  equals '11',  $P\_REV\_IN\_USE_s$  is less than 11, and the mobile station did not include a  $SYNC\_ID$  field in the *Page Response Message* or *Reconnect Message* that was transmitted in this substate, the mobile station shall send a *Mobile Station Reject Order* with  $ORDQ$  field set to '00000110' (capability not supported by the mobile station) and shall remain in this state.
  - If  $GRANTED\_MODE_r$  equals '11',  $SR\_ID\_RESTORE_r$  is not equal to '111', and a service option connection record corresponding to  $SR\_ID\_RESTORE_r$  or  $SR\_ID\_RESTORE\_BITMAP_r$  is not contained in the stored service configuration, the mobile station shall send a *Mobile Station Reject Order* with  $ORDQ$  field set to '00000110' (capability not supported by the mobile station) and shall remain in the current state,.
  - If  $SYNC\_ID\_INCL_r$  is included and equals '1', and the mobile station does not have stored service configuration corresponding to  $SYNC\_ID_r$  for the current  $SID_s$  and  $NID_s$  pair, the mobile station shall send a *Mobile Station Reject Order* with  $ORDQ$  field set to '00011011' (Requested stored service configuration is not available) and shall remain in the current state.
  - If the mobile station does not support any of the specified Radio Configurations ( $FOR\_PDCH\_RC$ ,  $FOR\_FCH\_DCCH\_RC$  or  $REV\_FCH\_DCCH\_RC$ ), the mobile station shall send a *Mobile Station Reject Order* with the  $ORDQ$  field set to '00000110' (capability not supported by the mobile station) and remain in the current state.
  - If  $EXT\_CH\_IND_r$  signals the allocation of a F-FCH or R-FCH and the mobile station does not support the Fundamental Channel, the mobile station shall send a *Mobile Station Reject Order* with the  $ORDQ$  field set to '00000110' (capability not supported by the mobile station) and remain in the current state.
  - If  $EXT\_CH\_IND_r$  signals the allocation of a F-DCCH or R-DCCH and the mobile station does not support the Dedicated Control Channel, the mobile station shall send a *Mobile Station Reject Order* with the  $ORDQ$  field set to '00000110' (capability not supported by the mobile station) and remain in the current state.



- 1       – If  $FREQ\_INCL_r$  equals '1' and if the band class ( $BAND\_CLASS_r$ ) is not supported
- 2       by the mobile station, the mobile station shall send a *Mobile Station Reject*
- 3       *Order* with  $ORDQ$  field set to '00000110' (capability not supported by the mobile
- 4       station) and remain in the current state.
- 5       – If  $PLCM\_TYPE_r$  equals '0010' and  $IMSI\_O$  is derived from  $IMSI\_T$ , or if
- 6        $PLCM\_TYPE_r$  equals '0011' and  $IMSI\_O$  is derived from  $IMSI\_M$ , the mobile
- 7       station shall send a *Mobile Station Reject Order* with the  $ORDQ$  field set to
- 8       '00011100' ( $PLCM\_TYPE$  mismatch) and remain in the current state.
- 9       – If  $FUNDICATED\_BCMC\_IND_r$  equals '1', and the mobile station does not
- 10      support  $BCMC$  reception on the Forward Fundicated Channels assigned in this
- 11      message, the mobile station shall send a *Mobile Station Reject Order* with the
- 12       $ORDQ$  field set to '00000110' (capability not supported by the mobile station)
- 13      and remain in the current state.
- 14      – If the mobile station does not send a *Mobile Station Reject Order* as specified
- 15      above, it shall continue to perform the actions specified below.
- 16      – Layer 3 shall send  $SIG\text{-}HandoffPDCH\text{-}Indication$  ( $handoff\_type = ASSIGN$ ) to the
- 17      MAC layer.
- 18      – If  $FREQ\_INCL_r$  equals '1', the mobile station shall set
- 19          +  $CDMABAND_s = BAND\_CLASS_r$
- 20          +  $CDMACH_s = CDMA\_FREQ_r$
- 21      – The mobile station shall store the bypass indicator ( $BYPASS\_ALERT\_ANSWER_s$
- 22      =  $BYPASS\_ALERT\_ANSWER_r$ ).
- 23      – The mobile station shall store the granted mode indicator ( $GRANTED\_MODE_s =$
- 24       $GRANTED\_MODE_r$ ). Furthermore, if  $GRANTED\_MODE_r$  equals '11', the mobile
- 25      station shall store service reference to be restored ( $SR\_ID\_RESTORE_s =$
- 26       $SR\_ID\_RESTORE_r$ ).
- 27      – If  $SR\_ID\_RESTORE_r$  equals '000', the mobile station shall store bitmap of
- 28      service reference identifiers to be restored ( $SR\_ID\_RESTORE\_BITMAP_s =$
- 29       $SR\_ID\_RESTORE\_BITMAP_r$ ).
- 30      – If  $SYNC\_ID\_INCL_r$  is included and equals '1', the mobile station shall store the
- 31      service configuration synchronization identifier ( $SYNC\_ID_s = SYNC\_ID_r$ ).
- 32      – The mobile station shall store the frame offset ( $FRAME\_OFFSET_s =$
- 33       $FRAME\_OFFSET_r$ ).
- 34      – The mobile station shall store the message encryption mode indicator
- 35      ( $ENCRYPT\_MODE_s = ENCRYPT\_MODE_r$ ).
- 36      – The mobile station shall perform the following procedures in the order listed
- 37      below:
- 38          + If  $D\_SIG\_ENCRYPT\_MODE_r$  is included, the mobile station shall perform the
- 39          following:

- 1           o If D\_SIG\_ENCRYPT\_MODE<sub>r</sub> is equal to '000', the mobile station shall set  
2           D\_SIG\_ENCRYPT\_MODE<sub>s</sub> to C\_SIG\_ENCRYPT\_MODE<sub>s</sub>; otherwise, the  
3           mobile station shall set D\_SIG\_ENCRYPT\_MODE<sub>s</sub> to  
4           D\_SIG\_ENCRYPT\_MODE<sub>r</sub>, ENC\_KEY<sub>s</sub> to the most recently generated  
5           CMEAKEY in the mobile station associated with AUTHR of the *Page*  
6           *Response Message*, and EXT\_ENCRYPT\_SEQ[0] and  
7           EXT\_ENCRYPT\_SEQ[1] to 256 × ENC\_SEQ\_H (the ENC\_SEQ\_H field in  
8           the *Page Response Message*).
- 9           + If ENC\_KEY\_SIZE<sub>r</sub> is included, the mobile station shall set ENC\_KEY\_SIZE<sub>s</sub>  
10          to ENC\_KEY\_SIZE<sub>r</sub>.
- 11          + If C\_SIG\_ENCRYPT\_MODE is included, the mobile station shall set  
12          C\_SIG\_ENCRYPT\_MODE<sub>s</sub> to C\_SIG\_ENCRYPT\_MODE<sub>r</sub>.
- 13          – The mobile station shall set EXT\_CH\_IND<sub>s</sub> to EXT\_CH\_IND<sub>r</sub>.
- 14          – The mobile station shall set CH\_IND<sub>s</sub> to '00'.
- 15          – If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH or a F-DCCH, the mobile  
16          station shall store the Forward power control subchannel relative gain  
17          [FPC\_SUBCHAN\_GAIN<sub>s</sub> = FPC\_SUBCHAN\_GAIN<sub>r</sub>).
- 18          – The mobile station shall set RLGAIN\_ADJ<sub>s</sub> to RLGAIN\_ADJ<sub>r</sub>.
- 19          – The mobile station shall set PLCM\_TYPE<sub>s</sub> to PLCM\_TYPE<sub>r</sub> if PLCM\_TYPE\_INCL<sub>r</sub>  
20          is equal to '1'; otherwise, the mobile station shall set PLCM\_TYPE<sub>s</sub> as follows:  
21          + If P\_REV\_IN\_USE<sub>s</sub> is less than 11, set PLCM\_TYPE<sub>s</sub> to '0000'; otherwise set  
22          PLCM\_TYPE<sub>s</sub> to '0100'.
- 23          – The mobile station shall set PLCM\_39<sub>s</sub> to PLCM\_39<sub>r</sub> if PLCM\_TYPE<sub>r</sub> is equal to  
24          '0001'.
- 25          – The mobile station shall set FUNDICATED\_BCMC\_IND<sub>s</sub> to  
26          FUNDICATED\_BCMC\_IND<sub>r</sub>. If FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1' and the  
27          EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH, the mobile station shall set  
28          FCH\_BCMC\_IND to '1'; otherwise, the mobile station shall set FCH\_BCMC\_IND  
29          to '0'.
- 30          – If FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1' and ADD\_PLCM\_FOR\_FCH\_INCL<sub>r</sub> is  
31          included and is set to '1', the mobile station shall store the following:  
32          + Set ADD\_PLCM\_FOR\_FCH\_TYPE<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub>.
- 33          + Set ADD\_PLCM\_FOR\_FCH\_39<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_39<sub>r</sub> if  
34          ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub> is equal to '1'.
- 35          – If EXT\_CH\_IND<sub>r</sub> signals the allocation of R-FCH, the mobile station shall set  
36          REV\_FCH\_GATING\_MODE<sub>s</sub> to REV\_FCH\_GATING\_MODE<sub>r</sub>.
- 37          – The mobile station shall set REV\_PWR\_CNTL\_DELAY<sub>s</sub> to  
38          REV\_PWR\_CNTL\_DELAY<sub>r</sub> if REV\_PWR\_CNTL\_DELAY\_INCL<sub>r</sub> is equal to '1'.

- 1       – The mobile station shall set FULL\_CI\_FEEDBACK\_IND<sub>S</sub> to
- 2       FULL\_CI\_FEEDBACK\_IND<sub>R</sub>.
- 3       – If EXT\_CH\_IND<sub>R</sub> equals '01000', the mobile station shall set
- 4       FOR\_CPCCH\_RATE<sub>S</sub> to FOR\_CPCCH\_RATE<sub>R</sub>, and FOR\_CPCCH\_UPDATE\_RATE<sub>S</sub>
- 5       to FOR\_CPCCH\_UPDATE\_RATE<sub>R</sub>; otherwise, the mobile station shall set
- 6       FOR\_CPCCH\_RATE<sub>S</sub> to '00', and FOR\_CPCCH\_UPDATE\_RATE<sub>S</sub> to '00'.
- 7       – The mobile station shall set REV\_CQICH\_FRAME\_OFFSET<sub>S</sub> to
- 8       REV\_CQICH\_FRAME\_OFFSET<sub>R</sub>.
- 9       – The mobile station shall set REV\_CQICH\_REPS<sub>S</sub> to REV\_CQICH\_REPS<sub>R</sub>.
- 10      – The mobile station shall set REV\_ACKCH\_REPS<sub>S</sub> to REV\_ACKCH\_REPS<sub>R</sub>.
- 11      – The mobile station shall set FOR\_PDCH\_RC<sub>S</sub> to FOR\_PDCH\_RC<sub>R</sub>.
- 12      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a R-PDCH, the mobile station shall set
- 13      REV\_PDCH\_RC<sub>S</sub> to REV\_PDCH\_RC<sub>R</sub>.
- 14      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-FCH, the mobile station shall set
- 15      FOR\_FCH\_RC<sub>S</sub> to FOR\_FCH\_DCCH\_RC<sub>R</sub>.
- 16      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-DCCH, the mobile station shall set
- 17      FOR\_DCCH\_RC<sub>S</sub> to FOR\_FCH\_DCCH\_RC<sub>R</sub>.
- 18      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a R-FCH, the mobile station shall set
- 19      REV\_FCH\_RC<sub>S</sub> to REV\_FCH\_DCCH\_RC<sub>R</sub>.
- 20      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a R-DCCH, the mobile station shall set
- 21      REV\_DCCH\_RC<sub>S</sub> to REV\_FCH\_DCCH\_RC<sub>R</sub>.
- 22      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-FCH and a F-DCCH, the mobile
- 23      station shall set FPC\_PRI\_CHAN<sub>S</sub> to FPC\_PRI\_CHAN<sub>R</sub>.
- 24      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-FCH, the mobile station shall set
- 25      FPC\_FCH\_INIT\_SETPT<sub>S</sub> to FPC\_FCH\_INIT\_SETPT<sub>R</sub>, FPC\_FCH\_CURR\_SETPT<sub>S</sub> to
- 26      FPC\_FCH\_INIT\_SETPT<sub>S</sub>, FPC\_FCH\_FER<sub>S</sub> to FPC\_FCH\_FER<sub>R</sub>,
- 27      FPC\_FCH\_MIN\_SETPT<sub>S</sub> to FPC\_FCH\_MIN\_SETPT<sub>R</sub>, FPC\_FCH\_MAX\_SETPT<sub>S</sub> to
- 28      FPC\_FCH\_MAX\_SETPT<sub>R</sub>.
- 29      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-DCCH, the mobile station shall set
- 30      FPC\_DCCH\_INIT\_SETPT<sub>S</sub> to FPC\_DCCH\_INIT\_SETPT<sub>R</sub>,
- 31      FPC\_DCCH\_CURR\_SETPT<sub>S</sub> to FPC\_DCCH\_INIT\_SETPT<sub>S</sub>, FPC\_DCCH\_FER<sub>S</sub> to
- 32      FPC\_DCCH\_FER<sub>R</sub>, FPC\_DCCH\_MIN\_SETPT<sub>S</sub> to FPC\_DCCH\_MIN\_SETPT<sub>R</sub>,
- 33      FPC\_DCCH\_MAX\_SETPT<sub>S</sub> to FPC\_DCCH\_MAX\_SETPT<sub>R</sub>.
- 34      – If EARLY\_RL\_TRANSMIT\_IND<sub>R</sub> is included, the mobile station shall set
- 35      EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> to EARLY\_RL\_TRANSMIT\_IND<sub>R</sub>; otherwise, the
- 36      mobile station shall set EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> to '0'.

- 1       – If the FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>R</sub> is included, the mobile station shall
- 2       set FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> to
- 3       FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>R</sub>; otherwise, the mobile station shall set
- 4       FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> to '0'. If
- 5       FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> equals '1', the mobile station shall store
- 6       FIXED\_NUM\_PREAMBLE<sub>S</sub> to FIXED\_NUM\_PREAMBLE<sub>R</sub>.
- 7       – If TX\_PWR\_LIMIT\_INCL<sub>R</sub> is set to '1', the mobile station shall perform the
- 8       following:
  - 9       + If the mobile station is being assigned to operate in the 1915MHz –
  - 10       1920MHz block of the PCS band, the mobile station shall store the transmit
  - 11       power limit TX\_PWR\_LIMIT<sub>S</sub> = (TX\_PWR\_LIMIT<sub>R</sub> - 30dB);
  - 12       + Otherwise, the mobile station shall set TX\_PWR\_LIMIT<sub>S</sub> to the limit defined
  - 13       in [11] for the target base station.
- 14       – If FOR\_PDCH\_PARMs\_INCL<sub>R</sub> is equal to '1', the mobile station shall set
- 15       FOR\_PDCH\_COMMON\_PARMs<sub>S</sub> = '0'; otherwise, if
- 16       FOR\_PDCH\_COMMON\_PARMs<sub>S</sub> is equal to '0', the mobile station shall send a
- 17       *Mobile Station Reject Order* with ORDQ equal to '00000011' (message structure
- 18       not acceptable) and remain in the current state.
- 19       – If FOR\_PDCH\_RLGAIN\_INCL<sub>R</sub> is included and equal to '1', the mobile station
- 20       shall set RLGAIN\_ACKCH\_PILOT<sub>S</sub> to RLGAIN\_ACKCH\_PILOT<sub>R</sub>, and
- 21       RLGAIN\_CQICH\_PILOT<sub>S</sub> to RLGAIN\_CQICH\_PILOT<sub>R</sub>.
- 22       – If FOR\_PDCH\_PARMs\_INCL<sub>R</sub> is equal to '1', the mobile station shall set
- 23       NUM\_SOFT\_SWITCHING\_FRAMES<sub>S</sub> to NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1,
- 24       and NUM\_SOFT\_SWITCHING\_FRAMES<sub>S</sub> to
- 25       NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1.
- 26       – If CHM\_SWITCHING\_PARMs\_INCL<sub>R</sub> is included and equal to '1', the mobile
- 27       station shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to
- 28       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1, and
- 29       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to
- 30       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1.
- 31       – If CHM\_SWITCHING\_PARMs\_INCL<sub>R</sub> is included and equal to '0', the mobile
- 32       station shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to
- 33       NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1, and
- 34       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to
- 35       NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1.
- 36       – If FOR\_PDCH\_PARMs\_INCL<sub>R</sub> is equal to '1', the mobile station shall set
- 37       NUM\_SOFT\_SWITCHING\_SLOTS<sub>S</sub> according to Table 3.7.2.3.2.21-9 based on
- 38       the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>R</sub>.
- 39       – If FOR\_PDCH\_PARMs\_INCL<sub>R</sub> is equal to '1', the mobile station shall set
- 40       NUM\_SOFT\_SWITCHING\_SLOTS<sub>S</sub> according to Table 3.7.2.3.2.21-9 based on
- 41       the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>R</sub>.

- 1       – If CHM\_SWITCHING\_PARMES\_INCL<sub>r</sub> is included and equal to '1', the mobile  
2       station shall:
  - 3       + Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table 3.7.2.3.2.21-  
4       9 based on the value of NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>r</sub>.
  - 5       + Set NUM\_SOFTER\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table  
6       3.7.2.3.2.21-9 based on the value of  
7       NUM\_SOFTER\_SWITCHING\_SLOTS\_CHM<sub>r</sub>.
- 8       – If CHM\_SWITCHING\_PARMES\_INCL<sub>r</sub> is included and equal to '0', the mobile  
9       station shall:
  - 10      + Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table 3.7.2.3.2.21-  
11      9 based on the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>r</sub>.
  - 12      + Set NUM\_SOFTER\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table  
13      3.7.2.3.2.21-9 based on the value of NUM\_SOFTER\_SWITCHING\_SLOTS<sub>r</sub>.
- 14      – If FOR\_PDCH\_PARMES\_INCL<sub>r</sub> is equal to '1', the mobile station shall set  
15      PDCH\_SOFT\_SWITCHING\_DELAY<sub>s</sub> to PDCH\_SOFT\_SWITCHING\_DELAY<sub>r</sub> + 1,  
16      and PDCH\_SOFTER\_SWITCHING\_DELAY<sub>s</sub> to  
17      PDCH\_SOFTER\_SWITCHING\_DELAY<sub>r</sub> + 1.
- 18      – If TX\_DISABLED\_TIMER\_INCL<sub>r</sub> is equal to '1', the mobile station shall set  
19      TX\_DISABLED\_TIMER<sub>s</sub> to TX\_DISABLED\_TIMER<sub>r</sub>; otherwise, the mobile station  
20      shall set TX\_DISABLED\_TIMER<sub>s</sub> to T<sub>81m</sub>.
- 21      – If EXT\_CH\_IND<sub>r</sub> signals the allocation of a R-PDCH, the mobile station shall:
  - 22      + Set FOR\_GCH\_ASSIGNED<sub>s</sub> to FOR\_GCH\_ASSIGNED<sub>r</sub>.
  - 23      + Set FOR\_RCCH\_ASSIGNED<sub>s</sub> to FOR\_RCCH\_ASSIGNED<sub>r</sub>.
  - 24      + If FOR\_RCCH\_ASSIGNED<sub>s</sub> is equal to '1', the mobile station shall:
    - 25      o Set FOR\_RCCH\_DRC\_MODE<sub>s</sub> to FOR\_RCCH\_DRC\_MODE<sub>r</sub>.
    - 26      o Set FOR\_RCCH\_REPETITION<sub>s</sub> to FOR\_RCCH\_REPETITION<sub>r</sub>.
    - 27      o Set FOR\_RCCH\_UPDATE\_RATE<sub>s</sub> to FOR\_RCCH\_UPDATE\_RATE<sub>r</sub>.
  - 28      + If FOR\_ACKCH\_ASSIGNED<sub>r</sub> is equal to '1', the mobile station shall set  
29      FOR\_ACKCH\_MODE<sub>s</sub> to FOR\_ACKCH\_MODE<sub>r</sub>.
  - 30      + If FOR\_ACKCH\_COMB\_SEL<sub>r</sub> is included, the mobile station shall set  
31      FOR\_ACKCH\_COMB\_SEL<sub>s</sub> to FOR\_ACKCH\_COMB\_SEL<sub>r</sub>; otherwise, the  
32      mobile station shall set FOR\_ACKCH\_COMB\_SEL<sub>s</sub> to '0'.
  - 33      + If REV\_PDCH\_RLGAIN\_INCL<sub>r</sub> is included and equal to '1', the mobile station  
34      shall perform the following:
    - 35      o The mobile station shall set RLGAIN\_SPICH\_PILOT<sub>s</sub> to  
36      RLGAIN\_SPICH\_PILOT<sub>r</sub>.
    - 37      o The mobile station shall set RLGAIN\_REQCH\_PILOT<sub>s</sub> to  
38      RLGAIN\_REQCH\_PILOT<sub>r</sub>.

- 1           o The mobile station shall set  $RLGAIN\_PDCCH\_PILOT_S$  to
- 2            $RLGAIN\_PDCCH\_PILOT_R$ .
- 3           + If  $REV\_PDCH\_PARMS\_1\_INCL_R$  is included and equal to '1', the mobile
- 4           station shall perform the following:
- 5           o The mobile station shall set  $REV\_PDCH\_TABLE\_SEL_S$  to
- 6            $REV\_PDCH\_TABLE\_SEL_R$ .
- 7           o The mobile station shall set  $REV\_PDCH\_MAX\_AUTO\_TPR_S$  to
- 8            $REV\_PDCH\_MAX\_AUTO\_TPR_R$ .
- 9           – Otherwise, the mobile station shall:
- 10          + Set  $FOR\_GCH\_ASSIGNED_S$  to NULL.
- 11          + Set  $FOR\_RCCH\_ASSIGNED_S$  to NULL.
- 12          – For each included member of the Active Set, the mobile station shall store the
- 13          following:
- 14          + Set the  $PILOT\_PN$  field to  $PILOT\_PN_R$ .
- 15          + Set the  $ADD\_PILOT\_REC\_INCL$  field to  $ADD\_PILOT\_REC\_INCL_R$ . If
- 16           $ADD\_PILOT\_REC\_INCL_R$  equals '1', the mobile station shall store the
- 17          following:
- 18          o Set the  $PILOT\_REC\_TYPE$  field of  $PILOT\_REC$  to  $PILOT\_REC\_TYPE_R$ .
- 19          o If  $PILOT\_REC\_TYPE_R$  equals '000', the mobile station shall set the
- 20           $TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to  $TD\_POWER\_LEVEL_R$  and set
- 21          the  $TD\_MODE$  field of  $PILOT\_REC$  to  $TD\_MODE_R$ .
- 22          o If  $PILOT\_REC\_TYPE_R$  is equal to '001', the mobile station shall.
- 23            ◇ Set the  $AUX\_PILOT\_QOF$  field of  $PILOT\_REC$  to  $QOF_R$ .
- 24            ◇ Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 25             $AUX\_PILOT\_WALSH_R$  with the Walsh Code length specified by
- 26             $WALSH\_LENGTH_R$ .
- 27          o If  $PILOT\_REC\_TYPE_R$  is equal to '010', the mobile station shall:
- 28            ◇ Set the  $AUX\_PILOT\_TD\_QOF$  field of  $PILOT\_REC$  to  $QOF_R$ .
- 29            ◇ Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 30             $AUX\_WALSH_R$  with the Walsh Code length specified by
- 31             $WALSH\_LENGTH_R$ .
- 32            ◇ Set the  $AUX\_TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to
- 33             $AUX\_TD\_POWER\_LEVEL_R$ .
- 34            ◇ Set the  $TD\_MODE$  field of  $NGHBR\_PILOT\_REC$  to  $TD\_MODE_R$ .
- 35          o Set  $FOR\_PDCH\_INCL_S$  to  $FOR\_PDCH\_INCL_R$ .
- 36          o If  $FOR\_PDCH\_INCL_R$  is equal to '1', the mobile station shall perform the
- 37          following:

- 1                   ◇ If FOR\_PDCH\_PARMS\_INCL<sub>R</sub> is equal to '1', the mobile station shall
- 2                   store the following parameters:
- 3                   – The mobile station shall set WALSH\_TABLE\_ID<sub>S</sub> to
- 4                   WALSH\_TABLE\_ID<sub>R</sub>.
- 5                   – The mobile station shall set NUM\_PDCCH<sub>S</sub> to NUM\_PDCCH<sub>R</sub>.
- 6                   – The mobile station shall store FOR\_PDCCH\_WALSH<sub>S</sub>[i] to the i<sup>th</sup>
- 7                   occurrence of FOR\_PDCCH\_WALSH<sub>R</sub>.
- 8                   ◇ The mobile station shall set MAC\_ID<sub>S</sub> to MAC\_ID<sub>R</sub>.
- 9                   ◇ The mobile station shall set REV\_CQICH\_COVER<sub>S</sub> to
- 10                  REV\_CQICH\_COVER<sub>R</sub>.
- 11                  ◇ If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-CPCCH, the mobile
- 12                  station shall set FOR\_CPCCH\_WALSH<sub>S</sub> to FOR\_CPCCH\_WALSH<sub>R</sub>,
- 13                  and, FOR\_CPCSCH<sub>S</sub> to FOR\_CPCSCH<sub>R</sub>.
- 14                  ◇ The mobile station shall store FOR\_PDCCH\_WALSH<sub>S</sub>[i] to the i<sup>th</sup>
- 15                  occurrence of FOR\_PDCCH\_WALSH<sub>R</sub>.
- 16                  o The mobile station shall set PWR\_COMB\_IND<sub>S</sub> to PWR\_COMB\_IND<sub>R</sub>.
- 17                  o If PDCH\_GROUP\_IND\_INCL<sub>R</sub> is equal to '1', the mobile station shall set
- 18                  PDCH\_GROUP\_IDENTIFIER<sub>S</sub> as follows:
- 19                  ◇ If this is the first pilot in the list that has a F-PDCH assignment, the
- 20                  mobile station shall perform the following:
- 21                  – The mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to '000';
- 22                  ◇ Otherwise, the mobile station shall perform the following:
- 23                  – If PDCH\_GROUP\_IND<sub>R</sub> is set to '1', the mobile station shall set
- 24                  PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to the same value as that of the
- 25                  previous pilot in the list that has a F-PDCH assigned; otherwise,
- 26                  the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to the
- 27                  value one greater than that of the previous pilot in the list that
- 28                  has a F-PDCH assigned.
- 29                  o Otherwise, the mobile station shall perform the following:
- 30                  ◇ If this is the first pilot in the list that has a F-PDCH assignment, the
- 31                  mobile station shall perform the following:
- 32                  – The mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to '000';
- 33                  ◇ Otherwise, the mobile station shall perform the following:
- 34                  – If F-PDCH is assigned for this pilot, the mobile station shall
- 35                  perform the following:

- 1                                   + If PWR\_COMB\_IND<sub>r</sub> is set to '1', and there are no pilots
- 2                                   between this pilot and the previous pilot in the list that has a
- 3                                   F-PDCH assigned, the mobile station shall set
- 4                                   PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the same value as that of the
- 5                                   previous pilot in the list that has a F-PDCH assigned.
- 6                                   + If PWR\_COMB\_IND<sub>r</sub> is set to '1', and all pilots between this
- 7                                   pilot and the previous pilot in the list that has a F-PDCH
- 8                                   assigned have PWR\_COMB\_IND set to '1', the mobile station
- 9                                   shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the same value as
- 10                                  that of the previous pilot in the list that has a F-PDCH
- 11                                  assigned.
- 12                                  + Otherwise, the mobile station shall set
- 13                                  PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the value one greater than
- 14                                  that of the previous pilot in the list.
- 15                                  - Otherwise, the mobile station shall set
- 16                                  PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to NULL.
- 17                   o If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH, the mobile station
- 18                   shall set CODE\_CHAN\_FCH<sub>s</sub> = CODE\_CHAN\_FCH<sub>r</sub>, and
- 19                   QOF\_MASK\_ID\_FCH<sub>s</sub> = QOF\_MASK\_ID\_FCH<sub>r</sub>.
- 20                   o If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-DCCH, the mobile station
- 21                   shall set CODE\_CHAN\_DCCH<sub>s</sub> = CODE\_CHAN\_DCCH<sub>r</sub>, and
- 22                   QOF\_MASK\_ID\_DCCH<sub>s</sub> = QOF\_MASK\_ID\_DCCH<sub>r</sub>.
- 23                   o If FOR\_PDCH\_INCL<sub>r</sub> is equal to '1', EXT\_CH\_IND<sub>r</sub> signals the allocation
- 24                   of a R-PDCH, and FOR\_ACKCH\_ASSIGNED<sub>r</sub> is equal to '1', the mobile
- 25                   station shall set FOR\_ACKCH\_WALSH\_INDEX<sub>s</sub> to
- 26                   FOR\_ACKCH\_WALSH\_INDEX<sub>r</sub>, and FOR\_ACKSCH\_INDEX<sub>s</sub> to
- 27                   FOR\_ACKSCH\_INDEX<sub>r</sub>.
- 28                   o If FOR\_RCCH\_INCL<sub>r</sub> is included and set to '1', the mobile station shall
- 29                   do the following:
- 30                    ◇ Set FOR\_RCCH\_WALSH\_INDEX<sub>s</sub> to FOR\_RCCH\_WALSH\_INDEX<sub>r</sub>.
- 31                    ◇ Set FOR\_RCSCH\_INDEX<sub>s</sub> to FOR\_RCSCH\_INDEX<sub>r</sub>.
- 32                   o If FOR\_PDCH\_INCL<sub>r</sub> is equal to '1', and if FOR\_GCH\_ASSIGNED<sub>r</sub> is
- 33                   included and set to '1', the mobile station shall perform the following:
- 34                    ◇ Set NUM\_FOR\_GCH<sub>s</sub> to NUM\_FOR\_GCH<sub>r</sub>, and
- 35                    ◇ For each of the NUM\_FOR\_GCH<sub>s</sub> occurrences of
- 36                    FOR\_GCH\_WALSH\_INDEX<sub>r</sub>, the mobile station shall set
- 37                    FOR\_GCH\_WALSH\_INDEX<sub>s</sub>[j] to FOR\_GCH\_WALSH\_INDEX<sub>r</sub>[j].
- 38                   o Otherwise, the mobile station shall perform the following:
- 39                    ◇ Set NUM\_FOR\_GCH<sub>s</sub> to 0, and



1                   ◇ Set FOR\_GCH\_WALSH\_INDEX<sub>S</sub> to NULL.

2           – The mobile station shall initialize CODE\_CHAN\_LIST as described in 2.6.8, and  
3           shall set SERV\_NEG<sub>S</sub> to enabled.

4           – If DIRECT\_CH\_ASSIGN\_IND<sub>R</sub> is equal to '1', the mobile station shall perform the  
5           following:

6           + The mobile station shall set RTC\_NOM\_PWR<sub>S</sub> to RTC\_NOM\_PWR<sub>R</sub>.

7           + If the mobile station has not received confirmation of delivery of the *Page*  
8           *Response Message* or the *Reconnect Message* sent in this substate, the  
9           mobile station shall perform the following:

10          o Set RTC\_NOM\_PWR\_USE\_IND to '1'.

11          o Set DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>S</sub> to  
12          DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>R</sub>

13          – If FREQ\_INCL<sub>R</sub> equals '1', the mobile station shall then tune to the new  
14          frequency assignment.

15          – If DIRECT\_CH\_ASSIGN\_IND<sub>R</sub> is equal to '1' and RESPOND\_IND<sub>R</sub> is equal to '1',  
16          the mobile station shall perform the following:

17          + If the mobile station is in *Mobile Station Idle State*, then the mobile station  
18          shall enter the *Update Overhead Information Substate* of the *System Access*  
19          *State* (see 2.6.3.2) with a direct channel assignment respond indication  
20          within T<sub>33m</sub> seconds after the *Extended Channel Assignment Message* is  
21          received; otherwise, the mobile station shall enter the *Page Response*  
22          *Substate* with a direct channel assignment respond indication.

23                 Otherwise, the mobile station shall enter the *Traffic Channel Initialization*  
24                 *Substate* of the *Mobile Station Control on the Traffic Channel State*.

## 25       8. Fast Call Setup Order:

26           • If ORDQ<sub>R</sub> is equal to '00000000', the mobile station shall process the message  
27           and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.

28           • If ORDQ<sub>R</sub> is equal to '00000001', the mobile station shall process the message  
29           as specified in 2.6.12.1.

## 30       9. Feature Notification Message

## 31       10. Local Control Order

32       11. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and  
33       record the reason for the *Lock Until Power-Cycled Order* in the mobile station's  
34       semi-permanent memory (LCKRSN\_P<sub>S-p</sub> equals the least significant four bits of  
35       ORDQ<sub>R</sub>). The mobile station should notify the user of the locked condition. The  
36       mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
37       *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the  
38       *System Access State* again until after the next mobile station power-up or until it

has received an *Unlock Order*. This requirement shall take precedence over any other mobile station requirement specifying entry to the *System Access State*.

12. *Maintenance Required Order*: The mobile station shall record the reason for the *Maintenance Required Order* in the mobile station's semi-permanent memory (MAINTRSN<sub>S-p</sub> equals the least significant four bits of ORDQ<sub>r</sub>). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

13. *Registration Accepted Order*: The mobile station shall perform the procedures as specified in 2.6.11.1.

14. *Registration Rejected Order*: This order indicates that normal service is not available on this system. The mobile station shall disable the full-TMSI timer. If the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set all the bits of the TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a registration rejected indication (see 2.6.1.1).

15. *Release Order*: If NDSS\_ORIG<sub>S</sub> is equal to enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled, and should indicate to the user that the call origination has been canceled. The mobile station shall enter the *Mobile Station Idle State* or the *System Determination Substate* of the *Mobile Station Initialization State* with a release indication (see 2.6.1.1). If the mobile station enters the *Mobile Station Idle State*, and if PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

16. *Retry Order*: The mobile station shall process the message as follows:

- If RETRY\_TYPE<sub>r</sub> is equal to '000', the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to '001', '010', '011', '100', or '101'.
- If RETRY\_TYPE<sub>r</sub> is equal to '001', '100', or '101', the mobile station shall perform the following:
  - If RETRY\_DELAY<sub>r</sub> is equal to '00000000', then the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>r</sub>] to 0.
  - If RETRY\_DELAY<sub>r</sub> is not equal to '00000000', the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>r</sub>] as follows:
    - + If the most significant bit of the RETRY\_DELAY<sub>r</sub> is '0', set RETRY\_DELAY\_UNIT<sub>S</sub> to 1000ms. If the most significant bit of the RETRY\_DELAY<sub>r</sub> is '1', set RETRY\_DELAY\_UNIT<sub>S</sub> to 60000ms.
    - + The mobile station shall set RETRY\_DELAY\_VALUE<sub>S</sub> to the seven least significant bits of RETRY\_DELAY<sub>r</sub>.
    - + The mobile station shall store the next system time 80 ms boundary + RETRY\_DELAY\_VALUE<sub>S</sub> × RETRY\_DELAY\_UNIT<sub>S</sub> ms as RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>r</sub>].

- 1 17. *Security Mode Command Message*: The mobile station shall perform the  
2 procedures as specified in 2.6.11.4.
- 3 18. *Service Redirection Message*: The mobile station shall process the message as  
4 follows:
- 5 • If the mobile station is directed to an unsupported operation mode or band  
6 class, the mobile station shall respond with a *Mobile Station Reject Order* with  
7 ORDQ equal to '00000110' (message requires a capability that is not supported  
8 by the mobile station).
  - 9 • If DELETE\_TMSI<sub>r</sub> is equal to '1', the mobile station shall set all the bits of  
10 TMSI\_CODE<sub>s-p</sub> to '1'. The mobile station shall disable the full-TMSI timer.
  - 11 • The mobile station shall set RETURN\_IF\_FAIL<sub>s</sub> = RETURN\_IF\_FAIL<sub>r</sub>.
  - 12 • If RECORD\_TYPE<sub>r</sub> is equal to '00000000', the mobile station shall enter the  
13 *System Determination Substate* of the *Mobile Station Initialization State* with an  
14 NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the  
15 redirection record received in the message as REDIRECT\_REC<sub>s</sub> and shall enter  
16 the *System Determination Substate* of the *Mobile Station Initialization State* with  
17 a redirection indication (see 2.6.1.1).
- 18 19. *SSD Update Message*: The mobile station shall respond to the message as  
19 specified in 2.3.12.1.5.
- 20 20. *Status Request Message*: The mobile station shall disable the *System Access State*  
21 timer and respond to the message. If P\_REV\_IN\_USE<sub>s</sub> is less than or equal to  
22 three, the mobile station shall respond with a *Status Response Message*. If  
23 P\_REV\_IN\_USE<sub>s</sub> is greater than three, the mobile station shall respond with an  
24 *Extended Status Response Message*. If the message does not specify any  
25 qualification information (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000000'), the mobile  
26 station shall include the requested information records in the response. If the  
27 message specifies a band class (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000001'), the  
28 mobile station shall only include the requested information records for the  
29 specified band class (BAND\_CLASS<sub>r</sub>) in the response. If the message specifies a  
30 band class and an operating mode (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000010'), the  
31 mobile station shall only include the requested information records for the  
32 specified band class (BAND\_CLASS<sub>r</sub>) and operating mode (OP\_MODE<sub>r</sub>) in the  
33 response. If the message specifies a band class or a band class and an operating  
34 mode which is not supported by the mobile station, the mobile station shall send a  
35 *Mobile Station Reject Order* with ORDQ set to '00000110' (message requires a  
36 capability that is not supported by the mobile station). If the response to this  
37 message exceeds the allowable length, the mobile station shall send a *Mobile*  
38 *Station Reject Order* with ORDQ set to '00001000' (response message would exceed  
39 the allowable length). If the message specifies an information record which is not  
40 supported by the mobile station for the specified band class and operating mode,  
41 the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to  
42 '00001001' (information record is not supported for the specified band class and  
43 operating mode).

1       21. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code  
2       as follows:

- 3       • The mobile station shall store the length of the TMSI zone field by setting  
4       ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> to TMSI\_ZONE\_LEN<sub>r</sub>;
- 5       • The mobile station shall store the assigning TMSI zone number by setting the  
6       ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> least significant octets of  
7       ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> to TMSI\_ZONE<sub>r</sub>, and
- 8       • The mobile station shall store the TMSI code by setting TMSI\_CODE<sub>s-p</sub> to  
9       TMSI\_CODE<sub>r</sub>.

10       The mobile station shall set the TMSI expiration time by setting TMSI\_EXP\_TIME<sub>s-p</sub>  
11       to TMSI\_EXP\_TIME<sub>r</sub>. The mobile station shall disable the full-TMSI timer. The  
12       mobile station shall then respond with a *TMSI Assignment Completion Message*  
13       within T<sub>56m</sub> seconds.

14       22. *User Zone Reject Message*

15       23. *General Extension Message*: The mobile station shall process this message as  
16       specified in section 2.6.18.

17       24. *Any other message*: If the mobile station receives any other message specified in  
18       Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all  
19       other messages.

20       If the mobile station performs an access probe handoff or access handoff and  
21       receives any of the following messages, it shall process the message as specified in  
22       2.6.3.1.3:

- 23       • If the mobile station is currently monitoring the Paging Channel:
  - 24           1. *System Parameters Message*
  - 25           2. *Access Parameters Message*
  - 26           3. *Neighbor List Message*
  - 27           4. *Extended System Parameters Message*
  - 28           5. *Extended Neighbor List Message*
  - 29           6. *General Neighbor List Message*
  - 30           7. *Global Service Redirection Message*
  - 31           8. *Extended Global Service Redirection Message*
- 32       • If the mobile station is currently monitoring the Primary Broadcast Control  
33       Channel:
  - 34           1. *ANSI-41 System Parameters Message*
  - 35           2. *Enhanced Access Parameters Message*
  - 36           3. *Universal Neighbor List Message*
  - 37           4. *MC-RR Parameters Message*

## 1                   5. *Extended Global Service Redirection Message*

### 2   2.6.3.4 Mobile Station Order/Message Response Substate

3   In this substate, the mobile station sends a message that is a response to a message  
4   received from the base station. If the base station responds to the mobile station's  
5   message with an authentication request, the mobile station responds in this substate.

6   If a message received from the base station requires a Layer 2 acknowledgment and does  
7   not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is  
8   outstanding (see [4]).

9   If a message received from the base station requires a Layer 2 acknowledgment and also a  
10   Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

11   When transmitting a response to a message received from the base station, Layer 3 shall  
12   indicate to Layer 2 that the type of the message is a response (see [4]).

13   When transmitting an autonomous message (i.e., a message that is not sent as a response  
14   to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type  
15   of the message is a request other than a registration request or a message transmission  
16   request (see [4]).

17   Upon entering the *Mobile Station Order/Message Response Substate*, the mobile station  
18   shall send the response message.

19   While in this substate, the mobile station shall monitor the Paging Channel or the Forward  
20   Common Control Channel. If the mobile station declares a loss of the Paging Channel or  
21   the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the  
22   following:

- 23       • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and  
24       PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the  
25       user that the PACA call has been canceled.
- 26       • The mobile station shall declare an access attempt failure and update its  
27       registration variables as specified in 2.6.5.5.3.2.
- 28       • The mobile station shall disable its transmitter.
- 29       • The mobile station shall enter the *Mobile Station Idle State*.

30   If the mobile station receives confirmation of delivery of any message sent by the mobile  
31   station in this substate, it shall send a response in this substate if required, and shall  
32   then enter the *Mobile Station Idle State*.

33   If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA\_CANCEL to '1' when the  
34   user directs the mobile station to cancel a PACA call.

35   If the mobile station is to exit the *System Access State* as a result of processing Layer 3  
36   fields of a message requiring an acknowledgment, the mobile station shall exit the *System*  
37   *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to  
38   the message has been sent and acknowledged.

39   If Layer 3 receives a message with an indication from Layer 2 that an access attempt for a

1 message being transmitted was not terminated as a result of processing the Layer 2 fields  
2 of the received message, the mobile station shall ignore the received message.

3 The following directed messages and orders can be received. If any field value of the  
4 message or order is outside its permissible range, the mobile station may send a *Mobile*  
5 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

6 1. *Authentication Challenge Message*: The mobile station shall respond to the  
7 message as specified in 2.3.12.1.4, regardless of the value of AUTH<sub>S</sub>.

8 2. *Authentication Request Message*: The mobile station shall process the message  
9 and shall respond as specified in 2.3.12.5.2.

10 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to  
11 the message as specified in 2.3.12.1.5.

12 4. *Base Station Reject Order*: The mobile station shall perform the procedures as  
13 specified in 2.6.11.5.

14 25. *Data Burst Message*

15 26. *Fast Call Setup Order*:

- 16 • If ORDQ<sub>r</sub> is equal to '00000000', the mobile station shall process the message  
17 and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- 18 • If ORDQ<sub>r</sub> is equal to '00000001', the mobile station shall process the message  
19 as specified in 2.6.12.1.

20 27. *Feature Notification Message*

21 28. *Local Control Order*

22 29. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and  
23 record the reason for the *Lock Until Power-Cycled Order* in the mobile station's  
24 semi-permanent memory (LCKRSN<sub>P<sub>S-P</sub></sub> equals the least significant four bits of  
25 ORDQ<sub>r</sub>). The mobile station should notify the user of the locked condition. The  
26 mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
27 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the  
28 *System Access State* again until after the next mobile station power-up or until it  
29 has received an *Unlock Order*. This requirement shall take precedence over any  
30 other mobile station requirement specifying entry to the *System Access State*.

31 30. *Maintenance Required Order*: The mobile station shall record the reason for the  
32 *Maintenance Required Order* in the mobile station's semi-permanent memory  
33 (MAINTRSN<sub>S-P</sub> equals the least significant four bits of ORDQ<sub>r</sub>). The mobile station  
34 shall remain in the unlocked condition. The mobile station should notify the user  
35 of the maintenance required condition.

36 31. *Registration Accepted Order*: The mobile station shall perform the procedures as  
37 specified in 2.6.11.1.

38 32. *Registration Rejected Order*: This order indicates that normal service is not  
39 available on this system. The mobile station shall disable the full-TMSI timer. If  
40 the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile

station shall set all the bits of the TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a registration rejected indication (see 2.6.1.1).

33. *Retry Order*: The mobile station shall process the message as follows:

- If RETRY\_TYPE<sub>R</sub> is equal to '000', the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to '001', '010', '011', '100, or '101'.
- If RETRY\_TYPE<sub>R</sub> is equal to '001', '100', or '101', the mobile station shall perform the following:
  - If RETRY\_DELAY<sub>R</sub> is equal to '00000000', then the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] to 0.
  - If RETRY\_DELAY<sub>R</sub> is not equal to '00000000', the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] as follows:
    - + If the most significant bit of the RETRY\_DELAY<sub>R</sub> is '0', set RETRY\_DELAY\_UNIT<sub>S</sub> to 1000ms. If the most significant bit of the RETRY\_DELAY<sub>R</sub> is '1', set RETRY\_DELAY\_UNIT<sub>S</sub> to 60000ms.
    - + The mobile station shall set RETRY\_DELAY\_VALUE<sub>S</sub> to the seven least significant bits of RETRY\_DELAY<sub>R</sub>.
    - + The mobile station shall store the next system time 80 ms boundary + RETRY\_DELAY\_VALUE<sub>S</sub> × RETRY\_DELAY\_UNIT<sub>S</sub> ms as RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>].

34. *Security Mode Command Message*: The mobile station shall perform the procedures as specified in 2.6.11.4.

35. *Service Redirection Message*: The mobile station shall process the message as follows:

- If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a *Mobile Station Reject Order* with ORDQ equal to '00000110' (message requires a capability that is not supported by the mobile station).
- If DELETE\_TMSI<sub>R</sub> is equal to '1', the mobile station shall set all the bits of TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall disable the full-TMSI timer.
- The mobile station shall set RETURN\_IF\_FAIL<sub>S</sub> = RETURN\_IF\_FAIL<sub>R</sub>.
- If RECORD\_TYPE<sub>R</sub> is equal to '00000000', the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with an NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the redirection record received in the message as REDIRECT\_REC<sub>S</sub> and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a redirection indication (see 2.6.1.1).

- 1 36. *SSD Update Message*: The mobile station shall respond to the message as  
2 specified in 2.3.12.1.5.
- 3 37. *Status Request Message*: The mobile station shall disable the *System Access State*  
4 timer and respond to the message. If  $P\_REV\_IN\_USE_s$  is less than or equal to  
5 three, the mobile station shall respond with a *Status Response Message*. If  
6  $P\_REV\_IN\_USE_s$  is greater than three, the mobile station shall respond with an  
7 *Extended Status Response Message*. If the message does not specify any  
8 qualification information ( $QUAL\_INFO\_TYPE_r$  is equal to '00000000'), the mobile  
9 station shall include the requested information records in the response. If the  
10 message specifies a band class ( $QUAL\_INFO\_TYPE_r$  is equal to '00000001'), the  
11 mobile station shall only include the requested information records for the  
12 specified band class ( $BAND\_CLASS_r$ ) in the response. If the message specifies a  
13 band class and an operating mode ( $QUAL\_INFO\_TYPE_r$  is equal to '00000010'), the  
14 mobile station shall only include the requested information records for the  
15 specified band class ( $BAND\_CLASS_r$ ) and operating mode ( $OP\_MODE_r$ ) in the  
16 response. If the message specifies a band class or a band class and an operating  
17 mode which is not supported by the mobile station, the mobile station shall send a  
18 *Mobile Station Reject Order* with  $ORDQ$  set to '00000110' (message requires a  
19 capability that is not supported by the mobile station). If the response to this  
20 message exceeds the allowable length, the mobile station shall send a *Mobile*  
21 *Station Reject Order* with  $ORDQ$  set to '00001000' (response message would exceed  
22 the allowable length). If the message specifies an information record which is not  
23 supported by the mobile station for the specified band class and operating mode,  
24 the mobile station shall send a *Mobile Station Reject Order* with  $ORDQ$  set to  
25 '00001001' (information record is not supported for the specified band class and  
26 operating mode).
- 27 38. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code  
28 as follows:
- 29 • The mobile station shall store the length of the TMSI zone field by setting  
30  $ASSIGNING\_TMSI\_ZONE\_LEN_{s-p}$  to  $TMSI\_ZONE\_LEN_r$ ,
  - 31 • The mobile station shall store the assigning TMSI zone number by setting the  
32  $ASSIGNING\_TMSI\_ZONE\_LEN_{s-p}$  least significant octets of  
33  $ASSIGNING\_TMSI\_ZONE_{s-p}$  to  $TMSI\_ZONE_r$ , and
  - 34 • The mobile station shall store the TMSI code by setting  $TMSI\_CODE_{s-p}$  to  
35  $TMSI\_CODE_r$ .
- 36 The mobile station shall set the TMSI expiration time by setting  $TMSI\_EXP\_TIME_{s-p}$   
37 to  $TMSI\_EXP\_TIME_r$ . The mobile station shall disable the full-TMSI timer. The  
38 mobile station shall then respond with a *TMSI Assignment Completion Message*  
39 within  $T_{56m}$  seconds.
- 40 39. *User Zone Reject Message*
- 41 40. *Any other message*: If the mobile station receives any other message specified in  
42 Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all  
43 other messages.



### 1 2.6.3.5 Mobile Station Origination Attempt Substate

2 In this substate, the mobile station sends an *Origination Message*, *Call Recovery Request*  
3 *Message* or a *Reconnect Message*. If the mobile station sends a *Reconnect Message*, it shall  
4 set the ORIG\_IND field of the message to '1'.

5 If directed by the user to transmit a Short Data Burst (see [30]) and the mobile station  
6 sends a *Reconnect Message* in assured mode in this substate, the mobile station may  
7 include a Short Data Burst in the *Reconnect Message* by setting the SDB\_INCL field to '1',  
8 if all of the following conditions are true:

- 9 • SDB\_SUPPORTED<sub>s</sub> and SDB\_IN\_RCNM\_IND<sub>s</sub> are equal to '1', and
- 10 • ACCT is not enabled for the service option number associated with the Short Data  
11 Burst as follows:
  - 12 – The service option number associated with the Short Data Burst is not equal to  
13 any ACCT\_SO entry in ACCT\_SO\_LIST, and
  - 14 – The service option group number of the service option associated with the Short  
15 Data Burst is not equal to any ACCT\_SO\_GRP entry in ACCT\_SO\_GRP\_LIST.

16 The mobile station shall not send the *Reconnect Message* if RECONNECT\_MSG\_IND<sub>s</sub>  
17 equals '0', if this message is not being sent to reconnect a dormant packet data service  
18 instance, or the information that needs to be conveyed to the base station for the dormant  
19 packet data reconnection (PREV\_SID, PREV\_NID, PREV\_PZID. See [42] for details) can not  
20 be carried in a *Reconnect Message*.

21 The mobile station shall not send the *Call Recovery Request Message* if CRRM\_MSG\_IND<sub>s</sub>  
22 equals '0'.

23 If P\_REV\_IN\_USE<sub>s</sub> is greater than or equal to 11 and the *Origination Message* is being sent  
24 to perform packet data dormant handoff, the mobile station shall include all dormant  
25 packet data service instances (see [42]) up to the limit specified by  
26 MAX\_ADD\_SERV\_INSTANCE<sub>s</sub>.

27 If the base station responds to the *Origination Message*, *Call Recovery Request Message* or  
28 the *Reconnect Message* with an authentication request, the mobile station responds in this  
29 substate.

30 If a message received from the base station requires a Layer 2 acknowledgment and does  
31 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is  
32 outstanding (see [4]).

33 If a message received from the base station requires a Layer 2 acknowledgment and also a  
34 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

35 When transmitting a response to a message received from the base station, Layer 3 shall  
36 indicate to Layer 2 that the type of the message is a response (see [4]).

37 When transmitting an autonomous message (i.e., a message that is not sent as a response  
38 to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type

1 of the message is a request other than a registration request or a message transmission  
2 request (see [4]).

3 Upon entering the *Mobile Station Origination Attempt Substate*, the mobile station shall set  
4 RLGAIN\_ADJ<sub>S</sub> to '0000', and perform the following:

- 5 • If P\_REV\_IN\_USE<sub>S</sub> is less than 11, set PLCM\_TYPE<sub>S</sub> to '0000'; otherwise set  
6 PLCM\_TYPE<sub>S</sub> to '0100'.
- 7 • The mobile station shall exit the *Mobile Station Origination Attempt Substate*, shall  
8 enter either the *Mobile Station Idle State* or the *System Determination Substate* with  
9 an ACCT blocked indication, and should indicate to the user that the call has  
10 terminated if all of the following conditions are true:
  - 11 – P\_REV\_IN\_USE<sub>S</sub> is greater than six,
  - 12 – ACCT\_INCL\_EMG<sub>S</sub> is equal to '1' or the mobile station determines that the call  
13 is not an emergency call,
  - 14 – ACCT is enabled for the requested service option number, due to either of the  
15 following two conditions:
    - 16 + the requested service option number is equal to an ACCT\_SO entry in  
17 ACCT\_SO\_LIST, or
    - 18 + the service option group number of the requested service option is equal to  
19 an ACCT\_SO\_GRP entry in ACCT\_SO\_GRP\_LIST.
- 20 • If the substate was entered with an origination indication, the mobile station shall  
21 send the *Origination Message*, *Call Recovery Request Message* or the *Reconnect*  
22 *Message* as an r-csch request.
- 23 • If the substate was entered with a PACA response indication, the mobile station  
24 shall send the *Origination Message* as an r-csch response using the access  
25 procedures specified in 2.6.3.1. The mobile station shall include the dialed digits (if  
26 any) from the previous origination attempt in the *Origination Message*.
- 27 • If the origination is a result of NDSS\_ORIG<sub>S</sub> being equal to enabled, the mobile  
28 station shall include in the *Origination Message* the dialed digits (if any) recorded  
29 from the previous origination attempt.
- 30 • If the mobile station has a stored service configuration (that is, parameters  
31 conveyed by both the Service Configuration information record and the Non-  
32 negotiable Service Configuration information record) and corresponding SYNC\_ID  
33 with associated SID and NID that are equal to the SID<sub>S</sub> and NID<sub>S</sub> respectively, and  
34 USE\_SYNC\_ID<sub>S</sub> is equal to '1', the mobile station may include the SYNC\_ID field in  
35 the *Origination Message* or the *Reconnect Message* and, if included, shall perform  
36 the following:
  - 37 – The mobile station shall set it to the SYNC\_ID corresponding to the stored  
38 service configuration. The mobile station shall store the value of the SYNC\_ID  
39 field in SYNC\_ID<sub>S</sub>.
  - 40 – The mobile station shall set the SR\_ID field of the *Origination Message* or the

1           *Reconnect Message* as follows:

- 2           + If the mobile station requests the restoration of a single service option
- 3           connection from the stored service configuration, the mobile station shall
- 4           set this field to the corresponding service reference identifier.
- 5           + Otherwise (that is, the mobile station requests the restoration of all the
- 6           service option connections from the stored service configuration), the mobile
- 7           station shall set this field to '111'.

- 8           • The mobile station shall include in the *Origination Message* as many of the dialed
- 9           digits as possible without exceeding the message capsule size. When calculating
- 10          the number of dialed digits to be included in the *Origination Message*, the mobile
- 11          station shall assume the following if P\_REV\_IN\_USE<sub>S</sub> is greater than three:

- 12          – The number of additional reported pilots (NUM\_ADD\_PILOTS) is equal to five
- 13          (see 2.6.3.1.7 and 2.7.1.3.1.3) so that up to five additional pilots may be
- 14          reported in any access probe, and
- 15          – The number of alternative service option numbers (NUM\_ALT\_SO) is less than
- 16          or equal to the maximum alternative service option numbers
- 17          (MAX\_NUM\_ALT\_SO<sub>S</sub>).

- 18          • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set the PACA\_REORIG field of
- 19          the *Origination Message* to '1'; otherwise, the mobile station shall set the field to '0'.

20 While in this substate, the mobile station shall monitor the Paging Channel or the Forward  
 21 Common Control Channel. The mobile station may perform an access probe handoff or an  
 22 access handoff as described in 2.6.3.1.3.2 and 2.6.3.1.3.3. If the mobile station declares a  
 23 loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8) during  
 24 an access attempt, the mobile station may perform an access probe handoff; otherwise, it  
 25 shall declare an access attempt failure and shall perform the following:

- 26          • If the mobile station is monitoring the Paging Channel, the mobile station shall set
- 27          SYS\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL.
- 28          • If the mobile station is monitoring the Forward Common Control Channel, the
- 29          mobile station shall set MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL.
- 30          • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and
- 31          PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
- 32          user that the PACA call has been canceled.
- 33          • If NDSS\_ORIG<sub>S</sub> is equal to enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to
- 34          disabled, and should indicate to the user that the call origination is canceled.
- 35          • The mobile station shall update its registration variables as specified in 2.6.5.5.3.2.
- 36          • The mobile station shall disable its transmitter and enter the *Mobile Station Idle*
- 37          *State*.

38 If the mobile station receives confirmation of delivery of any message sent by the mobile  
 39 station in this substate, the mobile station shall perform an access handoff if all of the  
 40 following conditions hold:

- 1 • The mobile station declares a loss of the Paging Channel or the Forward Common
- 2 Control Channel,
- 3 • The mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2) and
- 4 there are pilots other than the active pilot in the access handoff list (see
- 5 2.6.3.1.3.2).

6 If the mobile station declares a loss of the Paging Channel or the Forward Common Control  
 7 Channel and does not perform an access handoff, the mobile station shall perform the  
 8 following:

- 9 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
- 10 SYS\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL.
- 11 • If the mobile station is monitoring the Forward Common Control Channel, the
- 12 mobile station shall set MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL.
- 13 • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and
- 14 PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
- 15 user that the PACA call has been canceled.
- 16 • If NDSS\_ORIG<sub>S</sub> is equal to enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to
- 17 disabled and should indicate to the user that the call origination is canceled.
- 18 • The mobile station shall disable its transmitter and enter the *Mobile Station Idle*
- 19 *State*.

20 If the mobile station receives confirmation of delivery of the *Origination Message*, *Call*  
 21 *Recovery Request Message* or the *Reconnect Message*, the mobile station shall update its  
 22 registration variables with respect to the base station to which the first access probe was  
 23 transmitted after entering the *System Access State* as specified in 2.6.5.5.3.1.

24 The mobile station shall set and disable the *System Access State* timer as follows:

- 25 • The mobile station shall disable the timer whenever it begins an access attempt.
- 26 • The mobile station shall set the timer to T<sub>42m</sub> seconds whenever it ends an access
- 27 attempt.
- 28 • The mobile station shall disable the timer whenever it exits the *System Access*
- 29 *State*.

30 If the *System Access State* timer expires while in this substate, the mobile station shall  
 31 perform the following:

- 32 • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and
- 33 PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
- 34 user that the PACA call has been canceled.
- 35 • If NDSS\_ORIG<sub>S</sub> is equal to enabled, the mobile station shall set NDSS\_ORIG<sub>S</sub> to
- 36 disabled, and should indicate to the user that the call origination is canceled.
- 37 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
- 38 SYS\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL and enter the *Mobile Station*
- 39 *Idle State*.

- 1       • If the mobile station is monitoring the Forward Common Control Channel, the  
2       mobile station shall set MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to NULL and  
3       enter the *Mobile Station Idle State*.

4       If the mobile station is directed by the user to disconnect the call, the mobile station shall  
5       perform the following actions:

- 6       • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any  
7       access attempt in progress.
- 8       • The mobile station shall send the *Release Order* (normal release) in assured mode  
9       requiring confirmation of delivery.
- 10      • After receiving confirmation of delivery of the *Release Order*, the mobile station  
11      shall enter the *Mobile Station Idle State* (see 2.6.2.2) or the *System Determination*  
12      *Substate* of the *Mobile Station Initialization State* with a release indication (see  
13      2.6.1.1).

14      If the mobile station is directed by the user to power off, the mobile station shall perform  
15      the following actions:

- 16      • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any  
17      access attempt in progress.
- 18      • The mobile station shall send the *Release Order* (with power-down indication) in  
19      assured mode requiring confirmation of delivery.
- 20      • After receiving confirmation of delivery of the *Release Order*, the mobile station  
21      shall perform power-down registration procedures (see 2.6.5.1.2).
- 22      • The mobile station may power off.

23      If the mobile station receives a *Channel Assignment Message* or the *Extended Channel*  
24      *Assignment Message*, Layer 3 shall send a *dedicated channel assignment* indication to  
25      Layer 2 (see [4]). If the mobile station has not received confirmation of delivery of the  
26      *Origination Message*, *Call Recovery Request Message* or the *Reconnect Message* before  
27      receiving the *Channel Assignment Message* or the *Extended Channel Assignment Message*,  
28      the mobile station shall update its registration variables with respect to the base station to  
29      which the first access probe was transmitted after entering the *System Access State*, as  
30      specified in 2.6.5.5.3.1.

31      If the mobile station is to exit the *System Access State* as a result of processing Layer 3  
32      fields of a message requiring an acknowledgment, the mobile station shall exit the *System*  
33      *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to  
34      the message has been sent and acknowledged.

35      If Layer 3 receives a message other than messages listed below:

- 36      • a *Channel Assignment Message*, or
- 37      • *Extended Channel Assignment Message* with either DIRECT\_CH\_ASSIGN\_IND field  
38      not included, or DIRECT\_CH\_ASSIGN\_IND field included and set to '0'

39      with an indication from Layer 2 that an access attempt for a message being transmitted  
40      was not terminated as a result of processing the Layer 2 fields of the received message,

the mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the message or order is outside its permissible range, the mobile station may send a *Mobile Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

1. *Authentication Challenge Message*: The mobile station shall respond to the message as specified in 2.3.12.1.4, regardless of the value of AUTH<sub>S</sub>.
2. *Authentication Request Message*: The mobile station shall process the message and shall respond as specified in 2.3.12.5.2.
3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the message as specified in 2.3.12.1.5.
4. *Base Station Reject Order*: The mobile station shall perform the procedures as specified in 2.6.11.5.
5. *Channel Assignment Message*: The mobile station shall process the message as follows:
  - If ASSIGN\_MODE<sub>R</sub> equals '000', the mobile station shall perform the following actions:
    - The mobile station shall set CH\_IND<sub>S</sub> to '01'.
    - The mobile station shall store the frame offset (FRAME\_OFFSET<sub>S</sub> = FRAME\_OFFSET<sub>R</sub>), the message encryption mode indicator (ENCRYPT\_MODE<sub>S</sub> = ENCRYPT\_MODE<sub>R</sub>), and, if FREQ\_INCL<sub>R</sub> equals '1', the Frequency Assignment (CDMACH<sub>S</sub> = CDMA\_FREQ<sub>R</sub>).
    - If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.
    - If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile station shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set IDLE\_CDMA\_CHAN to CDMACH<sub>S</sub>, IDLE\_CDMABAND to CDMABAND<sub>S</sub>, IDLE\_SID to SID<sub>S</sub>, IDLE\_NID to NID<sub>S</sub>, and IDLE\_P\_REV to P\_REV<sub>S</sub>.
    - The mobile station shall initialize the CODE\_CHAN\_LIST as described in 2.6.8, shall set SERV\_NEG<sub>S</sub> to disabled, and shall enter the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*.
  - If ASSIGN\_MODE<sub>R</sub> equals '001', the mobile station shall perform the following actions:
    - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

- 1           – If a CDMA channel (CDMA\_FREQ) is specified in the assignment, the mobile  
2           station shall set CDMACH<sub>S</sub> = CDMA\_FREQ<sub>r</sub>, tune to the new Frequency  
3           Assignment, and measure the strength of each pilot listed in the assignment  
4           using the Neighbor Set search procedures specified in 2.6.6.2.1 and  
5           2.6.6.2.2.
- 6           – The mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub> and ACC\_MSG\_SEQ<sub>S</sub> to  
7           NULL (see 2.6.2.2) and shall set PILOT\_PN<sub>S</sub> to the pilot PN sequence offset of  
8           the strongest pilot in the list.
- 9           – If the mobile station has not stored configuration parameters for the Primary  
10          Paging Channel of the new base station, or if the stored information is not  
11          current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
12          NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
13          GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
14          EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
15          EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>,  
16          PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, and  
17          EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to NULL.
- 18          – The mobile station shall set PAGE\_CHAN<sub>S</sub> to '1' and PAGECH<sub>S</sub> to the  
19          Primary Paging Channel. The mobile station shall then begin monitoring  
20          the Primary Paging Channel of the selected base station.
- 21          – If RESPOND<sub>r</sub> is equal to '1', the mobile station shall enter the *Update*  
22          *Overhead Information Substate* with an origination indication.
- 23      • If ASSIGN\_MODE<sub>r</sub> equals '100', the mobile station shall perform the following  
24      actions:
  - 25          – The mobile station shall set CH\_IND<sub>S</sub> to '01'.
  - 26          – If GRANTED\_MODE<sub>r</sub> equals '00', and the multiplex option or radio  
27          configuration specified in the DEFAULT\_CONFIG field is not supported by  
28          the mobile station, the mobile station shall send a *Mobile Station Reject*  
29          *Order* with ORDQ field set to '00000110' (capability not supported by the  
30          mobile station) and remain in *Mobile Station Origination Attempt Substate*.
  - 31          – If FREQ\_INCL<sub>r</sub> equals '0', the mobile station shall perform the following  
32          actions:
    - 33              + The mobile station shall store the frame offset (FRAME\_OFFSET<sub>S</sub> =  
34              FRAME\_OFFSET<sub>r</sub>), the message encryption mode indicator  
35              (ENCRYPT\_MODE<sub>S</sub> = ENCRYPT\_MODE<sub>r</sub>), the granted mode  
36              (GRANTED\_MODE<sub>S</sub> = GRANTED\_MODE<sub>r</sub>), and the default configuration  
37              (DEFAULT\_CONFIG<sub>S</sub> = DEFAULT\_CONFIG<sub>r</sub>).
    - 38              + The mobile station shall set SERV\_NEG<sub>S</sub> to enabled.
    - 39              + If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> equal to  
40              disabled and PACA\_CANCEL to '0', shall disable the PACA state timer,  
41              and should indicate to the user that the PACA call is proceeding.

- 1           + The mobile station shall initialize CODE\_CHAN\_LIST as described in
- 2           2.6.8.
- 3           + If the mobile station is currently monitoring the Paging Channel, the
- 4           mobile station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile
- 5           station shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set
- 6           IDLE\_CDMA\_CHAN to CDMACH<sub>S</sub>, IDLE\_CDMABAND to CDMABAND<sub>S</sub>,
- 7           IDLE\_SID to SID<sub>S</sub>, IDLE\_NID to NID<sub>S</sub>, and IDLE\_P\_REV to P\_REV<sub>S</sub>.
- 8           + The mobile station shall then enter the *Traffic Channel Initialization*
- 9           *Substate of the Mobile Station Control on the Traffic Channel State.*
- 10          – If FREQ\_INCL<sub>R</sub> equals '1', the mobile station shall perform the following
- 11          actions:
- 12           + If the band class is not supported by the mobile station, the mobile
- 13           station shall send a *Mobile Station Reject Order* with ORDQ field set to
- 14           '00000110' (capability not supported by the mobile station) and remain
- 15           in the *Mobile Station Origination Attempt Substate.*
- 16           + If the band class is supported by the mobile station, the mobile station
- 17           shall perform the following actions:
- 18           o The mobile station shall store the frame offset (FRAME\_OFFSET<sub>S</sub> =
- 19           FRAME\_OFFSET<sub>R</sub>), the message encryption mode indicator
- 20           (ENCRYPT\_MODE<sub>S</sub> = ENCRYPT\_MODE<sub>R</sub>), the granted mode
- 21           (GRANTED\_MODE<sub>S</sub> = GRANTED\_MODE<sub>R</sub>), the default configuration
- 22           (DEFAULT\_CONFIG<sub>S</sub> = DEFAULT\_CONFIG<sub>R</sub>), the idle Frequency
- 23           Assignment (IDLE\_CDMA\_CHAN = CDMACH<sub>S</sub>), the idle band class
- 24           (IDLE\_CDMABAND = CDMABAND<sub>S</sub>), the band class (CDMABAND<sub>S</sub> =
- 25           BAND\_CLASS<sub>R</sub>), and the Frequency Assignment
- 26           (CDMACH<sub>S</sub> = CDMA\_FREQ<sub>R</sub>).
- 27           o The mobile station shall set SERV\_NEG<sub>S</sub> to enabled.
- 28           o If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to
- 29           disabled and PACA\_CANCEL to '0', shall disable the PACA state
- 30           timer, and should indicate to the user that the PACA call is
- 31           proceeding.
- 32           o The mobile station shall initialize the CODE\_CHAN\_LIST as
- 33           described in 2.6.8.
- 34           o If the mobile station is currently monitoring the Paging Channel, the
- 35           mobile station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the
- 36           mobile station shall set IDLE\_BCCH\_CHAN to '1'. The mobile station
- 37           shall set IDLE\_SID to SID<sub>S</sub>, IDLE\_NID to NID<sub>S</sub>, and IDLE\_P\_REV to
- 38           P\_REV<sub>S</sub>.
- 39           o The mobile station shall then tune to the new Frequency Assignment
- 40           and enter the *Traffic Channel Initialization Substate of the Mobile*
- 41           *Station Control on the Traffic Channel State.*



- 1       • If ASSIGN\_MODE<sub>r</sub> equals '101', the mobile station shall perform the following
- 2       actions:
- 3       – If FREQ\_INCL<sub>r</sub> equals '0', the mobile station shall perform the following
- 4       actions:
- 5       + If the message requires acknowledgment, the mobile station shall wait
- 6       until Layer 3 receives an indication from Layer 2 that the
- 7       acknowledgment to the message has been sent and acknowledged.
- 8       + The mobile station shall set CONFIG\_MSG\_SEQ<sub>s</sub> and ACC\_MSG\_SEQ<sub>s</sub>
- 9       to NULL (see 2.6.2.2) and shall set PILOT\_PN<sub>s</sub> to the pilot PN sequence
- 10      offset of the strongest pilot in the list (PILOT\_PN<sub>r</sub>).
- 11      + If the mobile station has not stored configuration parameters for the
- 12      Primary Paging Channel of the new base station, or if the stored
- 13      information is not current (see 2.6.2.2), the mobile station shall set
- 14      SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 15      EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 16      CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>,
- 17      FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>,
- 18      USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>,
- 19      GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and
- 20      EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL.
- 21      + The mobile station shall set PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the
- 22      Primary Paging Channel. The mobile station shall then begin
- 23      monitoring the Primary Paging Channel of the selected base station.
- 24      + If RESPOND<sub>r</sub> is equal to '1', the mobile station shall perform the
- 25      following:
- 26      o If the *Channel Assignment Message* does not require an
- 27      acknowledgment, the mobile station shall enter the *Update Overhead*
- 28      *Information Substate* with an origination indication within T<sub>34m</sub>
- 29      seconds after receiving the *Channel Assignment Message*.
- 30      o If the *Channel Assignment Message* requires an acknowledgment,
- 31      the mobile station shall enter the *Update Overhead Information*
- 32      *Substate* with a page response retransmission indication within
- 33      T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2 that
- 34      the acknowledgment to the *Channel Assignment Message* has been
- 35      sent and acknowledged.
- 36      + If RESPOND<sub>r</sub> is equal to '0', the mobile station shall perform the
- 37      following:
- 38      o If the *Channel Assignment Message* does not require an
- 39      acknowledgment, the mobile station shall enter the *Mobile Station*
- 40      *Idle State* within T<sub>34m</sub> seconds after receiving the *Channel*
- 41      *Assignment Message*.

- 1                   o If the *Channel Assignment Message* requires an acknowledgment,  
2                   the mobile station shall enter the *Mobile Station Idle State* within  
3                   T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2 that  
4                   the acknowledgment to the *Channel Assignment Message* has been  
5                   sent and acknowledged.
- 6           – If  $FREQ\_INCL_r$  equals '1', the mobile station shall perform the following  
7           actions:
  - 8           + If the band class is not supported by the mobile station, the mobile  
9           station shall send a *Mobile Station Reject Order* with ORDQ field set to  
10           '00000110' (capability not supported by the mobile station) and remain  
11           in the *Mobile Station Origination Attempt Substate*.
  - 12           + If the band class is supported by the mobile station, the mobile station  
13           shall perform the following actions:
    - 14           o If the message requires acknowledgment, the mobile station shall  
15           wait until Layer 3 receives an indication from Layer 2 that the  
16           acknowledgment to the message has been sent and acknowledged.
    - 17           o The mobile station shall set  $CDMACH_s$  to  $CDMA\_FREQ_r$  and  
18            $CDMABAND_s$  to  $BAND\_CLASS_r$ . Then the mobile station shall tune  
19           to the new Frequency Assignment, measure the strength of each  
20           pilot listed in the assignment using the Neighbor Set search  
21           procedures specified in 2.6.6.2.1 and 2.6.6.2.2, set  $PILOT\_PN_s$  to the  
22           pilot PN sequence offset of the strongest pilot in the list ( $PILOT\_PN_r$ ),  
23           and set  $CONFIG\_MSG\_SEQ_s$  and  $ACC\_MSG\_SEQ_s$  to NULL (see  
24           2.6.2.2).
    - 25           o If the mobile station has not stored configuration parameters for the  
26           Primary Paging Channel of the new base station, or if the stored  
27           information is not current (see 2.6.2.2), the mobile station shall set  
28            $SYS\_PAR\_MSG\_SEQ_s$ ,  $NGHBR\_LST\_MSG\_SEQ_s$ ,  
29            $EXT\_NGHBR\_LST\_MSG\_SEQ_s$ ,  $GEN\_NGHBR\_LST\_MSG\_SEQ_s$ ,  
30            $CHAN\_LST\_MSG\_SEQ_s$ ,  $EXT\_CHAN\_LST\_MSG\_SEQ_s$ ,  
31            $FD\_CHAN\_LST\_MSG\_SEQ_s$ ,  $EXT\_SYS\_PAR\_MSG\_SEQ_s$ ,  
32            $USER\_ZONE\_ID\_MSG\_SEQ_s$ ,  $PRI\_NGHBR\_LST\_MSG\_SEQ_s$ ,  
33            $GLOB\_SERV\_REDIR\_MSG\_SEQ_s$ , and  
34            $EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ_s$  to NULL.
    - 35           o The mobile station shall set  $PAGE\_CHAN_s$  to '1' and  $PAGECH_s$  to the  
36           Primary Paging Channel. The mobile station shall then begin  
37           monitoring the Primary Paging Channel of the selected base station.
    - 38           o If  $RESPOND_r$  is equal to '1', the mobile station shall perform the  
39           following:

- 1                   ◇ If the *Channel Assignment Message* does not require an
- 2                   acknowledgment, the mobile station shall enter the *Update*
- 3                   *Overhead Information Substate* with a page response
- 4                   retransmission indication within  $T_{34m}$  seconds after receiving
- 5                   the *Channel Assignment Message*.
- 6                   ◇ If the *Channel Assignment Message* requires an acknowledgment,
- 7                   the mobile station shall enter the *Update Overhead Information*
- 8                   *Substate* with a page response retransmission indication within
- 9                    $T_{34m}$  seconds after Layer 3 receives an indication from Layer 2
- 10                  that the acknowledgment to the *Channel Assignment Message*
- 11                  has been sent and acknowledged.
- 12                  o If  $RESPOND_r$  is equal to '0', the mobile station shall perform the
- 13                  following:
- 14                   ◇ If the *Channel Assignment Message* does not require an
- 15                   acknowledgment, the mobile station shall enter the *Mobile*
- 16                   *Station Idle State* within  $T_{34m}$  seconds after receiving the
- 17                   *Channel Assignment Message*.
- 18                   ◇ If the *Channel Assignment Message* requires an acknowledgment,
- 19                   the mobile station shall enter the *Mobile Station Idle State* within
- 20                    $T_{34m}$  seconds after Layer 3 receives an indication from Layer 2
- 21                   that the acknowledgment to the *Channel Assignment Message*
- 22                   has been sent and acknowledged.

## 23       6. Data Burst Message

- 24       7. *Extended Channel Assignment Message*: If  $P\_REV\_IN\_USE_s$  is greater than or equal
- 25       to 11, and  $DIRECT\_CH\_ASSIGN\_IND_r$  equals '1', the mobile station shall ignore the
- 26       message. Otherwise, the mobile station shall process the message as follows:
- 27       • The mobile station shall set  $RTC\_NOM\_PWR\_USE\_IND$  to '0'.
  - 28       • The mobile station shall set  $DIRECT\_CH\_ASSIGN\_RECOVER\_IND_s$  to '0'.
  - 29       • If  $ASSIGN\_MODE_r$  equals '000', the mobile station shall perform the following
  - 30       actions:
    - 31       – If  $PACA_s$  is equal to enabled, the mobile station shall set  $PACA_s$  to disabled
    - 32       and  $PACA\_CANCEL$  to '0', shall disable the  $PACA$  state timer, and should
    - 33       indicate to the user that the  $PACA$  call has been canceled.
    - 34       – If  $GRANTED\_MODE_r$  equals '00', and the multiplex option and radio
    - 35       configuration specified in the  $DEFAULT\_CONFIG$  field are not supported by
    - 36       the mobile station, the mobile station shall send a *Mobile Station Reject*
    - 37       *Order* with  $ORDQ$  field set to '00000110' (capability not supported by the
    - 38       mobile station) and shall remain in the *Mobile Station Origination Attempt*
    - 39       *Substate*.

- 1           – If GRANTED\_MODE<sub>r</sub> is equal to '00' and DEFAULT\_CONFIG<sub>r</sub> is not equal to
- 2           '100', the mobile station shall send a *Mobile Station Reject Order* with ORDQ
- 3           field set to '00001110' (RC does not match with DEFAULT\_CONFIG<sub>r</sub>) and
- 4           shall remain in the *Mobile Station Origination Attempt Substate* if any of the
- 5           following conditions is true:
  - 6           + FOR\_FCH\_RC<sub>r</sub> is not equal to the RC associated with
  - 7           DEFAULT\_CONFIG<sub>r</sub> (see Table 3.7.2.3.2.21-2).
  - 8           + REV\_FCH\_RC<sub>r</sub> is not equal to the RC associated with
  - 9           DEFAULT\_CONFIG<sub>r</sub> (see Table 3.7.2.3.2.21-2).
- 10          – If the mobile station does not support either of the Fundamental Channel
- 11          Radio Configurations (FOR\_FCH\_RC or REV\_FCH\_RC), the mobile shall
- 12          send a *Mobile Station Reject Order* with the ORDQ field set to '00000110'
- 13          (capability not supported by the mobile station) and remain in the *Mobile*
- 14          *Station Origination Attempt Substate*.
- 15          – If PLCM\_TYPE<sub>r</sub> equals '0010' and IMSI\_O is derived from IMSI\_T, or if
- 16          PLCM\_TYPE<sub>r</sub> equals '0011' and IMSI\_O is derived from IMSI\_M, the mobile
- 17          station shall send a *Mobile Station Reject Order* with the ORDQ field set to
- 18          '00011100' (PLCM\_TYPE mismatch) and remain in the *Mobile Station*
- 19          *Origination Attempt Substate*.
- 20          – The mobile station shall set CH\_IND<sub>s</sub> to '01'.
- 21          – If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than six, the mobile station shall
- 22          store the Forward Fundamental Channel Radio Configuration
- 23          (FOR\_FCH\_RC<sub>s</sub> = FOR\_FCH\_RC<sub>r</sub>) and the Reverse Fundamental Channel
- 24          Radio Configuration (REV\_FCH\_RC<sub>s</sub> = REV\_FCH\_RC<sub>r</sub>)
- 25          – If FREQ\_INCL<sub>r</sub> equals '0', the mobile station shall perform the following
- 26          actions:
  - 27          + The mobile station shall store the frame offset (FRAME\_OFFSET<sub>s</sub> =
  - 28          FRAME\_OFFSET<sub>r</sub>), the message encryption mode indicator
  - 29          (ENCRYPT\_MODE<sub>s</sub> = ENCRYPT\_MODE<sub>r</sub>), the bypass indicator
  - 30          (BYPASS\_ALERT\_ANSWER<sub>s</sub> = BYPASS\_ALERT\_ANSWER<sub>r</sub>), the granted
  - 31          mode (GRANTED\_MODE<sub>s</sub> = GRANTED\_MODE<sub>r</sub>), the default
  - 32          configuration (DEFAULT\_CONFIG<sub>s</sub> = DEFAULT\_CONFIG<sub>r</sub>), and the
  - 33          occurrences of PILOT\_PN and PWR\_COMB for each included member of
  - 34          the Active Set.
  - 35          + If C\_SIG\_ENCRYPT\_MODE is included, the mobile station shall set
  - 36          C\_SIG\_ENCRYPT\_MODE<sub>s</sub> to C\_SIG\_ENCRYPT\_MODE<sub>r</sub>.
  - 37          + The mobile station shall perform the procedures in 2.6.11.2.
  - 38          + The mobile station shall set SERV\_NEG<sub>s</sub> to enabled.
  - 39          + If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> equal to
  - 40          disabled and PACA\_CANCEL to '0', shall disable the PACA state timer,
  - 41          and should indicate to the user that the PACA call is proceeding.

- 1           + The mobile station shall initialize CODE\_CHAN\_LIST as described in
- 2           2.6.8.
- 3           + The mobile station shall set FPC\_FCH\_INIT\_SETPT<sub>S</sub> to
- 4           FPC\_FCH\_INIT\_SETPT<sub>R</sub>, FPC\_FCH\_CURR\_SETPT<sub>S</sub> to
- 5           FPC\_FCH\_INIT\_SETPT<sub>S</sub>, FPC\_FCH\_FER<sub>S</sub> to FPC\_FCH\_FER<sub>R</sub>,
- 6           FPC\_FCH\_MIN\_SETPT<sub>S</sub> to FPC\_FCH\_MIN\_SETPT<sub>R</sub>,
- 7           FPC\_FCH\_MAX\_SETPT<sub>S</sub> to FPC\_FCH\_MAX\_SETPT<sub>R</sub>, and
- 8           FPC\_PRI\_CHAN<sub>S</sub> to '0' if the mobile station supports any Radio
- 9           Configuration greater than 2.
- 10          + The mobile station shall set FPC\_SUBCHAN\_GAIN<sub>S</sub> to
- 11          FPC\_SUBCHAN\_GAIN<sub>R</sub>.
- 12          + The mobile station shall set REV\_FCH\_GATING\_MODE<sub>S</sub> to
- 13          REV\_FCH\_GATING\_MODE<sub>R</sub>.
- 14          + The mobile station shall set REV\_PWR\_CNTL\_DELAY<sub>S</sub> to
- 15          REV\_PWR\_CNTL\_DELAY<sub>R</sub> if REV\_PWR\_CNTL\_DELAY\_INCL<sub>R</sub> is equal to
- 16          '1'.
- 17          + The mobile station shall set RL\_GAIN\_ADJ<sub>S</sub> to RL\_GAIN\_ADJ<sub>R</sub>.
- 18          + The mobile station shall set PLCM\_TYPE<sub>S</sub> to PLCM\_TYPE<sub>R</sub> if
- 19          PLCM\_TYPE\_INCL<sub>R</sub> is equal to '1'; otherwise, the mobile station shall set
- 20          PLCM\_TYPE<sub>S</sub> as follows:
  - 21           o If P\_REV\_IN\_USE<sub>S</sub> is less than 11, set PLCM\_TYPE<sub>S</sub> to '0000';
  - 22           otherwise set PLCM\_TYPE<sub>S</sub> to '0100'.
- 23          + The mobile station shall set PLCM\_39<sub>S</sub> to PLCM\_39<sub>R</sub> if PLCM\_TYPE<sub>R</sub> is
- 24          equal to '0001'.
- 25          + If the mobile station is currently monitoring the Paging Channel, the
- 26          mobile station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile
- 27          station shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set
- 28          IDLE\_CDMA\_CHAN to CDMACH<sub>S</sub>, IDLE\_CDMABAND to CDMABAND<sub>S</sub>,
- 29          IDLE\_SID to SID<sub>S</sub>, IDLE\_NID to NID<sub>S</sub>, and IDLE\_P\_REV to P\_REV<sub>S</sub>.
- 30          + The mobile station shall then enter the *Traffic Channel Initialization*
- 31          *Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 32          – If FREQ\_INCL<sub>R</sub> equals '1', the mobile station shall perform the following
- 33          actions:
  - 34           + If the band class is not supported by the mobile station, the mobile
  - 35           station shall send a *Mobile Station Reject Order* with ORDQ field set to
  - 36           '00000110' (capability not supported by the mobile station) and remain
  - 37           in the *Mobile Station Origination Attempt Substate*.
  - 38           + If the band class is supported by the mobile station, the mobile station
  - 39           shall perform the following actions:

- 1           o The mobile station shall store the frame offset ( $FRAME\_OFFSET_S =$   
2            $FRAME\_OFFSET_R$ ); the message encryption mode indicator  
3           ( $ENCRYPT\_MODE_S = ENCRYPT\_MODE_R$ ); the bypass indicator  
4           ( $BYPASS\_ALERT\_ANSWER_S = BYPASS\_ALERT\_ANSWER_R$ ); the  
5           granted mode ( $GRANTED\_MODE_S = GRANTED\_MODE_R$ ); the default  
6           configuration ( $DEFAULT\_CONFIG_S = DEFAULT\_CONFIG_R$ ); the idle  
7           Frequency Assignment ( $IDLE\_CDMA\_CHAN = CDMACH_S$ ); the idle  
8           band class ( $IDLE\_CDMABAND = CDMABAND_S$ ); the band class  
9           ( $CDMABAND_S = BAND\_CLASS_R$ ); the Frequency Assignment  
10          ( $CDMACH_S = CDMA\_FREQ_R$ ); and the occurrences of  $PILOT\_PN$  and  
11           $PWR\_COMB\_IND$  for each included member of the Active Set.
- 12          o The mobile station shall perform the procedures in 2.6.11.2.
- 13          o The mobile station shall set  $SERV\_NEG_S$  to enabled.
- 14          o The mobile station shall initialize  $CODE\_CHAN\_LIST$  as described in  
15          2.6.8.
- 16          o The mobile station shall set  $FPC\_FCH\_INIT\_SETPT_S$  to  
17           $FPC\_FCH\_INIT\_SETPT_R$ ,  $FPC\_FCH\_CURR\_SETPT_S$  to  
18           $FPC\_FCH\_INIT\_SETPT_S$ ,  $FPC\_FCH\_FER_S$  to  $FPC\_FCH\_FER_R$ ,  
19           $FPC\_FCH\_MIN\_SETPT_S$  to  $FPC\_FCH\_MIN\_SETPT_R$ ,  
20           $FPC\_FCH\_MAX\_SETPT_S$  to  $FPC\_FCH\_MAX\_SETPT_R$ , and  
21           $FPC\_PRI\_CHAN_S$  to '0' if the mobile station supports any Radio  
22          Configuration greater than 2.
- 23          o The mobile station shall set  $FPC\_SUBCHAN\_GAIN_S$  to  
24           $FPC\_SUBCHAN\_GAIN_R$ .
- 25          o The mobile station shall set  $RLGAIN\_ADJ_S$  to  $RLGAIN\_ADJ_R$ .
- 26          o The mobile station shall set  $REV\_FCH\_GATING\_MODE_S$  to  
27           $REV\_FCH\_GATING\_MODE_R$ .
- 28          o The mobile station shall set  $REV\_PWR\_CNTL\_DELAY_S$  to  
29           $REV\_PWR\_CNTL\_DELAY_R$  if  $REV\_PWR\_CNTL\_DELAY\_INCL_R$  is equal  
30          to '1'.
- 31          o The mobile station shall set  $PLCM\_TYPE_S$  to  $PLCM\_TYPE_R$  if  
32           $PLCM\_TYPE\_INCL_R$  is equal to '1'; otherwise, the mobile station shall  
33          set  $PLCM\_TYPE_S$  as follows:
  - 34           ◇ If  $P\_REV\_IN\_USE_S$  is less than 11, set  $PLCM\_TYPE_S$  to '0000';
  - 35           otherwise set  $PLCM\_TYPE_S$  to '0100'.
- 36          o The mobile station shall set  $PLCM\_39_S$  to  $PLCM\_39_R$  if  $PLCM\_TYPE_R$   
37          is equal to '0001'.

- o If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile station shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set IDLE\_SID to SID<sub>s</sub>, IDLE\_NID to NID<sub>s</sub>, IDLE\_P\_REV to P\_REV<sub>s</sub>.
  - o The mobile station shall then tune to the new Frequency Assignment and enter the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*.
- If ASSIGN\_MODE<sub>r</sub> equals '001', the mobile station shall perform the following actions:
  - If FREQ\_INCL<sub>r</sub> equals '0', the mobile station shall perform the following actions:
    - + If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    - + The mobile station shall set CONFIG\_MSG\_SEQ<sub>s</sub> and ACC\_MSG\_SEQ<sub>s</sub> to NULL (see 2.6.2.2) and shall set PILOT\_PN<sub>s</sub> to the pilot PN sequence offset of the strongest pilot in the list (PILOT\_PN<sub>r</sub>).
    - + If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ<sub>s</sub>, NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GEN\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>s</sub>, EXT\_SYS\_PAR\_MSG\_SEQ<sub>s</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>s</sub>, PRI\_NGHBR\_LST\_MSG\_SEQ<sub>s</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub>, and EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>s</sub> to NULL.
    - + The mobile station shall set PAGE\_CHAN<sub>s</sub> to '1' and PAGECH<sub>s</sub> to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRAT<sub>s</sub> to '00'. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
    - + If RESPOND<sub>r</sub> is equal to '1', the mobile station shall perform the following:
      - o If the *Extended Channel Assignment Message* does not require an acknowledgment, the mobile station shall enter the *Update Overhead Information Substate* with an origination indication within T<sub>34m</sub> seconds after receiving the *Extended Channel Assignment Message*.

- o If the *Extended Channel Assignment Message* requires an acknowledgment, the mobile station shall enter the *Update Overhead Information Substate* with an origination indication within  $T_{34m}$  seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the *Extended Channel Assignment Message* has been sent and acknowledged.
- If  $FREQ\_INCL_r$  equals '1', the mobile station shall perform the following actions:
  - + If the band class is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to '00000110' (capability not supported by the mobile station) and remain in the *Mobile Station Origination Attempt Substate*.
  - + If the band class is supported by the mobile station, the mobile station shall perform the following actions:
    - o If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    - o The mobile station shall set  $CDMACH_s$  to  $CDMA\_FREQ_r$  and  $CDMABAND_s$  to  $BAND\_CLASS_r$ . Then the mobile station shall tune to the new Frequency Assignment, measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2, set  $PILOT\_PN_s$  to the pilot PN sequence offset of the strongest pilot in the list ( $PILOT\_PN_r$ ), and set  $CONFIG\_MSG\_SEQ_s$  and  $ACC\_MSG\_SEQ_s$  to NULL (see 2.6.2.2).
    - o If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set  $SYS\_PAR\_MSG\_SEQ_s$ ,  $NGHBR\_LST\_MSG\_SEQ_s$ ,  $EXT\_NGHBR\_LST\_MSG\_SEQ_s$ ,  $GEN\_NGHBR\_LST\_MSG\_SEQ_s$ ,  $CHAN\_LST\_MSG\_SEQ_s$ ,  $EXT\_CHAN\_LST\_MSG\_SEQ_s$ ,  $FD\_CHAN\_LST\_MSG\_SEQ_s$ ,  $EXT\_SYS\_PAR\_MSG\_SEQ_s$ ,  $USER\_ZONE\_ID\_MSG\_SEQ_s$ ,  $PRI\_NGHBR\_LST\_MSG\_SEQ_s$ ,  $GLOB\_SERV\_REDIR\_MSG\_SEQ_s$ , and  $EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ_s$  to NULL.
    - o The mobile station shall set  $PAGE\_CHAN_s$  to '1' and  $PAGECH_s$  to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the  $PRAT_s$  to '00'. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
    - o If  $RESPOND_r$  is equal to '1', the mobile station shall perform the following:



- 1                   ◇ If the *Extended Channel Assignment Message* does not require an
- 2                   acknowledgment, the mobile station shall enter the *Update*
- 3                   *Overhead Information Substate* with an origination indication
- 4                   within  $T_{34m}$  seconds after receiving the *Extended Channel*
- 5                   *Assignment Message*.
- 6                   ◇ If the *Extended Channel Assignment Message* requires an
- 7                   acknowledgment, the mobile station shall enter the *Update*
- 8                   *Overhead Information Substate* with an origination indication
- 9                   within  $T_{34m}$  seconds after Layer 3 receives an indication from
- 10                  Layer 2 that the acknowledgment to the *Extended Channel*
- 11                  *Assignment Message* has been sent and acknowledged.
- 12                  • If ASSIGN\_MODE<sub>r</sub> equals '100', the mobile station shall perform the following
- 13                  actions:
- 14                  – If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> to disabled
- 15                  and PACA\_CANCEL to '0', shall disable the PACA state timer, and should
- 16                  indicate to the user that the PACA call has been canceled.
- 17                  – If GRANTED\_MODE<sub>r</sub> equals '00' and the multiplex option and radio
- 18                  configuration specified in the DEFAULT\_CONFIG<sub>r</sub> field are not supported by
- 19                  the mobile station, the mobile station shall send a *Mobile Station Reject*
- 20                  *Order* with ORDQ field set to '00000110' (capability not supported by the
- 21                  mobile station) and shall remain in the *Mobile Station Origination Attempt*
- 22                  *Substate*.
- 23                  – If GRANTED\_MODE<sub>r</sub> equals '11', P\_REV\_IN\_USE<sub>s</sub> is less than 11, and the
- 24                  mobile station did not include a SYNC\_ID field in the *Origination Message* or
- 25                  the *Reconnect Message* that was transmitted in this substate, the mobile
- 26                  station shall send a *Mobile Station Reject Order* with ORDQ field set to
- 27                  '00000110' (capability not supported by the mobile station) and shall
- 28                  remain in the *Mobile Station Origination Attempt Substate*.
- 29                  – If SYNC\_ID\_INCL<sub>r</sub> is included and equals '1' and the mobile station does not
- 30                  have stored service configuration corresponding to SYNC\_ID<sub>r</sub> for the current
- 31                  SID<sub>s</sub> and NID<sub>s</sub> pair, the mobile station shall send a *Mobile Station Reject*
- 32                  *Order* with ORDQ field set to '00011011' (Requested stored service
- 33                  configuration is not available) and shall remain in the *Mobile Station*
- 34                  *Origination Attempt Substate*.
- 35                  – If GRANTED\_MODE<sub>r</sub> equals '11', SR\_ID\_RESTORE<sub>r</sub> is not equal to '111',
- 36                  and a service option connection record corresponding to SR\_ID\_RESTORE<sub>r</sub>
- 37                  is not contained in the stored service configuration, the mobile station shall
- 38                  send a *Mobile Station Reject Order* with ORDQ field set to '00000110'
- 39                  (capability not supported by the mobile station) and shall remain in the
- 40                  *Mobile Station Origination Attempt Substate*.

- 1           – If GRANTED\_MODE<sub>r</sub> equals '00' and DEFAULT\_CONFIG<sub>r</sub> is not equal to
- 2           '100', the mobile station shall send a *Mobile Station Reject Order* with ORDQ
- 3           field set to '00001110' (RC does not match with DEFAULT\_CONFIG) and
- 4           shall remain in the *Mobile Station Origination Attempt Substate* if one of the
- 5           following conditions is true:
  - 6           + FOR\_RC<sub>r</sub> is not equal to the Radio Configuration associated with
  - 7           DEFAULT\_CONFIG<sub>r</sub> as specified in Table 3.7.2.3.2.21-2.
  - 8           + REV\_RC<sub>r</sub> is not equal to the Radio Configuration associated with
  - 9           DEFAULT\_CONFIG<sub>r</sub> as specified in Table 3.7.2.3.2.21-2.
- 10          – If the mobile station does not support either of the Radio Configurations
- 11          (FOR\_RC or REV\_RC), the mobile station shall send a *Mobile Station Reject*
- 12          *Order* with the ORDQ field set to '00000110' (capability not supported by
- 13          the mobile station) and remain in the *Mobile Station Origination Attempt*
- 14          *Substate*.
- 15          – If CH\_IND<sub>r</sub> = '01' and the mobile station does not support the Fundamental
- 16          Channel, the mobile station shall send a *Mobile Station Reject Order* with
- 17          the ORDQ field set to '00000110' (capability not supported by the mobile
- 18          station) and remain in the *Mobile Station Origination Attempt Substate*.
- 19          – If CH\_IND<sub>r</sub> = '10' and the mobile station does not support the Dedicated
- 20          Control Channel, the mobile station shall send a *Mobile Station Reject Order*
- 21          with the ORDQ field set to '00000110' (capability not supported by the
- 22          mobile station) and remain in the *Mobile Station Origination Attempt*
- 23          *Substate*.
- 24          – If CH\_IND<sub>r</sub> = '11' and the mobile station does not support the Dedicated
- 25          Control Channel and Fundamental Channel concurrently, the mobile
- 26          station shall send a *Mobile Station Reject Order* with the ORDQ field set to
- 27          '00000110' (capability not supported by the mobile station) and remain in
- 28          the *Mobile Station Origination Attempt Substate*.
- 29          – If FREQ\_INCL<sub>r</sub> equals '1' and if the band class (BAND\_CLASS<sub>r</sub>) is not
- 30          supported by the mobile station, the mobile station shall send a *Mobile*
- 31          *Station Reject Order* with ORDQ field set to '00000110' (capability not
- 32          supported by the mobile station) and remain in the *Mobile Station*
- 33          *Origination Attempt Substate*.
- 34          – If PLCM\_TYPE<sub>r</sub> equals '0010' and IMSI\_O is derived from IMSI\_T, or if
- 35          PLCM\_TYPE<sub>r</sub> equals '0011' and IMSI\_O is derived from IMSI\_M, the mobile
- 36          station shall send a *Mobile Station Reject Order* with the ORDQ field set to
- 37          '00011100' (PLCM\_TYPE mismatch) and remain in the *Mobile Station*
- 38          *Origination Attempt Substate*.

- 1           – If FUNDICATED\_BCMC\_IND<sub>r</sub> is included and set to 1, and the mobile  
2           station does not support the BCMC reception on the Forward Fundicated  
3           Channels assigned in this message, the mobile station shall send a *Mobile*  
4           *Station Reject Order* with the ORDQ field set to '00000110' (capability not  
5           supported by the mobile station) and remain in the *Mobile Station*  
6           *Origination Attempt Substate*.
- 7           – If the mobile station does not send a Mobile Station Reject Order as  
8           specified above, it shall continue to perform the actions specified below.
- 9           – The mobile station shall set
  - 10           + IDLE\_CDMABAND = CDMABAND<sub>s</sub>
  - 11           + IDLE\_CDMACH = CDMACH<sub>s</sub>
- 12          – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall set
  - 13           + CDMABAND<sub>s</sub> = BAND\_CLASS<sub>r</sub>
  - 14           + CDMACH<sub>s</sub> = CDMA\_FREQ<sub>r</sub>
- 15          – The mobile station shall store the bypass indicator  
16           (BYPASS\_ALERT\_ANSWER<sub>s</sub> = BYPASS\_ALERT\_ANSWER<sub>r</sub>).
- 17          – The mobile station shall store granted mode (GRANTED\_MODE<sub>s</sub> =  
18           GRANTED\_MODE<sub>r</sub>). If GRANTED\_MODE<sub>r</sub> equals '11', the mobile station  
19           shall perform the following:
  - 20           + The mobile station shall store service reference identifier to be restored  
21           (SR\_ID\_RESTORE<sub>s</sub> = SR\_ID\_RESTORE<sub>r</sub>).
  - 22           + If SR\_ID\_RESTORE<sub>r</sub> equals '000', the mobile station shall store bitmap  
23           of service reference identifiers to be restored (SR\_ID\_RESTORE\_BITMAP<sub>s</sub>  
24           = SR\_ID\_RESTORE\_BITMAP<sub>r</sub>).
- 25          – If SYNC\_ID\_INCL<sub>r</sub> is included and equals '1', the mobile station shall store  
26           the service configuration synchronization identifier (SYNC\_ID<sub>s</sub> = SYNC\_ID<sub>r</sub>).
- 27          – The mobile station shall store the default configuration (DEFAULT\_CONFIG<sub>s</sub>  
28           = DEFAULT\_CONFIG<sub>r</sub>).
- 29          – The mobile station shall store the Forward Traffic Channel Radio  
30           Configuration (FOR\_RC<sub>s</sub> = FOR\_RC<sub>r</sub>) and the Reverse Traffic Channel Radio  
31           Configuration (REV\_RC<sub>s</sub> = REV\_RC<sub>r</sub>).
- 32          – The mobile station shall store the frame offset (FRAME\_OFFSET<sub>s</sub> =  
33           FRAME\_OFFSET<sub>r</sub>).
- 34          – The mobile station shall store the message encryption mode indicator  
35           (ENCRYPT\_MODE<sub>s</sub> = ENCRYPT\_MODE<sub>r</sub>).
- 36          – The mobile station shall perform the procedures in 2.6.11.2.
- 37          – The mobile station shall store the Forward power control subchannel  
38           relative gain (FPC\_SUBCHAN\_GAIN<sub>s</sub> = FPC\_SUBCHAN\_GAIN<sub>r</sub>).

- 1           – The mobile station shall set  $RLGAIN\_ADJ_S$  to  $RLGAIN\_ADJ_R$ .
- 2           – The mobile station shall set  $REV\_FCH\_GATING\_MODE_S$  to
- 3            $REV\_FCH\_GATING\_MODE_R$ .
- 4           – The mobile station shall set  $REV\_PWR\_CNTL\_DELAY_S$  to
- 5            $REV\_PWR\_CNTL\_DELAY_R$  if  $REV\_PWR\_CNTL\_DELAY\_INCL_R$  is equal to '1'.
- 6           – If  $3XFL\_1XRL\_INCL_R$  is equal to '1', the mobile station shall set
- 7            $1XRL\_FREQ\_OFFSET_S$  to  $1XRL\_FREQ\_OFFSET_R$ .
- 8           – The mobile station shall set  $PLCM\_TYPE_S$  to  $PLCM\_TYPE_R$  if
- 9            $PLCM\_TYPE\_INCL_R$  is equal to '1'; otherwise, the mobile station shall set
- 10           $PLCM\_TYPE_S$  as follows:
- 11          + If  $P\_REV\_IN\_USE_S$  is less than 11, set  $PLCM\_TYPE_S$  to '0000'; otherwise
- 12          set  $PLCM\_TYPE_S$  to '0100'.
- 13          – The mobile station shall set  $PLCM\_39_S$  to  $PLCM\_39_R$  if  $PLCM\_TYPE_R$  is equal
- 14          to '0001'.
- 15          – The mobile station shall set  $EARLY\_RL\_TRANSMIT\_IND_S$  to
- 16           $EARLY\_RL\_TRANSMIT\_IND_R$ .
- 17          – If  $FIXED\_PREAMBLE\_TRANSMIT\_IND_R$  is included, the mobile station shall
- 18          set  $FIXED\_PREAMBLE\_TRANSMIT\_IND_S$  to
- 19           $FIXED\_PREAMBLE\_TRANSMIT\_IND_R$ ; otherwise, the mobile station shall set
- 20           $FIXED\_PREAMBLE\_TRANSMIT\_IND_S$  to '0'. If
- 21           $FIXED\_PREAMBLE\_TRANSMIT\_IND_S$  equals '1', the mobile station shall set
- 22           $FIXED\_NUM\_PREAMBLE_S$  to  $FIXED\_NUM\_PREAMBLE_R$ .
- 23          – If  $TX\_PWR\_LIMIT\_INCL_R$  is set to '1', the mobile station shall perform the
- 24          following:
- 25          + If the mobile station is being assigned to operate in the 1915MHz –
- 26          1920MHz block of the PCS band, the mobile station shall store the
- 27          transmit power limit  $TX\_PWR\_LIMIT_S = (TX\_PWR\_LIMIT_R - 30dB)$ ;
- 28          + Otherwise, the mobile station shall set  $TX\_PWR\_LIMIT_S$  to the limit
- 29          defined in [11] for the target base station.
- 30          – The mobile station shall store the channel indicator ( $CH\_IND_S = CH\_IND_R$ )
- 31          and the mobile station shall perform the following actions:
- 32          + If  $CH\_IND_R$  equals '01', the mobile station shall set
- 33           $FPC\_FCH\_INIT\_SETPT_S$  to  $FPC\_FCH\_INIT\_SETPT_R$ ,
- 34           $FPC\_FCH\_CURR\_SETPT_S$  to  $FPC\_FCH\_INIT\_SETPT_S$ ,  $FPC\_FCH\_FER_S$  to
- 35           $FPC\_FCH\_FER_R$ ,  $FPC\_FCH\_MIN\_SETPT_S$  to  $FPC\_FCH\_MIN\_SETPT_R$ ,
- 36           $FPC\_FCH\_MAX\_SETPT_S$  to  $FPC\_FCH\_MAX\_SETPT_R$ , and
- 37           $FPC\_PRI\_CHAN_S$  to '0' if the mobile station supports any Radio
- 38          Configuration greater than 2. Then for each included member of the
- 39          Active Set, the mobile station shall store the following:
- 40          o Set the  $PILOT\_PN$  field to  $PILOT\_PN_R$ .

- 1                   o Set the ADD\_PILOT\_REC\_INCL field to ADD\_PILOT\_REC\_INCL<sub>r</sub>. If
- 2                   ADD\_PILOT\_REC\_INCL<sub>r</sub> equals '1', the mobile station shall store the
- 3                   following:
- 4                   ◇ Set the PILOT\_REC\_TYPE field of PILOT\_REC to
- 5                   PILOT\_REC\_TYPE<sub>r</sub>.
- 6                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> equals '000', the mobile station shall set the
- 7                   TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL<sub>r</sub>
- 8                   and set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 9                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station shall
- 10                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 11                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 12                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 13                  WALSH\_LENGTH<sub>r</sub>.
- 14                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station shall:
- 15                  – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 16                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 17                  AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 18                  WALSH\_LENGTH<sub>r</sub>.
- 19                  – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to
- 20                  AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 21                  – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 22                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:
- 23                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 24                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 25                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 26                  SR3\_PILOT\_POWER1<sub>r</sub>.
- 27                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 28                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 29                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
- 30                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 31                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 32                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 33                  SR3\_PILOT\_POWER1<sub>r</sub>.
- 34                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 35                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 36                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.

- 1                                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 2                                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 3                                   WALSH\_LENGTH<sub>r</sub>.
- 4                                   – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1
- 5                                   field of PILOT\_REC to QOF1<sub>r</sub> and set the
- 6                                   AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 7                                   AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length specified
- 8                                   by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF1
- 9                                   field of PILOT\_REC to QOF<sub>r</sub> and set the
- 10                                  AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 11                                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 12                                  WALSH\_LENGTH<sub>r</sub>.
- 13                                  – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2
- 14                                  field of PILOT\_REC to QOF2<sub>r</sub> and set the
- 15                                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 16                                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length specified
- 17                                  by WALSH\_LENGTH2<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF2
- 18                                  field of PILOT\_REC to QOF<sub>r</sub> and set the
- 19                                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 20                                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 21                                  WALSH\_LENGTH<sub>r</sub>.
- 22                                  o Set the PWR\_COMB\_IND field to PWR\_COMB\_IND<sub>r</sub>.
- 23                                  o Set the CODE\_CHAN\_FCH field to CODE\_CHAN\_FCH<sub>r</sub>.
- 24                                  o Set the QOF\_MASK\_ID\_FCH field to QOF\_MASK\_ID\_FCH<sub>r</sub>.
- 25                                  + If CH\_IND<sub>r</sub> equals '01' and 3X\_FCH\_INFO\_INCL<sub>r</sub> equals '1', for each
- 26                                  included member of the Active Set, the mobile station store the
- 27                                  following:
- 28                                  o If 3X\_FCH\_LOW\_INCL<sub>r</sub> equals '1', set the QOF\_MASK\_ID\_FCH\_LOW
- 29                                  field to QOF\_MASK\_ID\_FCH\_LOW<sub>r</sub> and the CODE\_CHAN\_FCH\_LOW
- 30                                  field to CODE\_CHAN\_FCH\_LOW<sub>r</sub>. Otherwise, set the
- 31                                  QOF\_MASK\_ID\_FCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the
- 32                                  CODE\_CHAN\_FCH\_LOW to CODE\_CHAN\_FCH<sub>r</sub>.
- 33                                  o If 3X\_FCH\_HIGH\_INCL<sub>r</sub> equals '1', set the
- 34                                  QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH\_HIGH<sub>r</sub> and
- 35                                  the CODE\_CHAN\_FCH\_HIGH field to CODE\_CHAN\_FCH\_HIGH<sub>r</sub>.
- 36                                  Otherwise, set the QOF\_MASK\_ID\_FCH\_HIGH field to
- 37                                  QOF\_MASK\_ID\_FCH<sub>r</sub> and the CODE\_CHAN\_FCH\_HIGH to
- 38                                  CODE\_CHAN\_FCH<sub>r</sub>.

- 1                   + If CH\_IND<sub>r</sub> equals '10', the mobile station shall set  
2                   FPC\_DCCH\_INIT\_SETPT<sub>s</sub> to FPC\_DCCH\_INIT\_SETPT<sub>r</sub>,  
3                   FPC\_DCCH\_CURR\_SETPT<sub>s</sub> to FPC\_DCCH\_INIT\_SETPT<sub>s</sub>,  
4                   FPC\_DCCH\_FER<sub>s</sub> to FPC\_DCCH\_FER<sub>r</sub>, FPC\_DCCH\_MIN\_SETPT<sub>s</sub> to  
5                   FPC\_DCCH\_MIN\_SETPT<sub>r</sub>, FPC\_DCCH\_MAX\_SETPT<sub>s</sub> to  
6                   FPC\_DCCH\_MAX\_SETPT<sub>r</sub>, FUNDICATED\_BCMC\_IND<sub>s</sub> to  
7                   FUNDICATED\_BCMC\_IND<sub>r</sub>, and FPC\_PRI\_CHAN<sub>s</sub> to '1' if the mobile  
8                   station supports any Radio Configuration greater than 2. Then for each  
9                   included member of the Active Set, the mobile station shall store the  
10                  following:
- 11                 o Set the PILOT\_PN to PILOT\_PN<sub>r</sub>.
- 12                 o Set the ADD\_PILOT\_REC\_INCL field to ADD\_PILOT\_REC\_INCL. If  
13                   ADD\_PILOT\_REC\_INCL is equal to '1', the mobile station shall store  
14                   the following:
- 15                     ◇ Set the PILOT\_REC\_TYPE field of PILOT\_REC to  
16                     PILOT\_REC\_TYPE<sub>r</sub>.
- 17                     ◇ If PILOT\_REC\_TYPE<sub>r</sub> equals '000', the mobile station shall set the  
18                     TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL<sub>r</sub>  
19                     and set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 20                     ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station shall
- 21                         – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 22                         – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
23                         AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by  
24                         WALSH\_LENGTH<sub>r</sub>.
- 25                     ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station shall:
- 26                         – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 27                         – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
28                         AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by  
29                         WALSH\_LENGTH<sub>r</sub>.
- 30                         – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to  
31                         AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 32                         – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 33                     ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:
- 34                         – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to  
35                         SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 36                         – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to  
37                         SR3\_PILOT\_POWER1<sub>r</sub>.
- 38                         – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to  
39                         SR3\_PILOT\_POWER2<sub>r</sub>.

- 1                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
- 2                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 3                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 4                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 5                   SR3\_PILOT\_POWER1<sub>r</sub>.
- 6                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 7                   SR3\_PILOT\_POWER2<sub>r</sub>.
- 8                   – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 9                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 10                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 11                  WALSH\_LENGTH<sub>r</sub>.
- 12                  – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1
- 13                  field of PILOT\_REC to QOF1<sub>r</sub> and set the
- 14                  AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 15                  AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length specified
- 16                  by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF1
- 17                  field of PILOT\_REC to QOF<sub>r</sub> and set the
- 18                  AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 19                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 20                  WALSH\_LENGTH<sub>r</sub>.
- 21                  – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2
- 22                  field of PILOT\_REC to QOF2<sub>r</sub> and set the
- 23                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 24                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length specified
- 25                  by WALSH\_LENGTH2<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF2
- 26                  field of PILOT\_REC to QOF<sub>r</sub> and set the
- 27                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 28                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 29                  WALSH\_LENGTH<sub>r</sub>.
- 30                  ○ Set the PWR\_COMB\_IND field to PWR\_COMB\_IND<sub>r</sub>.
- 31                  ○ Set the CODE\_CHAN\_FCH field to CODE\_CHAN\_FCH<sub>r</sub>.
- 32                  ○ Set the QOF\_MASK\_ID\_FCH field to QOF\_MASK\_ID\_FCH<sub>r</sub>.
- 33                  ○ Set the DCCH\_INCL field to DCCH\_INCL<sub>r</sub>. If DCCH\_INCL<sub>r</sub> equals '1',
- 34                  the mobile station shall store the following:
- 35                   ◇ Set the CODE\_CHAN\_DCCH field to CODE\_CHAN\_DCCH<sub>r</sub>.
- 36                   ◇ Set the QOF\_MASK\_ID\_DCCH field to QOF\_MASK\_ID\_DCCH<sub>r</sub>.
- 37                  + If CH\_IND<sub>r</sub> equals '10' and 3X\_DCCH\_INFO\_INCL<sub>r</sub> equals '1', for each
- 38                  included member of the Active Set, the mobile station shall store the
- 39                  following:



- 1                   o If 3X\_DCCH\_LOW\_INCL<sub>r</sub> equals '1', set the
- 2                   QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_DCCH\_LOW<sub>r</sub>
- 3                   and the CODE\_CHAN\_DCCH\_LOW field to
- 4                   CODE\_CHAN\_DCCH\_LOW<sub>r</sub>. Otherwise, set the
- 5                   QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the
- 6                   CODE\_CHAN\_DCCH\_LOW to CODE\_CHAN\_FCH<sub>r</sub>.
- 7                   o If 3X\_DCCH\_HIGH\_INCL<sub>r</sub> equals '1', set the
- 8                   QOF\_MASK\_ID\_DCCH\_HIGH field to QOF\_MASK\_ID\_DCCH\_HIGH<sub>r</sub>,
- 9                   and the CODE\_CHAN\_DCCH\_HIGH field to
- 10                  CODE\_CHAN\_DCCH\_HIGH<sub>r</sub>. Otherwise, set the
- 11                  QOF\_MASK\_ID\_DCCH\_HIGH field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the
- 12                  CODE\_CHAN\_DCCH\_HIGH to CODE\_CHAN\_FCH<sub>r</sub>.
- 13           + If CH\_IND<sub>r</sub> equals '10', and FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1', for
- 14           each included member of the Active Set, the mobile station shall store
- 15           the following:
- 16           o Set FOR\_CPCCH\_WALSH<sub>s</sub> to FOR\_CPCCH\_WALSH<sub>r</sub>.
- 17           o Set FOR\_CPCSCH<sub>s</sub> to FOR\_CPCSCH<sub>r</sub>.
- 18           + If CH\_IND<sub>r</sub> equals '11', the mobile station shall set
- 19           FPC\_FCCH\_INIT\_SETPT<sub>s</sub> to FPC\_FCH\_INIT\_SETPT<sub>r</sub>,
- 20           FPC\_FCH\_CURR\_SETPT<sub>s</sub> to FPC\_FCH\_INIT\_SETPT<sub>s</sub>, FPC\_FCH\_FER<sub>s</sub> to
- 21           FPC\_FCH\_FER<sub>r</sub>, FPC\_FCH\_MIN\_SETPT<sub>s</sub> to FPC\_FCH\_MIN\_SETPT<sub>r</sub>,
- 22           FPC\_FCH\_MAX\_SETPT<sub>s</sub> to FPC\_FCH\_MAX\_SETPT<sub>r</sub>,
- 23           FPC\_DCCH\_INIT\_SETPT<sub>s</sub> to FPC\_DCCH\_INIT\_SETPT<sub>r</sub>,
- 24           FPC\_DCCH\_CURR\_SETPT<sub>s</sub> to FPC\_DCCH\_INIT\_SETPT<sub>s</sub>,
- 25           FPC\_DCCH\_FER<sub>s</sub> to FPC\_DCCH\_FER<sub>r</sub>, FPC\_DCCH\_MIN\_SETPT<sub>s</sub> to
- 26           FPC\_DCCH\_MIN\_SETPT<sub>r</sub>, FPC\_DCCH\_MAX\_SETPT<sub>s</sub> to
- 27           FPC\_DCCH\_MAX\_SETPT<sub>r</sub>, FPC\_PRI\_CHAN<sub>s</sub> to FPC\_PRI\_CHAN<sub>r</sub>, and
- 28           FUNDICATED\_BCMC\_IND<sub>s</sub> to FUNDICATED\_BCMC\_IND<sub>r</sub>. Then for
- 29           each included member of the Active Set, the mobile station shall store
- 30           the following:
- 31           o Set the PILOT\_PN to PILOT\_PN<sub>r</sub>.
- 32           o Set the ADD\_PILOT\_REC\_INCL field to ADD\_PILOT\_REC. If
- 33           ADD\_PILOT\_REC\_INCL is equal to '1', the mobile station shall store
- 34           the following:
- 35           ◇ Set the PILOT\_REC\_TYPE field of PILOT\_REC to
- 36           PILOT\_REC\_TYPE<sub>r</sub>.
- 37           ◇ If PILOT\_REC\_TYPE<sub>r</sub> equals '000', the mobile station shall set the
- 38           TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL<sub>r</sub>
- 39           and set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 40           ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station shall
- 41           – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.

- 1                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 2                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 3                   WALSH\_LENGTH<sub>r</sub>.
- 4           ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station shall:
- 5                   – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 6                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 7                   AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 8                   WALSH\_LENGTH<sub>r</sub>.
- 9                   – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to
- 10                  AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 11                  – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 12           ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:
- 13                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 14                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 15                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 16                   SR3\_PILOT\_POWER1<sub>r</sub>.
- 17                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 18                   SR3\_PILOT\_POWER2<sub>r</sub>.
- 19           ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
- 20                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 21                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 22                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 23                   SR3\_PILOT\_POWER1<sub>r</sub>.
- 24                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 25                   SR3\_PILOT\_POWER2<sub>r</sub>.
- 26                   – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 27                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 28                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 29                   WALSH\_LENGTH<sub>r</sub>.
- 30                   – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1
- 31                   field of PILOT\_REC to QOF1<sub>r</sub> and set the
- 32                   AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 33                   AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length specified
- 34                   by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF1
- 35                   field of PILOT\_REC to QOF<sub>r</sub> and set the
- 36                   AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 37                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 38                   WALSH\_LENGTH<sub>r</sub>.

- If ADD\_INFO\_INCL<sub>2r</sub> is equal to '1', set the AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>2r</sub> and set the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to AUX\_PILOT\_WALSH<sub>2r</sub> with the Walsh Code length specified by WALSH\_LENGTH<sub>2r</sub>; otherwise, set the AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by WALSH\_LENGTH<sub>r</sub>.
  - o Set the PWR\_COMB\_IND field to PWR\_COMB\_IND<sub>r</sub>.
  - o Set the CODE\_CHAN\_FCH field to CODE\_CHAN\_FCH<sub>r</sub>.
  - o Set the QOF\_MASK\_ID\_FCH field to QOF\_MASK\_ID\_FCH<sub>r</sub>.
  - o Set the CODE\_CHAN\_DCCH field to CODE\_CHAN\_DCCH<sub>r</sub>.
  - o Set the QOF\_MASK\_ID\_DCCH field to QOF\_MASK\_ID\_DCCH<sub>r</sub>.
  - + If CH\_IND<sub>r</sub> equals '11' and 3X\_FCH\_INFO\_INCL<sub>r</sub> equals '1', for each included member of the Active Set, the mobile station store the following:
    - o If 3X\_FCH\_LOW\_INCL<sub>r</sub> equals '1', set the QOF\_MASK\_ID\_FCH\_LOW field to QOF\_MASK\_ID\_FCH\_LOW<sub>r</sub> and the CODE\_CHAN\_FCH\_LOW field to CODE\_CHAN\_FCH\_LOW<sub>r</sub>. Otherwise, set the QOF\_MASK\_ID\_FCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the CODE\_CHAN\_FCH\_LOW to CODE\_CHAN\_FCH<sub>r</sub>.
    - o If 3X\_FCH\_HIGH\_INCL<sub>r</sub> equals '1', set the QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH\_HIGH<sub>r</sub> and the CODE\_CHAN\_FCH\_HIGH field to CODE\_CHAN\_FCH\_HIGH<sub>r</sub>. Otherwise, set the QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the CODE\_CHAN\_FCH\_HIGH to CODE\_CHAN\_FCH<sub>r</sub>.
  - + If CH\_IND<sub>r</sub> equals '11' and FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1', the mobile station shall:
    - o Set REV\_FCH\_ASSIGNED<sub>s</sub> to REV\_FCH\_ASSIGNED<sub>r</sub>.
  - + If CH\_IND<sub>r</sub> equals '11' and FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1', the mobile station shall set FCH\_BCNC\_IND to '1'; otherwise, the mobile station shall set FCH\_BCNC\_IND to '0'.
  - + If CH\_IND<sub>r</sub> equals '11', FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1', and FOR\_CPCCH\_INFO\_INCL<sub>r</sub> is included and is set to '1', for each included member of the Active Set, the mobile station shall store the following:
    - o Set FOR\_CPCCH\_WALSH<sub>s</sub> to FOR\_CPCCH\_WALSH<sub>r</sub>.
    - o Set FOR\_CPCSCH<sub>s</sub> to FOR\_CPCSCH<sub>r</sub>.

- 1                   + If CH\_IND<sub>r</sub> equals '11', FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1', and  
2                   ADD\_PLCM\_FOR\_FCH\_INCL<sub>r</sub> is included and is set to '1', the mobile  
3                   station shall store the following:  
4                   o Set ADD\_PLCM\_FOR\_FCH\_TYPE<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub>.  
5                   o Set ADD\_PLCM\_FOR\_FCH\_39<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_39<sub>r</sub> if  
6                   ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub> is equal to '1'.  
7                   + If CH\_IND<sub>r</sub> equals '11' and 3X\_DCCH\_INFO\_INCL<sub>r</sub> equals '1', for each  
8                   included member of the Active Set, the mobile station store the  
9                   following:  
10                  o If 3X\_DCCH\_LOW\_INCL<sub>r</sub> equals '1', set the  
11                  QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_DCCH\_LOW<sub>r</sub>  
12                  and the CODE\_CHAN\_DCCH\_LOW field to  
13                  CODE\_CHAN\_DCCH\_LOW<sub>r</sub>. Otherwise, set the  
14                  QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the  
15                  CODE\_CHAN\_DCCH\_LOW to CODE\_CHAN\_FCH<sub>r</sub>.  
16                  o If 3X\_DCCH\_HIGH\_INCL<sub>r</sub> equals '1', set the  
17                  QOF\_MASK\_ID\_DCCH\_HIGH field to QOF\_MASK\_ID\_DCCH\_HIGH<sub>r</sub>  
18                  and the CODE\_CHAN\_DCCH\_HIGH field to  
19                  CODE\_CHAN\_DCCH\_HIGH<sub>r</sub>. Otherwise, set the  
20                  QOF\_MASK\_ID\_DCCH\_HIGH field to QOF\_MASK\_ID\_FCH<sub>r</sub> and the  
21                  CODE\_CHAN\_DCCH\_HIGH to CODE\_CHAN\_FCH<sub>r</sub>.  
22                  – The mobile station shall initialize CODE\_CHAN\_LIST as described in 2.6.8,  
23                  and shall set SERV\_NEG<sub>s</sub> to enabled.  
24                  – If the mobile station is currently monitoring the Paging Channel, the mobile  
25                  station shall set IDLE\_BCCH\_CHAN to '0'; otherwise, the mobile station  
26                  shall set IDLE\_BCCH\_CHAN to '1'. The mobile station shall set IDLE\_SID to  
27                  SID<sub>s</sub>, IDLE\_NID to NID<sub>s</sub>, and IDLE\_P\_REV to P\_REV<sub>s</sub>.  
28                  – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall then tune to the new  
29                  frequency assignment.  
30                  – The mobile station shall then enter the *Traffic Channel Initialization*  
31                  *Substate of the Mobile Station Control on the Traffic Channel State*.  
32                  • If ASSIGN\_MODE<sub>r</sub> equals '101', the mobile station shall perform the following  
33                  actions:  
34                  – If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> to disabled and  
35                  PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to  
36                  the user that the PACA call has been canceled.

- 1       – If GRANTED\_MODE<sub>r</sub> equals '11', P\_REV\_IN\_USE<sub>s</sub> is less than 11, and the  
2       mobile station did not include a SYNC\_ID field in the *Origination Message* or the  
3       *Reconnect Message* that was transmitted in this substate, the mobile station  
4       shall send a *Mobile Station Reject Order* with ORDQ field set to '00000110'  
5       (capability not supported by the mobile station) and shall remain in the *Mobile*  
6       *Station Origination Attempt Substate*.
- 7       – If SYNC\_ID\_INCL<sub>r</sub> is included and equals '1' and the mobile station does not  
8       have stored service configuration corresponding to SYNC\_ID<sub>r</sub> for the current  
9       SID<sub>s</sub> and NID<sub>s</sub> pair, the mobile station shall send a *Mobile Station Reject Order*  
10      with ORDQ field set to '00011011' (Requested stored service configuration is  
11      not available) and shall remain in the *Mobile Station Origination Attempt*  
12      *Substate*.
- 13      – If GRANTED\_MODE<sub>r</sub> equals '11', SR\_ID\_RESTORE<sub>r</sub> is not equal to '111', and a  
14      service option connection record corresponding to SR\_ID\_RESTORE<sub>r</sub> is not  
15      contained in the stored service configuration, the mobile station shall send a  
16      *Mobile Station Reject Order* with ORDQ field set to '00000110' (capability not  
17      supported by the mobile station) and shall remain in the *Mobile Station*  
18      *Origination Attempt Substate*.
- 19      – If the mobile station does not support any of the specified Radio Configurations  
20      (FOR\_PDCH\_RC, FOR\_FCH\_DCCH\_RC or REV\_FCH\_DCCH\_RC), the mobile  
21      station shall send a *Mobile Station Reject Order* with the ORDQ field set to  
22      '00000110' (capability not supported by the mobile station) and remain in the  
23      *Mobile Station Origination Attempt Substate*.
- 24      – If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH or R-FCH and the mobile  
25      station does not support Fundamental Channel, the mobile station shall send a  
26      *Mobile Station Reject Order* with the ORDQ field set to '00000110' (capability not  
27      supported by the mobile station) and remain in the *Mobile Station Origination*  
28      *Attempt Substate*.
- 29      – If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-DCCH or R-DCCH and the mobile  
30      station does not support the Dedicated Control Channel, the mobile station  
31      shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110'  
32      (capability not supported by the mobile station) and remain in the *Mobile*  
33      *Station Origination Attempt Substate*.
- 34      – If FREQ\_INCL<sub>r</sub> equals '1' and if the band class (BAND\_CLASS<sub>r</sub>) is not supported  
35      by the mobile station, the mobile station shall send a *Mobile Station Reject*  
36      *Order* with ORDQ field set to '00000110' (capability not supported by the mobile  
37      station) and remain in the *Mobile Station Origination Attempt Substate*.
- 38      – If PLCM\_TYPE<sub>r</sub> equals '0010' and IMSI\_O is derived from IMSI\_T, or if  
39      PLCM\_TYPE<sub>r</sub> equals '0011' and IMSI\_O is derived from IMSI\_M, the mobile  
40      station shall send a *Mobile Station Reject Order* with the ORDQ field set to  
41      '00011100' (PLCM\_TYPE mismatch) and remain in the *Mobile Station Origination*  
42      *Attempt Substate*.

- 1       – If FUNDICATED\_BCNC\_IND<sub>r</sub> is included and set to 1, and the mobile station  
2       does not support BCNC reception on the Forward Fundicated Channels  
3       assigned in this message, the mobile station shall send a *Mobile Station Reject*  
4       *Order* with the ORDQ field set to '00000110' (capability not supported by the  
5       mobile station) and remain in the *Mobile Station Origination Attempt Substate*.
- 6       – If the mobile station does not send a *Mobile Station Reject Order* as specified  
7       above, it shall continue to perform the actions specified below.
- 8       – Layer 3 shall send SIG-HandoffPDCH.Indication (handoff\_type = ASSIGN) to the  
9       MAC layer.
- 10      – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall set  
11          + CDMABAND<sub>s</sub> = BAND\_CLASS<sub>r</sub>  
12          + CDMACH<sub>s</sub> = CDMA\_FREQ<sub>r</sub>
- 13      – The mobile station shall store the bypass indicator (BYPASS\_ALERT\_ANSWER<sub>s</sub>  
14      = BYPASS\_ALERT\_ANSWER<sub>r</sub>).
- 15      – The mobile station shall store the granted mode indicator (GRANTED\_MODE<sub>s</sub> =  
16      GRANTED\_MODE<sub>r</sub>). If GRANTED\_MODE<sub>r</sub> equals '11', the mobile station shall  
17      perform the following:  
18          + The mobile station shall store the service reference identifier to be restored  
19          (SR\_ID\_RESTORE<sub>s</sub> = SR\_ID\_RESTORE<sub>r</sub>).
- 20          + If SR\_ID\_RESTORE<sub>r</sub> equals '000', the mobile station shall store bitmap of  
21          service reference identifiers to be restored (SR\_ID\_RESTORE\_BITMAP<sub>s</sub> =  
22          SR\_ID\_RESTORE\_BITMAP<sub>r</sub>).
- 23          + If SYNC\_ID\_INCL<sub>r</sub> is included and equals '1', the mobile station shall store  
24          the service configuration synchronization identifier (SYNC\_ID<sub>s</sub> = SYNC\_ID<sub>r</sub>).
- 25      – The mobile station shall store the frame offset (FRAME\_OFFSET<sub>s</sub> =  
26      FRAME\_OFFSET<sub>r</sub>).
- 27      – The mobile station shall store the message encryption mode indicator  
28      (ENCRYPT\_MODE<sub>s</sub> = ENCRYPT\_MODE<sub>r</sub>).
- 29      – The mobile station shall perform the following procedures in the order listed  
30      below:  
31          + If D\_SIG\_ENCRYPT\_MODE<sub>r</sub> is included, the mobile station shall perform the  
32          following:

- 1           o If D\_SIG\_ENCRYPT\_MODE<sub>r</sub> is equal to '000', the mobile station shall set
- 2           D\_SIG\_ENCRYPT\_MODE<sub>s</sub> to C\_SIG\_ENCRYPT\_MODE<sub>s</sub>; otherwise, the
- 3           mobile station shall set D\_SIG\_ENCRYPT\_MODE<sub>s</sub> to
- 4           D\_SIG\_ENCRYPT\_MODE<sub>r</sub>, ENC\_KEY<sub>s</sub> to the most recently generated
- 5           CMEAKEY in the mobile station associated with AUTHR of the
- 6           *Origination Message*, and EXT\_ENCRYPT\_SEQ[0] and
- 7           EXT\_ENCRYPT\_SEQ[1] to  $256 \times \text{ENC\_SEQ\_H}$  (the ENC\_SEQ\_H field in
- 8           the *Origination Message*).
- 9           + If ENC\_KEY\_SIZE<sub>r</sub> is included, the mobile station shall set ENC\_KEY\_SIZE<sub>s</sub>
- 10          to ENC\_KEY\_SIZE<sub>r</sub>.
- 11          + If C\_SIG\_ENCRYPT\_MODE is included, the mobile station shall set
- 12          C\_SIG\_ENCRYPT\_MODE<sub>s</sub> to C\_SIG\_ENCRYPT\_MODE<sub>r</sub>.
- 13          – The mobile station shall set EXT\_CH\_IND<sub>s</sub> to EXT\_CH\_IND<sub>r</sub>.
- 14          – The mobile station shall set CH\_IND<sub>s</sub> to '00'.
- 15          – If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH or a F-DCCH, the mobile
- 16          station shall store the Forward power control subchannel relative gain
- 17          [FPC\_SUBCHAN\_GAIN<sub>s</sub> = FPC\_SUBCHAN\_GAIN<sub>r</sub>].
- 18          – The mobile station shall set RLGAIN\_ADJ<sub>s</sub> to RLGAIN\_ADJ<sub>r</sub>.
- 19          – The mobile station shall set PLCM\_TYPE<sub>s</sub> to PLCM\_TYPE<sub>r</sub> if PLCM\_TYPE\_INCL<sub>r</sub>
- 20          is equal to '1'; otherwise, the mobile station shall set PLCM\_TYPE<sub>s</sub> as follows:
- 21           + If P\_REV\_IN\_USE<sub>s</sub> is less than 11, set PLCM\_TYPE<sub>s</sub> to '0000'; otherwise set
- 22           PLCM\_TYPE<sub>s</sub> to '0100'.
- 23          – The mobile station shall set PLCM\_39<sub>s</sub> to PLCM\_39<sub>r</sub> if PLCM\_TYPE<sub>r</sub> is equal to
- 24          '0001'.
- 25          – The mobile station shall set FUNDICATED\_BCNC\_IND<sub>s</sub> to
- 26          FUNDICATED\_BCNC\_IND<sub>r</sub>. If FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1' and the
- 27          EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH, the mobile station shall set
- 28          FCH\_BCNC\_IND to '1'; otherwise, the mobile station shall set FCH\_BCNC\_IND
- 29          to '0'.
- 30          – If FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1' and ADD\_PLCM\_FOR\_FCH\_INCL<sub>r</sub> is
- 31          included and is set to '1', the mobile station shall store the following:
- 32           + Set ADD\_PLCM\_FOR\_FCH\_TYPE<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub>.
- 33           + Set ADD\_PLCM\_FOR\_FCH\_39<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_39<sub>r</sub> if
- 34           ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub> is equal to '1'.
- 35          – The mobile station shall set REV\_FCH\_GATING\_MODE<sub>s</sub> to
- 36          REV\_FCH\_GATING\_MODE<sub>r</sub>.
- 37          – The mobile station shall set REV\_PWR\_CNTL\_DELAY<sub>s</sub> to
- 38          REV\_PWR\_CNTL\_DELAY<sub>r</sub> if REV\_PWR\_CNTL\_DELAY\_INCL<sub>r</sub> is equal to '1'.

- 1       – The mobile station shall set FULL\_CI\_FEEDBACK\_IND<sub>S</sub> to
- 2       FULL\_CI\_FEEDBACK\_IND<sub>R</sub>.
- 3       – If EXT\_CH\_IND<sub>R</sub> equals '01000', the mobile station shall set
- 4       FOR\_CPCCH\_RATE<sub>S</sub> to FOR\_CPCCH\_RATE<sub>R</sub>, and FOR\_CPCCH\_UPDATE\_RATE<sub>S</sub>
- 5       to FOR\_CPCCH\_UPDATE\_RATE<sub>R</sub>; otherwise, the mobile station shall set
- 6       FOR\_CPCCH\_RATE<sub>S</sub> to '00', and FOR\_CPCCH\_UPDATE\_RATE<sub>S</sub> to '00'.
- 7       – The mobile station shall set REV\_CQICH\_FRAME\_OFFSET<sub>S</sub> to
- 8       REV\_CQICH\_FRAME\_OFFSET<sub>R</sub>.
- 9       – The mobile station shall set REV\_CQICH\_REPS<sub>S</sub> to REV\_CQICH\_REPS<sub>R</sub>.
- 10      – The mobile station shall set REV\_ACKCH\_REPS<sub>S</sub> to REV\_ACKCH\_REPS<sub>R</sub>.
- 11      – The mobile station shall set FOR\_PDCH\_RC<sub>S</sub> to FOR\_PDCH\_RC<sub>R</sub>.
- 12      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a R-PDCH, the mobile station shall set
- 13      REV\_PDCH\_RC<sub>S</sub> to REV\_PDCH\_RC<sub>R</sub>.
- 14      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-FCH, the mobile station shall set
- 15      FOR\_FCH\_RC<sub>S</sub> to FOR\_FCH\_DCCH\_RC<sub>R</sub>.
- 16      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-DCCH, the mobile station shall set
- 17      FOR\_DCCH\_RC<sub>S</sub> to FOR\_FCH\_DCCH\_RC<sub>R</sub>.
- 18      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a R-FCH, the mobile station shall set
- 19      REV\_FCH\_RC<sub>S</sub> to REV\_FCH\_DCCH\_RC<sub>R</sub>.
- 20      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a R-DCCH, the mobile station shall set
- 21      REV\_DCCH\_RC<sub>S</sub> to REV\_FCH\_DCCH\_RC<sub>R</sub>.
- 22      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-FCH and a F-DCCH, the mobile
- 23      station shall set FPC\_PRI\_CHAN<sub>S</sub> to FPC\_PRI\_CHAN<sub>R</sub>.
- 24      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-FCH, the mobile station shall set
- 25      FPC\_FCH\_INIT\_SETPT<sub>S</sub> to FPC\_FCH\_INIT\_SETPT<sub>R</sub>, FPC\_FCH\_CURR\_SETPT<sub>S</sub> to
- 26      FPC\_FCH\_INIT\_SETPT<sub>S</sub>, FPC\_FCH\_FER<sub>S</sub> to FPC\_FCH\_FER<sub>R</sub>,
- 27      FPC\_FCH\_MIN\_SETPT<sub>S</sub> to FPC\_FCH\_MIN\_SETPT<sub>R</sub>, FPC\_FCH\_MAX\_SETPT<sub>S</sub> to
- 28      FPC\_FCH\_MAX\_SETPT<sub>R</sub>.
- 29      – If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-DCCH, the mobile station shall set
- 30      FPC\_DCCH\_INIT\_SETPT<sub>S</sub> to FPC\_DCCH\_INIT\_SETPT<sub>R</sub>,
- 31      FPC\_DCCH\_CURR\_SETPT<sub>S</sub> to FPC\_DCCH\_INIT\_SETPT<sub>S</sub>, FPC\_DCCH\_FER<sub>S</sub> to
- 32      FPC\_DCCH\_FER<sub>R</sub>, FPC\_DCCH\_MIN\_SETPT<sub>S</sub> to FPC\_DCCH\_MIN\_SETPT<sub>R</sub>,
- 33      FPC\_DCCH\_MAX\_SETPT<sub>S</sub> to FPC\_DCCH\_MAX\_SETPT<sub>R</sub>.
- 34      – If EARLY\_RL\_TRANSMIT\_IND<sub>R</sub> is included, the mobile station shall set
- 35      EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> to EARLY\_RL\_TRANSMIT\_IND<sub>R</sub>; otherwise, the
- 36      mobile station shall set EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> to '0'.



- 1       – If FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>R</sub> is included, the mobile station shall set  
2       FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> to FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>R</sub>;  
3       otherwise, the mobile station shall set FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> to  
4       ‘0’. If FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> equals ‘1’, the mobile station shall  
5       set FIXED\_NUM\_PREAMBLE<sub>S</sub> to FIXED\_NUM\_PREAMBLE<sub>R</sub>.
- 6       – If TX\_PWR\_LIMIT\_INCL<sub>R</sub> is set to ‘1’, the mobile station shall perform the  
7       following:  
8       + If the mobile station is being assigned to operate in the 1915MHz –  
9       1920MHz block of the PCS band, the mobile station shall store the transmit  
10      power limit TX\_PWR\_LIMIT<sub>S</sub> = (TX\_PWR\_LIMIT<sub>R</sub> - 30dB);  
11      + Otherwise, the mobile station shall set TX\_PWR\_LIMIT<sub>S</sub> to the limit defined  
12      in [11] for the target base station.
- 13      – If FOR\_PDCH\_PARMS\_INCL<sub>R</sub> is equal to ‘1’, the mobile station shall set  
14      FOR\_PDCH\_COMMON\_PARMS<sub>S</sub> = ‘0’; otherwise, if  
15      FOR\_PDCH\_COMMON\_PARMS<sub>S</sub> is equal to ‘0’, the mobile station shall send a  
16      *Mobile Station Reject Order* with ORDQ equal to ‘00000011’ (message structure  
17      not acceptable) and remain in the current state.
- 18      – If FOR\_PDCH\_RLGAIN\_INCL<sub>R</sub> is included and equal to ‘1’, the mobile station  
19      shall set RLGAIN\_ACKCH\_PILOT<sub>S</sub> to RLGAIN\_ACKCH\_PILOT<sub>R</sub>, and  
20      RLGAIN\_CQICH\_PILOT<sub>S</sub> to RLGAIN\_CQICH\_PILOT<sub>R</sub>.
- 21      – If FOR\_PDCH\_PARMS\_INCL<sub>R</sub> is equal to ‘1’, the mobile station shall set  
22      NUM\_SOFT\_SWITCHING\_FRAMES<sub>S</sub> to NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1,  
23      and NUM\_SOFT\_SWITCHING\_FRAMES<sub>S</sub> to  
24      NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1.
- 25      – If CHM\_SWITCHING\_PARMS\_INCL<sub>R</sub> is included and equal to ‘1’, the mobile  
26      station shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to  
27      NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1, and  
28      NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to  
29      NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1.
- 30      – If CHM\_SWITCHING\_PARMS\_INCL<sub>R</sub> is included and equal to ‘0’, the mobile  
31      station shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to  
32      NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1, and  
33      NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to  
34      NUM\_SOFT\_SWITCHING\_FRAMES<sub>R</sub> + 1.
- 35      – If FOR\_PDCH\_PARMS\_INCL<sub>R</sub> is equal to ‘1’, the mobile station shall set  
36      NUM\_SOFT\_SWITCHING\_SLOTS<sub>S</sub> according to Table 3.7.2.3.2.21-9 based on  
37      the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>R</sub>.
- 38      – If FOR\_PDCH\_PARMS\_INCL<sub>R</sub> is equal to ‘1’, the mobile station shall set  
39      NUM\_SOFT\_SWITCHING\_SLOTS<sub>S</sub> according to Table 3.7.2.3.2.21-9 based on  
40      the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>R</sub>.

- 1       – If CHM\_SWITCHING\_PARMs\_INCL<sub>r</sub> is included and equal to '1', the mobile  
2       station shall:
  - 3       + Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table 3.7.2.3.2.21-  
4       9 based on the value of NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>r</sub>.
  - 5       + Set NUM\_SOFTER\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table  
6       3.7.2.3.2.21-9 based on the value of  
7       NUM\_SOFTER\_SWITCHING\_SLOTS\_CHM<sub>r</sub>.
- 8       – If CHM\_SWITCHING\_PARMs\_INCL<sub>r</sub> is included and equal to '0', the mobile  
9       station shall:
  - 10      + Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table 3.7.2.3.2.21-  
11      9 based on the value of NUM\_SOFT\_SWITCHING\_SLOTS<sub>r</sub>.
  - 12      + Set NUM\_SOFTER\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table  
13      3.7.2.3.2.21-9 based on the value of NUM\_SOFTER\_SWITCHING\_SLOTS<sub>r</sub>.
- 14      – If FOR\_PDCH\_PARMs\_INCL<sub>r</sub> is equal to '1', the mobile station shall set  
15      PDCH\_SOFT\_SWITCHING\_DELAY<sub>s</sub> to PDCH\_SOFT\_SWITCHING\_DELAY<sub>r</sub> + 1,  
16      and PDCH\_SOFTER\_SWITCHING\_DELAY<sub>s</sub> to  
17      PDCH\_SOFTER\_SWITCHING\_DELAY<sub>r</sub> + 1.
- 18      – If TX\_DISABLED\_TIMER\_INCL<sub>r</sub> is equal to '1', the mobile station shall set  
19      TX\_DISABLED\_TIMER<sub>s</sub> to TX\_DISABLED\_TIMER<sub>r</sub>; otherwise, the mobile station  
20      shall set TX\_DISABLED\_TIMER<sub>s</sub> to T<sub>81m</sub>.
- 21      – If EXT\_CH\_IND<sub>r</sub> signals the allocation of a R-PDCH, the mobile station shall:
  - 22      + Set FOR\_GCH\_ASSIGNED<sub>s</sub> to FOR\_GCH\_ASSIGNED<sub>r</sub>.
  - 23      + Set FOR\_RCCH\_ASSIGNED<sub>s</sub> to FOR\_RCCH\_ASSIGNED<sub>r</sub>.
  - 24      + If FOR\_RCCH\_ASSIGNED<sub>s</sub> is equal to '1', the mobile station shall:
    - 25      o Set FOR\_RCCH\_DRC\_MODE<sub>s</sub> to FOR\_RCCH\_DRC\_MODE<sub>r</sub>.
    - 26      o Set FOR\_RCCH\_REPETITION<sub>s</sub> to FOR\_RCCH\_REPETITION<sub>r</sub>.
    - 27      o Set FOR\_RCCH\_UPDATE\_RATE<sub>s</sub> to FOR\_RCCH\_UPDATE\_RATE<sub>r</sub>.
  - 28      + If FOR\_ACKCH\_ASSIGNED<sub>r</sub> is equal to '1', the mobile station shall set  
29      FOR\_ACKCH\_MODE<sub>s</sub> to FOR\_ACKCH\_MODE<sub>r</sub>.
  - 30      + If FOR\_ACKCH\_COMB\_SEL<sub>r</sub> is included, the mobile station shall set  
31      FOR\_ACKCH\_COMB\_SEL<sub>s</sub> to FOR\_ACKCH\_COMB\_SEL<sub>r</sub>; otherwise, the  
32      mobile station shall set FOR\_ACKCH\_COMB\_SEL<sub>s</sub> to '0'.
  - 33      + If REV\_PDCH\_RLGAIN\_INCL<sub>r</sub> is included and equal to '1', the mobile station  
34      shall perform the following:
    - 35      o The mobile station shall set RLGAIN\_SPICH\_PILOT<sub>s</sub> to  
36      RLGAIN\_SPICH\_PILOT<sub>r</sub>.
    - 37      o The mobile station shall set RLGAIN\_REQCH\_PILOT<sub>s</sub> to  
38      RLGAIN\_REQCH\_PILOT<sub>r</sub>.

- 1           o The mobile station shall set  $RLGAIN\_PDCCH\_PILOT_S$  to
- 2            $RLGAIN\_PDCCH\_PILOT_R$ .
- 3       + If  $REV\_PDCH\_PARMS\_1\_INCL_R$  is included and equal to '1', the mobile
- 4       station shall perform the following:
- 5           o The mobile station shall set  $REV\_PDCH\_TABLE\_SEL_S$  to
- 6            $REV\_PDCH\_TABLE\_SEL_R$ .
- 7           o The mobile station shall set  $REV\_PDCH\_MAX\_AUTO\_TPR_S$  to
- 8            $REV\_PDCH\_MAX\_AUTO\_TPR_R$ .
- 9       – Otherwise, the mobile station shall:
- 10       + Set  $FOR\_GCH\_ASSIGNED_S$  to NULL.
- 11       + Set  $FOR\_RCCH\_ASSIGNED_S$  to NULL.
- 12       – For each included member of the Active Set, the mobile station shall store the
- 13       following:
- 14       + Set the  $PILOT\_PN$  field to  $PILOT\_PN_R$ .
- 15       + Set the  $ADD\_PILOT\_REC\_INCL$  field to  $ADD\_PILOT\_REC\_INCL_R$ . If
- 16        $ADD\_PILOT\_REC\_INCL_R$  equals '1', the mobile station shall store the
- 17       following:
- 18       o Set the  $PILOT\_REC\_TYPE$  field of  $PILOT\_REC$  to  $PILOT\_REC\_TYPE_R$ .
- 19       o If  $PILOT\_REC\_TYPE_R$  equals '000', the mobile station shall set the
- 20        $TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to  $TD\_POWER\_LEVEL_R$  and set
- 21       the  $TD\_MODE$  field of  $PILOT\_REC$  to  $TD\_MODE_R$ .
- 22       o If  $PILOT\_REC\_TYPE_R$  is equal to '001', the mobile station shall.
- 23        ◇ Set the  $AUX\_PILOT\_QOF$  field of  $PILOT\_REC$  to  $QOF_R$ .
- 24        ◇ Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 25         $AUX\_PILOT\_WALSH_R$  with the Walsh Code length specified by
- 26         $WALSH\_LENGTH_R$ .
- 27       o If  $PILOT\_REC\_TYPE_R$  is equal to '010', the mobile station shall:
- 28        ◇ Set the  $AUX\_PILOT\_TD\_QOF$  field of  $PILOT\_REC$  to  $QOF_R$ .
- 29        ◇ Set the  $AUX\_PILOT\_WALSH\_CODE$  field of  $PILOT\_REC$  to
- 30         $AUX\_WALSH_R$  with the Walsh Code length specified by
- 31         $WALSH\_LENGTH_R$ .
- 32        ◇ Set the  $AUX\_TD\_POWER\_LEVEL$  field of  $PILOT\_REC$  to
- 33         $AUX\_TD\_POWER\_LEVEL_R$ .
- 34        ◇ Set the  $TD\_MODE$  field of  $NGHBR\_PILOT\_REC$  to  $TD\_MODE_R$ .
- 35       o Set  $FOR\_PDCH\_INCL_S$  to  $FOR\_PDCH\_INCL_R$ .
- 36       o If  $FOR\_PDCH\_INCL_R$  is equal to '1', the mobile station shall perform the
- 37       following:

- 1                   ◇ If FOR\_PDCH\_PARMS\_INCL<sub>R</sub> is equal to '1', the mobile station shall  
2                   store the following parameters:
- 3                   – The mobile station shall set WALSH\_TABLE\_ID<sub>S</sub> to  
4                   WALSH\_TABLE\_ID<sub>R</sub>.
- 5                   – The mobile station shall set NUM\_PDCCH<sub>S</sub> to NUM\_PDCCH<sub>R</sub>.
- 6                   – The mobile station shall set FOR\_PDCCH\_WALSH<sub>S</sub>[i] to the i<sup>th</sup>  
7                   occurrence of FOR\_PDCCH\_WALSH<sub>R</sub>.
- 8                   ◇ The mobile station shall set MAC\_ID<sub>S</sub> to MAC\_ID<sub>R</sub>.
- 9                   ◇ The mobile station shall set REV\_CQICH\_COVER<sub>S</sub> to  
10                  REV\_CQICH\_COVER<sub>R</sub>.
- 11                  ◇ If EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-CPCCH, the mobile  
12                  station shall set FOR\_CPCCH\_WALSH<sub>S</sub> to FOR\_CPCCH\_WALSH<sub>R</sub>, and  
13                  FOR\_CPCSCH<sub>S</sub> to FOR\_CPCSCH<sub>R</sub>.
- 14                  ◇ The mobile station shall store FOR\_PDCCH\_WALSH<sub>S</sub>[i] to the i<sup>th</sup>  
15                  occurrence of FOR\_PDCCH\_WALSH<sub>R</sub>.
- 16                  o The mobile station shall set PWR\_COMB\_IND<sub>S</sub> to PWR\_COMB\_IND<sub>R</sub>.
- 17                  o If PDCH\_GROUP\_IND\_INCL<sub>R</sub> is equal to '1', the mobile station shall set  
18                  PDCH\_GROUP\_IDENTIFIER<sub>S</sub> as follows:
- 19                   ◇ If this is the first pilot in the list that has a F-PDCH assignment, the  
20                   mobile station shall perform the following:
- 21                   – The mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to '000';
- 22                   ◇ Otherwise, the mobile station shall perform the following:
- 23                   – If PDCH\_GROUP\_IND<sub>R</sub> is set to '1', the mobile station shall set  
24                   PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to the same value as that of the  
25                   previous pilot in the list that has a F-PDCH assigned; otherwise,  
26                   the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to the  
27                   value one greater than that of the previous pilot in the list that  
28                   has a F-PDCH assigned.
- 29                  o Otherwise, the mobile station shall perform the following:
- 30                   ◇ If this is the first pilot in the list that has a F-PDCH assignment, the  
31                   mobile station shall perform the following:
- 32                   – The mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>S</sub> to '000';
- 33                   ◇ Otherwise, the mobile station shall perform the following:
- 34                   – If F-PDCH is assigned for this pilot, the mobile station shall  
35                   perform the following:

- 1                                   + If PWR\_COMB\_IND<sub>r</sub> is set to '1', and there are no pilots
- 2                                   between this pilot and the previous pilot in the list that has a
- 3                                   F-PDCH assigned, the mobile station shall set
- 4                                   PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the same value as that of the
- 5                                   previous pilot in the list that has a F-PDCH assigned.
- 6                                   + If PWR\_COMB\_IND<sub>r</sub> is set to '1', and all pilots between this
- 7                                   pilot and the previous pilot in the list that has a F-PDCH
- 8                                   assigned have PWR\_COMB\_IND set to '1', the mobile station
- 9                                   shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the same value as
- 10                                  that of the previous pilot in the list that has a F-PDCH
- 11                                  assigned.
- 12                                  + Otherwise, the mobile station shall set
- 13                                  PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the value one greater than
- 14                                  that of the previous pilot in the list.
- 15                                  - Otherwise, the mobile station shall set
- 16                                  PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to NULL.
- 17                                  o If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH, the mobile station
- 18                                  shall set CODE\_CHAN\_FCH<sub>s</sub> to CODE\_CHAN\_FCH<sub>r</sub>, and
- 19                                  QOF\_MASK\_ID\_FCH<sub>s</sub> to QOF\_MASK\_ID\_FCH<sub>r</sub>.
- 20                                  o If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-DCCH, the mobile station
- 21                                  shall set CODE\_CHAN\_DCCH<sub>s</sub> to CODE\_CHAN\_DCCH<sub>r</sub>, and
- 22                                  QOF\_MASK\_ID\_DCCH<sub>s</sub> to QOF\_MASK\_ID\_DCCH<sub>r</sub>.
- 23                                  o If FOR\_PDCH\_INCL<sub>r</sub> is equal to '1', EXT\_CH\_IND<sub>r</sub> signals the allocation
- 24                                  of a R-PDCH, and FOR\_ACKCH\_ASSIGNED<sub>r</sub> is equal to '1', the mobile
- 25                                  station shall set FOR\_ACKCH\_WALSH\_INDEX<sub>s</sub> to
- 26                                  FOR\_ACKCH\_WALSH\_INDEX<sub>r</sub>, and FOR\_ACKSCH\_INDEX<sub>s</sub> to
- 27                                  FOR\_ACKSCH\_INDEX<sub>r</sub>.
- 28                                  o If FOR\_RCCH\_INCL<sub>r</sub> is included and set to '1', the mobile station shall
- 29                                  do the following:
- 30                                    ◇ Set FOR\_RCCH\_WALSH\_INDEX<sub>s</sub> to FOR\_RCCH\_WALSH\_INDEX<sub>r</sub>.
- 31                                    ◇ Set FOR\_RCSCH\_INDEX<sub>s</sub> to FOR\_RCSCH\_INDEX<sub>r</sub>.
- 32                                  o If FOR\_PDCH\_INCL<sub>r</sub> is equal to '1', and if FOR\_GCH\_ASSIGNED<sub>r</sub> is
- 33                                  included and set to '1', the mobile station shall perform the following;
- 34                                    ◇ Set NUM\_FOR\_GCH<sub>s</sub> to NUM\_FOR\_GCH<sub>r</sub>, and
- 35                                    ◇ For each of the NUM\_FOR\_GCH<sub>s</sub> occurrences of
- 36                                    FOR\_GCH\_WALSH\_INDEX<sub>r</sub>, the mobile station shall set
- 37                                    FOR\_GCH\_WALSH\_INDEX<sub>s</sub>[j] to FOR\_GCH\_WALSH\_INDEX<sub>r</sub>[j].
- 38                                  o Otherwise, the mobile station shall perform the following:
- 39                                    ◇ Set NUM\_FOR\_GCH<sub>s</sub> to 0, and

- 1                   ◇ Set FOR\_GCH\_WALSH\_INDEX<sub>S</sub> to NULL.
- 2           – The mobile station shall initialize CODE\_CHAN\_LIST as described in 2.6.8, and  
3           shall set SERV\_NEG<sub>S</sub> to enabled.
- 4           – If FREQ\_INCL<sub>R</sub> equals '1', the mobile station shall then tune to the new  
5           frequency assignment.
- 6           – The mobile station shall then enter the *Traffic Channel Initialization Substate* of  
7           the *Mobile Station Control on the Traffic Channel State*.
- 8   8. *Feature Notification Message*: If RELEASE<sub>R</sub> is equal to '1', the mobile station shall  
9   enter the *Mobile Station Idle State* or the *System Determination Substate* of the  
10   *Mobile Station Initialization State* with a release indication (see 2.6.1.1).
- 11   9. *Intercept Order*: The mobile station shall enter the *Mobile Station Idle State*.
- 12   10. *Local Control Order*
- 13   11. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and  
14   record the reason for the *Lock Until Power-Cycled Order* in the mobile station's  
15   semi-permanent memory (LCKRSN\_P<sub>S-p</sub> equals the least significant four bits of  
16   ORDQ<sub>R</sub>). The mobile station should notify the user of the locked condition. The  
17   mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
18   *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the  
19   *System Access State* again until after the next mobile station power-up or until it  
20   has received an *Unlock Order*. This requirement shall take precedence over any  
21   other mobile station requirement specifying entry to the *System Access State*.
- 22   12. *Maintenance Required Order*: The mobile station shall record the reason for the  
23   *Maintenance Required Order* in the mobile station's semi-permanent memory  
24   (MAINTRSN<sub>S-p</sub> equals the least significant four bits of ORDQ<sub>R</sub>). The mobile station  
25   shall remain in the unlocked condition. The mobile station should notify the user  
26   of the maintenance required condition.
- 27   13. *PACA Message*: If P\_REV\_IN\_USE<sub>S</sub> is less than or equal to four and the mobile  
28   station does not support PACA capability, the mobile station shall send a *Mobile*  
29   *Station Reject Order* with the ORDQ field set to '00000110' (message requires a  
30   capability that is not supported by the mobile station); otherwise, the mobile  
31   station shall process the message as follows:
- 32   • If PACA<sub>S</sub> is equal to disabled, the mobile station shall perform the following  
33   actions:
- 34   – If the purpose of the message is to respond to an *Origination Message*  
35   (PURPOSE<sub>R</sub> is equal to '0000'), the mobile station shall perform the following  
36   actions:
- 37   + The mobile station shall set PACA<sub>S</sub> to enabled and shall set PACA\_SID<sub>S</sub>  
38   to SID<sub>S</sub>.
- 39   + The mobile station shall set the PACA state timer to the duration shown  
40   in Table 3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT<sub>S</sub>.

- 1           + The mobile station should indicate to the user that the call has been  
2           queued as a PACA call, and should indicate the current queue position  
3           (Q\_POS<sub>r</sub>) of the call.
- 4           + The mobile station shall enter the *Mobile Station Idle State*.
- 5           – If the purpose of the message is to cancel the PACA call (PURPOSE<sub>r</sub> is equal  
6           to '0011'), the mobile station shall perform the following actions:  
7           + The mobile station shall set PACA<sub>s</sub> to disabled and PACA\_CANCEL to '0',  
8           shall disable the PACA state timer, and should indicate to the user that  
9           the PACA call has been canceled.
- 10          + The mobile station shall enter the *Mobile Station Idle State*.
- 11          – If the purpose of the message is anything else (PURPOSE<sub>r</sub> is not equal to  
12          '0000' or '0011'), the mobile station shall ignore the message. The mobile  
13          station shall remain in the *Mobile Station Origination Attempt Substate*.
- 14          • If PACA<sub>s</sub> is equal to enabled, the mobile station shall perform the following  
15          actions:  
16          – If the purpose of the message is to respond to an *Origination Message*  
17          (PURPOSE<sub>r</sub> is equal to '0000'), the mobile station shall perform the following  
18          actions:  
19          + The mobile station should indicate to the user that the PACA call is still  
20          queued, and should indicate to the user the current queue position  
21          (Q\_POS<sub>r</sub>) of the call.  
22          + The mobile station shall set the PACA state timer to the duration shown  
23          in Table 3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT<sub>s</sub>.  
24          + The mobile station shall enter the *Mobile Station Idle State*.  
25          – If the purpose of the message is to provide the queue position of the PACA  
26          call (PURPOSE<sub>r</sub> is equal to '0001'), the mobile station shall perform the  
27          following actions:  
28          + The mobile station should indicate to the user that the PACA call is still  
29          queued, and should indicate the current queue position (Q\_POS<sub>r</sub>) of the  
30          call.  
31          + The mobile station shall set the PACA state timer to the duration shown  
32          in Table 3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT<sub>s</sub>.  
33          + The mobile station shall enter the *Mobile Station Idle State*.  
34          – If the purpose of the message is to instruct the mobile station to re-originate  
35          the PACA call (PURPOSE<sub>r</sub> is equal to '0010'), the mobile station shall remain  
36          in the *Mobile Station Origination Attempt Substate*.  
37          – If the purpose of the message is to cancel the PACA call (PURPOSE<sub>r</sub> is equal  
38          to '0011'), the mobile station shall perform the following actions:

- 1           + The mobile station shall set PACA<sub>S</sub> to disabled, shall disable the PACA
- 2           state timer, and should indicate to the user that the PACA call has been
- 3           canceled.
- 4           + The mobile station shall enter the *Mobile Station Idle State*.
- 5   14. *Registration Accepted Order*: The mobile station shall perform the procedures as
- 6       specified in 2.6.11.1.
- 7   15. *Registration Rejected Order*: This order indicates that normal service is not
- 8       available on this system. The mobile station shall disable the full-TMSI timer. If
- 9       the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile
- 10       station shall set all the bits of the TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall
- 11       enter the *System Determination Substate* of the *Mobile Station Initialization State*
- 12       with a registration rejected indication (see 2.6.1.1).
- 13   16. *Release Order* or *Service Status Order*: If NDSS\_ORIG<sub>S</sub> is equal to enabled, the
- 14       mobile station shall set NDSS\_ORIG<sub>S</sub> to disabled, and should indicate to the user
- 15       that the call origination has been canceled. The mobile station shall enter the
- 16       *Mobile Station Idle State* or the *System Determination Substate* of the *Mobile Station*
- 17       *Initialization State* with a release indication (see 2.6.1.1). If the mobile station
- 18       enters the *Mobile Station Idle State*, and if PACA<sub>S</sub> is equal to enabled, the mobile
- 19       station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to '0', shall disable the
- 20       PACA state timer, and should indicate to the user that the PACA call has been
- 21       canceled.
- 22   17. *Reorder Order*: If NDSS\_ORIG<sub>S</sub> is equal to enabled, the mobile station shall set
- 23       NDSS\_ORIG<sub>S</sub> to disabled, and should indicate to the user that the call origination
- 24       has been canceled. If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub>
- 25       to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and
- 26       should indicate to the user that the PACA call has been canceled. The mobile
- 27       station shall enter the *Mobile Station Idle State*.
- 28   18. *Retry Order*: The mobile station shall process the order as follows:
- 29       • If RETRY\_TYPE<sub>R</sub> is equal to '000', the mobile station shall set
- 30       RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to '001', '010',
- 31       '011', '100', or '101'.
- 32       • If RETRY\_TYPE<sub>R</sub> is equal to '001', '100', or '101', then the mobile station shall
- 33       perform the following:
- 34           – If RETRY\_DELAY<sub>R</sub> is equal to '00000000', then the mobile station shall set
- 35           RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] to 0.
- 36           – If RETRY\_DELAY<sub>R</sub> is not equal to '00000000', the mobile station shall set
- 37           RETRY\_DELAY<sub>S</sub> as follows:
- 38           + If the most significant bit of the RETRY\_DELAY<sub>R</sub> is '0', set
- 39           RETRY\_DELAY\_UNIT<sub>S</sub> to 1000ms. If the most significant bit of the
- 40           RETRY\_DELAY<sub>R</sub> is '1', set RETRY\_DELAY\_UNIT<sub>S</sub> to 60000ms.



- 1           + The mobile station shall set  $\text{RETRY\_DELAY\_VALUE}_S$  to the seven least
- 2           significant bits of  $\text{RETRY\_DELAY}_R$ .
- 3           + The mobile station shall store the next system time 80 ms boundary +
- 4            $\text{RETRY\_DELAY\_VALUE}_S \times \text{RETRY\_DELAY\_UNIT}_S$  ms as
- 5            $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}_R]$ .
- 6           + If  $\text{RETRY\_TYPE}_R$  is equal to '001' or '101', and  $\text{NDSS\_ORIG}_S$  is equal to
- 7           enabled, the mobile station shall set  $\text{NDSS\_ORIG}_S$  to disabled and
- 8           should indicate to the user that the call origination has been canceled.
- 9           If  $\text{PACA}_S$  is equal to enabled, the mobile station shall set  $\text{PACA}_S$  to
- 10          disabled and  $\text{PACA\_CANCEL}$  to '0', shall disable the  $\text{PACA}$  state timer,
- 11          and should indicate to the user that the  $\text{PACA}$  call has been canceled.
- 12          + If  $\text{RETRY\_TYPE}_R$  is equal to '001' or '101', the mobile station shall enter
- 13          the *Mobile Station Idle State*.
- 14   19. *Security Mode Command Message*: The mobile station shall perform the procedures
- 15       as specified in 2.6.11.4.
- 16   20. *Service Redirection Message*: The mobile station shall process the message as
- 17       follows:
- 18       • If the mobile station is directed to an unsupported operation mode or band
- 19       class, the mobile station shall respond with a *Mobile Station Reject Order* with
- 20        $\text{ORDQ}$  equal to '00000110' (message requires a capability that is not supported
- 21       by the mobile station).
- 22       • If  $\text{DELETE\_TMSI}_R$  is equal to '1', the mobile station shall set all the bits of
- 23        $\text{TMSI\_CODE}_{S-p}$  to '1'.
- 24       • The mobile station shall disable the full-TMSI timer.
- 25       • The mobile station shall set  $\text{RETURN\_IF\_FAIL}_S = \text{RETURN\_IF\_FAIL}_R$ .
- 26       • If  $\text{RECORD\_TYPE}_R$  is '00000000', the mobile station shall set  $\text{RETURN\_IF\_FAIL}_S$
- 27       =  $\text{RETURN\_IF\_FAIL}_R$ , and enter the *System Determination Substate* of the *Mobile*
- 28       *Station Initialization State* with an NDSS off indication (see 2.6.1.1); otherwise:
- 29       – if  $\text{REDIRECT\_TYPE}_R$  is '0', the mobile station shall store the redirection
- 30       record received in the message as  $\text{REDIRECT\_REC}_S$  and shall enter the
- 31       System Determination Substate of the *Mobile Station Initialization State* with
- 32       a redirection indication (see 2.6.1.1).
- 33       – if  $\text{REDIRECT\_TYPE}_R$  is '1', the mobile station shall store the redirection
- 34       record received in the message as  $\text{REDIRECT\_REC}_S$  and shall enable
- 35        $\text{NDSS\_ORIG}_S$ , and shall record the dialed digits (if any). The mobile station
- 36       shall enter the System Determination Substate of the *Mobile Station*
- 37       *Initialization State* with a redirection indication (see 2.6.1.1).
- 38   21. *SSD Update Message*: The mobile station shall respond to the message as specified
- 39       in 2.3.12.1.5.

22. *Status Request Message*: The mobile station shall disable the *System Access State* timer and respond to the message. If  $P\_REV\_IN\_USE_s$  is less than or equal to three, the mobile station shall respond with a *Status Response Message*. If  $P\_REV\_IN\_USE_s$  is greater than three, the mobile station shall respond with an *Extended Status Response Message*. If the message does not specify any qualification information ( $QUAL\_INFO\_TYPE_r$  is equal to '00000000'), the mobile station shall include the requested information records in the response. If the message specifies a band class ( $QUAL\_INFO\_TYPE_r$  is equal to '00000001'), the mobile station shall only include the requested information records for the specified band class ( $BAND\_CLASS_r$ ) in the response. If the message specifies a band class and an operating mode ( $QUAL\_INFO\_TYPE_r$  is equal to '00000010'), the mobile station shall only include the requested information records for the specified band class ( $BAND\_CLASS_r$ ) and operating mode ( $OP\_MODE_r$ ) in the response. If the message specifies a band class or a band class and an operating mode which are not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with  $ORDQ$  set to '00000110' (message requires a capability that is not supported by the mobile station). If the response to this message exceeds the allowable length, the mobile station shall send a *Mobile Station Reject Order* with  $ORDQ$  set to '00001000' (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a *Mobile Station Reject Order* with  $ORDQ$  set to '00001001' (information record is not supported for the specified band class and operating mode).

23. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code as follows:

- The mobile station shall store the length of the TMSI zone field by setting  $ASSIGNING\_TMSI\_ZONE\_LEN_{s-p}$  to  $TMSI\_ZONE\_LEN_r$ ,
- The mobile station shall store the assigning TMSI zone number by setting the  $ASSIGNING\_TMSI\_ZONE\_LEN_{s-p}$  least significant octets of  $ASSIGNING\_TMSI\_ZONE_{s-p}$  to  $TMSI\_ZONE_r$ , and
- The mobile station shall store the TMSI code by setting  $TMSI\_CODE_{s-p}$  to  $TMSI\_CODE_r$ .

The mobile station shall set the TMSI expiration time by setting  $TMSI\_EXP\_TIME_{s-p}$  to  $TMSI\_EXP\_TIME_r$ . The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within  $T_{56m}$  seconds.

24. *User Zone Reject Message*

25. *BCMC Order*: The mobile station shall process this message as follows:

- If  $ORDQ_r$  is set to '00000000', the mobile station shall perform the following for each of the BCMC flows that the base station is responding to:
  - If  $CLEAR\_ALL\_RETRY\_DELAY_r$  equals '1', the mobile station shall delete the currently stored BCMC Retry Delay List.

- 1           - If CLEAR\_RETRY\_DELAY<sub>r</sub> equals '1', the mobile station shall delete the entry  
2           in the BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i] corresponding to BCMC\_FLOW\_ID (See  
3           section 2.6.13.11) in this message.
- 4           - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals '0000', Layer 3 shall send  
5           a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE, cause=*  
6           *FLOW\_NOT\_AVAILABLE, reason\_ind=CURRENT\_SYS)* for each of the  
7           corresponding BCMC\_FLOW\_ID to the BCMC Service Layer.
- 8           - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals '0001', Layer 3 shall send  
9           a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE, cause=*  
10           *FLOW\_NOT\_TRANSMITTED, reason\_ind=CURRENT\_SYS)* for each of the  
11           corresponding BCMC\_FLOW\_ID to the BCMC Service Layer.
- 12           - If BCMC\_REASON<sub>r</sub> equals '0010' for any of the flows or ALL\_BCMC\_REASON<sub>r</sub>  
13           equals '0010', the mobile station shall enable the BCMC wait timer with a  
14           value of BSPM\_WAIT\_TIME seconds, shall enter the *Mobile Station Idle State*  
15           and shall wait for an updated *BCMC Service Parameters Message* as specified  
16           in 2.6.13.1.
- 17           - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals '0011', Layer 3 shall send  
18           a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = SUCCESS, cause =*  
19           *REGISTRATION\_ACCEPTED, reason\_ind = CURRENT\_SYS)* for each of the  
20           corresponding BCMC\_FLOW\_ID to the BCMC Service Layer.
- 21           - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals '0100', Layer 3 shall send  
22           a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause=*  
23           *AUTHORIZATION\_FAILURE, reason\_ind = CURRENT\_SYS)* for each of the  
24           corresponding BCMC\_FLOW\_ID to the BCMC Service Layer.
- 25           - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals '0101', the mobile station  
26           shall perform the following:
  - 27           + Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID,*  
28           *result=FAILURE, cause= RETRY\_DELAY, reason\_ind=CURRENT\_SYS)* for  
29           each of the corresponding BCMC\_FLOW\_ID to the BCMC Service Layer.
  - 30           + For each of the corresponding BCMC\_FLOW\_ID, if there is a  
31           BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].BCMC\_FLOW\_ID which is same as  
32           BCMC\_FLOW\_ID (See section 2.6.13.11), the mobile station shall set  
33           BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].RETRY\_DELAY to current system time  
34           plus ALL\_BCMC\_RETRY\_DELAY<sub>r</sub>/BCMC\_RETRY\_DELAY<sub>r</sub>; otherwise, the  
35           mobile station shall add new BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i] to the BCMC  
36           Retry Delay List and shall set  
37           BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].BCMC\_FLOW\_ID to the BCMC\_FLOW\_ID,  
38           BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].RETRY\_DELAY to current system time  
39           plus ALL\_BCMC\_RETRY\_DELAY<sub>r</sub>/BCMC\_RETRY\_DELAY<sub>r</sub>.
- 40           - If the base station indicates BCMC\_REASON (indicated via  
41           ALL\_BCMC\_REASON<sub>r</sub>/BCMC\_REASON<sub>r</sub>) of '0000', '0001', '0011', '0100', or

1                   ‘0101’ for all of the flows requested, the mobile station shall enter the *Mobile*  
2                   *Station Idle State*.

3       26. General Extension Message: The mobile station shall process this message as  
4       specified in section 2.6.18.

5       27. *Any other message*: If the mobile station receives any other message specified in  
6       Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all  
7       other messages.

8   If the mobile station performs an access probe handoff or access handoff and receives any  
9   of the following messages, it shall process the message as specified in 2.6.3.1.3:

- 10       • If the mobile station is currently monitoring the Paging Channel:
  - 11           1. *System Parameters Message*
  - 12           2. *Access Parameters Message*
  - 13           3. *Neighbor List Message*
  - 14           4. *Extended System Parameters Message*
  - 15           5. *Extended Neighbor List Message*
  - 16           6. *General Neighbor List Message*
  - 17           7. *Global Service Redirection Message*
  - 18           8. *Extended Global Service Redirection Message*
- 19       • If the mobile station is currently monitoring the Primary Broadcast Control  
20       Channel:
  - 21           1. *ANSI-41 System Parameters Message*
  - 22           2. *Enhanced Access Parameters Message*
  - 23           3. *Universal Neighbor List Message*
  - 24           4. *MC-RR Parameters Message*
  - 25           5. *Extended Global Service Redirection Message*

#### 26   2.6.3.6 Registration Access Substate

27   In this substate, the mobile station sends a *Registration Message*. If the base station  
28   responds with an authentication request, the mobile station responds in this substate.

29   Upon entering the *Registration Access Substate*, the mobile station shall send the  
30   *Registration Message*.

31   If a message received from the base station requires a Layer 2 acknowledgment and does  
32   not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is  
33   outstanding (see [4]).

34   If a message received from the base station requires a Layer 2 acknowledgment and also a  
35   Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

1 When transmitting a response to a message received from the base station, Layer 3 shall  
2 indicate to Layer 2 that the type of the message is a response (see [4]).

3 When transmitting an autonomous message (i.e., a message that is not sent as a response  
4 to a message received from the base station) other than the *Registration Message*, Layer 3  
5 shall indicate to Layer 2 that the type of the message is a request other than a registration  
6 request or a message transmission request (see [4]).

7 When transmitting an autonomous *Registration Message* (i.e., it is not sent as a response  
8 to a *Registration Request Order* received from the base station), Layer 3 shall indicate to  
9 Layer 2 that the type of the message is a request that is a registration (see [4]).

10 While in this substate, the mobile station shall monitor the Paging Channel or the Forward  
11 Common Control Channel. If the mobile station declares a loss of the Paging Channel or  
12 the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the  
13 following:

- 14 • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and  
15 PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the  
16 user that the PACA call has been canceled.
- 17 • The mobile station shall declare an access attempt failure and update its  
18 registration variables as specified in 2.6.5.5.3.2.
- 19 • The mobile station shall disable its transmitter and enter the *Mobile Station Idle*  
20 *State*.

21 If the mobile station receives confirmation of delivery of any message sent by the mobile  
22 station in this substate, it shall then enter the *Mobile Station Idle State* unless:

- 23 • If the registration access was initiated due to a user direction to power down, the  
24 mobile station shall update registration variables as specified in 2.6.5.5.3.3 and  
25 may power down.
- 26 • If the mobile station has included the ENC\_SEQ\_H field in the *Registration*  
27 *Message*.
- 28 • If a message received from the base station requires a response, the mobile station  
29 shall send a response to the message in this substate.

30 If the mobile station receives confirmation of delivery of the *Registration Message*, the  
31 mobile station shall update its registration variables as specified in 2.6.5.5.3.1.

32 If the mobile station is directed by the user to originate a call, the mobile station may  
33 process the origination request as follows:

- 34 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any  
35 access attempt in progress.
- 36 • If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and  
37 PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the  
38 user that the PACA call has been canceled.
- 39 • The mobile station shall enter the *Mobile Station Origination Attempt Substate* with  
40 an origination indication.

1 If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA\_CANCEL to '1' when the  
2 user directs the mobile station to cancel a PACA call.

3 If the mobile station is to exit the *System Access State* as a result of processing Layer 3  
4 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*  
5 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to  
6 the message has been sent and acknowledged.

7 If Layer 3 receives a message other than message listed below:

- 8 • *Extended Channel Assignment Message* with DIRECT\_CH\_ASSIGN\_IND field  
9 included and set to '1'

10 with an indication from Layer 2 that an access attempt for a message being transmitted  
11 was not terminated as a result of processing the Layer 2 fields of the received message, the  
12 mobile station shall ignore the received message.

13 The following directed messages and orders can be received. If any field value of the  
14 message or order is outside its permissible range, the mobile station may send a *Mobile*  
15 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 16 1. *Authentication Challenge Message*: If the registration access was initiated due to a  
17 user direction to power down, the mobile station shall ignore the message;  
18 otherwise, the mobile station shall respond to the message as specified in  
19 2.3.12.1.4, regardless of the value of AUTH<sub>S</sub>.
- 20 2. *Authentication Request Message*: The mobile station shall process the message and  
21 shall respond as specified in 2.3.12.5.2.
- 22 3. *Base Station Challenge Confirmation Order*: If the registration access was initiated  
23 due to a user direction to power down, the mobile station shall ignore the message;  
24 otherwise, the mobile station shall respond to the message as specified in  
25 2.3.12.1.5.
- 26 4. *Base Station Reject Order*: The mobile station shall perform the procedures as  
27 specified in 2.6.11.5.
- 28 5. *Data Burst Message*
- 29 6. *Feature Notification Message*
- 30 7. *Local Control Order*
- 31 8. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and  
32 record the reason for the *Lock Until Power-Cycled Order* in the mobile station's  
33 semi-permanent memory (LCKRSN\_P<sub>S-p</sub> equals the least significant four bits of  
34 ORDQ<sub>r</sub>). The mobile station should notify the user of the locked condition. The  
35 mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
36 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the  
37 *System Access State* again until after the next mobile station power-up or until it  
38 has received an *Unlock Order*. This requirement shall take precedence over any  
39 other mobile station requirement specifying entry to the *System Access State*.

1       9. *Maintenance Required Order*: The mobile station shall record the reason for the  
 2       *Maintenance Required Order* in the mobile station's semi-permanent memory  
 3       (MAINTRSN<sub>S-p</sub> equals the least significant four bits of ORDQ<sub>r</sub>). The mobile station  
 4       shall remain in the unlocked condition. The mobile station should notify the user  
 5       of the maintenance required condition.

6       10. *PACA Message*: If P\_REV\_IN\_USE<sub>S</sub> is less than or equal to four and the mobile  
 7       station does not support PACA capability, the mobile station shall send a *Mobile*  
 8       *Station Reject Order* with the ORDQ field set to '00000110' (message requires a  
 9       capability that is not supported by the mobile station); otherwise, the mobile  
 10       station shall process the message as follows:

11       If PACA<sub>S</sub> is equal to disabled, the mobile station shall send a *Mobile Station Reject*  
 12       *Order* with the ORDQ field set to '00000010' (message not accepted in this state).

13       If PACA<sub>S</sub> is equal to enabled, the mobile station shall perform the following:

- 14       • If the purpose of the message is to respond to an *Origination Message*  
 15       (PURPOSE<sub>r</sub> is equal to '0000'), the mobile station shall send a *Mobile Station*  
 16       *Reject Order* with the ORDQ field set to '00000010' (message not accepted in  
 17       this state).
- 18       • If the purpose of the message is to provide the queue position of the PACA call  
 19       (PURPOSE<sub>r</sub> is equal to '0001'), the mobile station shall set the PACA state timer  
 20       to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of  
 21       PACA\_TIMEOUT<sub>S</sub>, should indicate to the user that the PACA call is still queued,  
 22       and should indicate to the user the current queue position (Q\_POS<sub>r</sub>) of the call.
- 23       • If the purpose of the message is to instruct the mobile station to re-originate the  
 24       PACA call (PURPOSE<sub>r</sub> is equal to '0010'), Layer 3 shall send an L2-  
 25       Supervision.Request primitive to Layer 2 to abort any access attempt in  
 26       progress, shall set the PACA state timer to the duration shown in Table  
 27       3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT<sub>S</sub>, and shall enter  
 28       the *Mobile Station Origination Attempt Substate* with a PACA response  
 29       indication.
- 30       • If the purpose of the message is to cancel the PACA call (PURPOSE<sub>r</sub> is equal to  
 31       '0011'), the mobile station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to '0',  
 32       shall disable the PACA state timer, and should indicate to the user that the  
 33       PACA call has been canceled.

34       11. *Registration Accepted Order*: The mobile station shall perform the procedures  
 35       specified in 2.6.11.1

36       12. *Registration Rejected Order*: This order indicates that normal service is not  
 37       available on this system. The mobile station shall disable the full-TMSI timer. If  
 38       the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile  
 39       station shall set all the bits of the TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall  
 40       enter the *System Determination Substate* of the *Mobile Station Initialization State*  
 41       with a registration rejected indication (see 2.6.1.1).

- 1      13. *Release Order*: If NDSS\_ORIG<sub>S</sub> is equal to enabled, the mobile station shall set  
2      NDSS\_ORIG<sub>S</sub> to disabled, and should indicate to the user that the call origination  
3      has been canceled. The mobile station shall enter the *Mobile Station Idle State* or  
4      the *System Determination Substate* of the *Mobile Station Initialization State* with a  
5      release indication (see 2.6.1.1). If the mobile station enters the *Mobile Station Idle*  
6      *State*, and if PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to  
7      disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and should  
8      indicate to the user that the PACA call has been canceled.
- 9      14. *Retry Order*: The mobile station shall process the message as follows:
- 10      • If RETRY\_TYPE<sub>R</sub> is equal to '000', the mobile station shall set  
11      RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to '001', '010',  
12      '011', '100', or '101'.
  - 13      • If RETRY\_TYPE<sub>R</sub> is equal to '001', '100', or '101', the mobile station shall perform  
14      the following:
    - 15      – If RETRY\_DELAY<sub>R</sub> is equal to '00000000', then the mobile station shall set  
16      RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] to 0.
    - 17      – If RETRY\_DELAY<sub>R</sub> is not equal to '00000000', the mobile station shall set  
18      RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] as follows:
      - 19      + If the most significant bit of the RETRY\_DELAY<sub>R</sub> is '0', set  
20      RETRY\_DELAY\_UNIT<sub>S</sub> to 1000ms. If the most significant bit of the  
21      RETRY\_DELAY<sub>R</sub> is '1', set RETRY\_DELAY\_UNIT<sub>S</sub> to 60000ms.
      - 22      + The mobile station shall set RETRY\_DELAY\_VALUE<sub>S</sub> to the seven least  
23      significant bits of RETRY\_DELAY<sub>R</sub>.
      - 24      + The mobile station shall store the next system time 80 ms boundary +  
25      RETRY\_DELAY\_VALUE<sub>S</sub> × RETRY\_DELAY\_UNIT<sub>S</sub> ms as  
26      RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>].
- 27      15. *Security Mode Command Message*: The mobile station shall perform the procedures  
28      as specified in 2.6.11.4.
- 29      16. *Service Redirection Message*: The mobile station shall process the message as  
30      follows:
- 31      • If the mobile station is directed to an unsupported operation mode or band  
32      class, the mobile station shall respond with a *Mobile Station Reject Order* with  
33      ORDQ equal to '00000110' (message requires a capability that is not supported  
34      by the mobile station).
  - 35      • If DELETE\_TMSI<sub>R</sub> is equal to '1', the mobile station shall set all the bits of  
36      TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall disable the full-TMSI timer.
  - 37      • The mobile station shall set RETURN\_IF\_FAIL<sub>S</sub> = RETURN\_IF\_FAIL<sub>R</sub>.



- 1       • If RECORD\_TYPE<sub>r</sub> is equal to '00000000', the mobile station shall enter the  
2       *System Determination Substate* of the *Mobile Station Initialization State* with an  
3       NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the  
4       redirection record received in the message as REDIRECT\_REC<sub>s</sub> and shall enter  
5       the *System Determination Substate* of the *Mobile Station Initialization State* with  
6       a redirection indication (see 2.6.1.1).
- 7       17. *SSD Update Message*: If the registration access was initiated due to a user  
8       direction to power down, the mobile station shall ignore the message. Otherwise,  
9       the mobile station shall respond to the message as specified in 2.3.12.1.5.
- 10      18. *Status Request Message*: The mobile station shall disable the *System Access State*  
11      timer and respond to the message. If P\_REV\_IN\_USE<sub>s</sub> is less than or equal to three,  
12      the mobile station shall respond with a *Status Response Message*. If  
13      P\_REV\_IN\_USE<sub>s</sub> is greater than three, the mobile station shall respond with an  
14      *Extended Status Response Message*. If the message does not specify any  
15      qualification information (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000000'), the mobile  
16      station shall include the requested information records in the response. If the  
17      message specifies a band class (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000001'), the  
18      mobile station shall only include the requested information records for the specified  
19      band class (BAND\_CLASS<sub>r</sub>) in the response. If the message specifies a band class  
20      and an operating mode (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000010'), the mobile  
21      station shall only include the requested information records for the specified band  
22      class (BAND\_CLASS<sub>r</sub>) and operating mode (OP\_MODE<sub>r</sub>) in the response.
- 23      If the message specifies a band class or a band class and an operating mode which  
24      are not supported by the mobile station, the mobile station shall send a *Mobile*  
25      *Station Reject Order* with ORDQ set to '00000110' (message requires a capability  
26      that is not supported by the mobile station). If the response to this message  
27      exceeds the allowable length, the mobile station shall send a *Mobile Station Reject*  
28      *Order* with ORDQ set to '00001000' (response message would exceed the allowable  
29      length). If the message specifies an information record which is not supported by  
30      the mobile station for the specified band class and operating mode, the mobile  
31      station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001'  
32      (information record is not supported for the specified band class and operating  
33      mode).
- 34      19. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code  
35      as follows:
- 36      • The mobile station shall store the length of the TMSI zone field by setting  
37      ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> to TMSI\_ZONE\_LEN<sub>r</sub>;
- 38      • The mobile station shall store the assigning TMSI zone number by setting the  
39      ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> least significant octets of  
40      ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> to TMSI\_ZONE<sub>r</sub>, and
- 41      • The mobile station shall store the TMSI code by setting TMSI\_CODE<sub>s-p</sub> to  
42      TMSI\_CODE<sub>r</sub>.

The mobile station shall set the TMSI expiration time by setting TMSI\_EXP\_TIME<sub>s-p</sub> to TMSI\_EXP\_TIME<sub>r</sub>. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within T<sub>56m</sub> seconds.

#### 20. *User Zone Reject Message*

21. *General Page Message* or *Universal Page Message*: If the mobile station receives a mobile-station-addressed page, the mobile station may determine if there is a page match (see 2.6.2.3). If a match is declared, the mobile station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- The mobile station shall enter the *Page Response Substate*.

22. *Extended Channel Assignment Message*: If the DIRECT\_CH\_ASSIGN\_IND<sub>r</sub> is included and is set to '1', the mobile station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- The mobile station shall process the message as specified in section 2.6.3.3.

Otherwise, the mobile station shall ignore this message.

#### 23. *Fast Call Setup Order*

- If ORDQ<sub>r</sub> is equal to '00000000', the mobile station shall process the message and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- If ORDQ<sub>r</sub> is equal to '00000001', the mobile station shall process the message as specified in 2.6.12.1.

24. *General Extension Message*: The mobile station shall process this message as specified in section 2.6.18.

25. *Any other message*: If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

#### 2.6.3.7 Mobile Station Message Transmission Substate

In this substate, the mobile station sends a *Data Burst Message*, a *Device Information Message*, a *Radio Environment Message*, or a *Fast Call Setup Order*. If the base station responds with an authentication request, the mobile station responds in this substate.

Support of this substate is optional.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

1 When transmitting a response to a message received from the base station, Layer 3 shall  
2 indicate to Layer 2 that the type of the message is a response (see [4]).

3 When transmitting an autonomous message (i.e., a message that is not sent as a response  
4 to a message received from the base station) other than the *Data Burst Message*, Layer 3  
5 shall indicate to Layer 2 that the message is a request other than a registration request or  
6 a message transmission request (see [4]).

7 When transmitting an autonomous *Data Burst Message*, Layer 3 shall indicate to Layer 2  
8 that the type of the message is a request that is a message transmission (see [4]).

9 The mobile station shall not send any Short Data Burst (see [30], [42]) until the maximum  
10 of the system time stored in RETRY\_DELAY<sub>S</sub>[100] and RETRY\_DELAY<sub>S</sub>[101].

11 Upon entering the *Mobile Station Message Transmission Substate*, the mobile station shall  
12 transmit the message as follows:

- 13 • The mobile station shall exit the *Mobile Station Message Transmission Substate*,  
14 shall enter either the *Mobile Station Idle State* or the *System Determination Substate*  
15 with an ACCT blocked indication, and should indicate to the user that the message  
16 transmission has terminated if all of the following conditions are true:
  - 17 – P\_REV\_IN\_USE<sub>S</sub> is greater than six,
  - 18 – ACCT is enabled for the service option number associated with the *Data Burst*  
19 *Message*, due to either of the following two conditions:
    - 20 + The service option number associated with the *Data Burst Message* is equal  
21 to an ACCT\_SO entry in ACCT\_SO\_LIST, or
    - 22 + The service option group number of the service option associated with the  
23 *Data Burst Message* is equal to an ACCT\_SO\_GRP entry in  
24 ACCT\_SO\_GRP\_LIST.
- 25 • If the mobile station entered this substate with a message transmission indication,  
26 the mobile station shall transmit the *Data Burst Message* to the base station.
- 27 • If the mobile station entered this substate with a hook status indication, the mobile  
28 station shall set the autonomous message timer equal to AUTO\_MSG\_INTERVAL<sub>S</sub>  
29 and shall start the timer. The mobile station shall transmit the Device Information  
30 Message to the base station, with the RECORD\_TYPE field of the message set to  
31 00100000 and the Hook Indicator field set to the current hook status.
- 32 • If the mobile station entered this substate with a radio environment report  
33 indication, the mobile station shall transmit the *Radio Environment Message* to the  
34 base station in assured mode, and increment RER\_COUNT upon receiving  
35 confirmation of delivery. If, after incrementing, RER\_COUNT is equal to  
36 RER\_MAX\_NUM\_MSG<sub>S</sub>, the mobile station shall set RER\_MODE\_ENABLED to NO.  
37 If RER\_MODE\_ENABLED is set to NO and TKZ\_MODE\_PENDING is equal to YES,  
38 the mobile station shall perform the following:
  - 39 – Set TKZ\_MODE\_ENABLED to YES and TKZ\_MODE\_PENDING to NO.

- 1       – If TKZ\_SID<sub>S</sub> is equal to SID<sub>S</sub>, TKZ\_NID<sub>S</sub> is equal to NID<sub>S</sub>, and  
2       TKZ\_MODE\_SUPPORTED<sub>S</sub> is equal to '1', initialize the tracking zone list  
3       (TKZ\_LIST) to contain TKZ\_ID<sub>S</sub>; otherwise, initialize the tracking zone list to  
4       NULL.
- 5       – Enable the tracking zone update timer with an initial value of infinity if  
6       TKZ\_UPDATE\_PRD<sub>S</sub> is equal to '1111'; otherwise, the mobile station shall  
7       enable the tracking zone update timer with an initial value of  $2^{TKZ\_UPDATE\_PRD_S + 6}$   
8       seconds.
- 9       • If the mobile station entered this substate with a tracking zone indication, the  
10       mobile station shall perform the following:
- 11       – The mobile station shall transmit the *Radio Environment Message* to the base  
12       station.
- 13       – If the mobile station receives confirmation of delivery of *Radio Environment*  
14       *Message*, the mobile station shall add TKZ\_ID<sub>S</sub> to TKZ\_LIST. For all entries of  
15       TKZ\_LIST whose TKZ timer is not active, other than TKZ\_ID<sub>S</sub>, enable the TKZ  
16       timer with the duration specified by TKZ\_TIMER<sub>S</sub>. If TKZ\_LIST contains more  
17       than TKZ\_LIST\_LEN<sub>S</sub> + 1 entries, the entry with active TKZ timer with smallest  
18       remaining TKZ timer value shall be removed from the list before adding the new  
19       entry.
- 20       – The mobile station shall increment TKZ\_COUNT upon receiving confirmation of  
21       delivery. If, after incrementing, TKZ\_COUNT is equal to TKZ\_MAX\_NUM\_MSG<sub>S</sub>,  
22       the mobile station shall disable the tracking zone update timer and set  
23       TKZ\_MODE\_ENABLED to NO.
- 24       • If the mobile station entered this substate with a fast call setup indication, the  
25       mobile station shall transmit the *Fast Call Setup Order* (ORDQ = '00000000') to the  
26       base station as follows:
- 27       – If the mobile station requests operation in the reduced slot cycle mode, the  
28       mobile station shall set the RSC\_MODE\_IND field to '1' and perform the  
29       following:
- 30       + Set RSC\_MODE\_ENABLED to YES.
- 31       + Set the RSC\_END\_TIME\_UNIT and RSC\_END\_TIME\_VALUE fields as  
32       specified in 2.7.3.6, and store the system time specified by these fields as  
33       RSC\_END\_TIME.
- 34       + Set the RSCI field as specified in 2.7.3.6 and store it as RSCI<sub>S</sub>; if RSCI<sub>S</sub> is  
35       equal to '0111', set SLOTTED<sub>S</sub> to NO.
- 36       + Set IGNORE\_QPCH<sub>S</sub> to '1'.
- 37       – Otherwise, the mobile station shall set the RSC\_MODE\_IND field to '0'.
- 38       While in this substate, the mobile station shall monitor the Paging Channel or the Forward  
39       Common Control Channel. If the mobile station declares a loss of the Paging Channel or

the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the following:

- If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- The mobile station shall declare an access attempt failure and update its registration variables as specified in 2.6.5.5.3.2.
- The mobile station shall disable its transmitter and enter the *Mobile Station Idle State*.

If the mobile station receives confirmation of any message sent by the mobile station in this substate, it shall send a response in this substate if required and shall then enter the *Mobile Station Idle State*.

If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA\_CANCEL to '1' when the user directs the mobile station to cancel a PACA call.

If the mobile station is to exit the *System Access State* as a result of processing Layer 3 fields of a message requiring an acknowledgment, the mobile station shall exit the *System Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

If Layer 3 receives a message other than message listed below:

- *Extended Channel Assignment Message* with DIRECT\_CH\_ASSIGN\_IND field included and set to '1'

with an indication from Layer 2 that an access attempt for a message being transmitted was not terminated as a result of processing the Layer 2 fields of the received message, the mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the message or order is outside its permissible range, the mobile station may send a *Mobile Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

1. *Authentication Challenge Message*: The mobile station shall respond to the message as specified in 2.3.12.1.4, regardless of the value of AUTH<sub>S</sub>.
2. *Authentication Request Message*: The mobile station shall process the message and shall respond as specified in 2.3.12.5.2.
3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the message as specified in 2.3.12.1.5.
4. *Base Station Reject Order*: The mobile station shall perform the procedures as specified in 2.6.11.5.
5. *Data Burst Message*
6. *Local Control Order*
7. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and record the reason for the *Lock Until Power-Cycled Order* in the mobile station's

semi-permanent memory (LCKRSN<sub>P<sub>S</sub>-p</sub> equals the least significant four bits of ORDQ<sub>r</sub>). The mobile station should notify the user of the locked condition. The mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the *System Access State* again until after the next mobile station power-up or until it has received an *Unlock Order*. This requirement shall take precedence over any other mobile station requirement specifying entry to the *System Access State*.

8. *Maintenance Required Order*: The mobile station shall record the reason for the *Maintenance Required Order* in the mobile station's semi-permanent memory (MAINTRSN<sub>S-p</sub> equals the least significant four bits of ORDQ<sub>r</sub>). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

9. *PACA Message*: If P\_REV\_IN\_USE<sub>S</sub> is less than or equal to four and the mobile station does not support PACA capability, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (message requires a capability that is not supported by the mobile station); otherwise, the mobile station shall process the message as follows:

If PACA<sub>S</sub> is equal to disabled, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000010' (message not accepted in this state).

If PACA<sub>S</sub> is equal to enabled, the mobile station shall perform the following:

- If the purpose of the message is to respond to an *Origination Message* (PURPOSE<sub>r</sub> is equal to '0000'), the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000010' (message not accepted in this state).
- If the purpose of the message is to provide the queue position of the PACA call (PURPOSE<sub>r</sub> is equal to '0001'), the mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT<sub>S</sub>, should indicate to the user that the PACA call is still queued, and should indicate to the user the current queue position (Q\_POS<sub>r</sub>) of the call.
- If the purpose of the message is to instruct the mobile station to re-originate the PACA call (PURPOSE<sub>r</sub> is equal to '0010'), Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress, shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT<sub>S</sub>, and shall enter the *Mobile Station Origination Attempt Substate* with a PACA response indication.
- If the purpose of the message is to cancel the PACA call (PURPOSE<sub>r</sub> is equal to '0011'), the mobile station shall set PACA<sub>S</sub> to disabled and PACA\_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

10. *Registration Accepted Order*: The mobile station shall perform the procedures as specified in 2.6.11.1.

11. *Registration Rejected Order*: This order indicates that normal service is not available on this system. The mobile station shall disable the full-TMSI timer. If the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set all the bits of the TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a registration rejected indication (see 2.6.1.1).
12. *Retry Order*: The mobile station shall process the message as follows:
- If RETRY\_TYPE<sub>R</sub> is equal to '000', the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to '001', '010', '011', '100', or '101'.
  - If RETRY\_TYPE<sub>R</sub> is equal to '001', '100', or '101', the mobile station shall perform the following:
    - If RETRY\_DELAY<sub>R</sub> is equal to '00000000', then the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] to 0.
    - If RETRY\_DELAY<sub>R</sub> is not equal to '00000000', the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] as follows:
      - + If the most significant bit of the RETRY\_DELAY<sub>R</sub> is '0', set RETRY\_DELAY\_UNIT<sub>S</sub> to 1000ms. If the most significant bit of the RETRY\_DELAY<sub>R</sub> is '1', set RETRY\_DELAY\_UNIT<sub>S</sub> to 60000ms.
      - + The mobile station shall set RETRY\_DELAY\_VALUE<sub>S</sub> to the seven least significant bits of RETRY\_DELAY<sub>R</sub>.
      - + The mobile station shall store the next system time 80 ms boundary + RETRY\_DELAY\_VALUE<sub>S</sub> × RETRY\_DELAY\_UNIT<sub>S</sub> ms as RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>].
13. *Security Mode Command Message*: The mobile station shall perform the procedures as specified in 2.6.11.4.
14. *Service Redirection Message*: The mobile station shall process the message as follows:
- If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a *Mobile Station Reject Order* with ORDQ equal to '00000110' (message requires a capability that is not supported by the mobile station).
  - If DELETE\_TMSI<sub>R</sub> is equal to '1', the mobile station shall set all the bits of TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall disable the full-TMSI timer.
  - The mobile station shall set RETURN\_IF\_FAIL<sub>S</sub> = RETURN\_IF\_FAIL<sub>R</sub>.

- If RECORD\_TYPE<sub>r</sub> is equal to '00000000', the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with an NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the redirection record received in the message as REDIRECT\_REC<sub>s</sub> and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a redirection indication (see 2.6.1.1).

15. *SSD Update Message*: The mobile station shall respond to the message as specified in 2.3.12.1.5.

16. *Status Request Message*: The mobile station shall disable the *System Access State* timer and respond to the message. If P\_REV\_IN\_USE<sub>s</sub> is less than or equal to three, the mobile station shall respond with a *Status Response Message*. If P\_REV\_IN\_USE<sub>s</sub> is greater than three, the mobile station shall respond with an *Extended Status Response Message*. If the message does not specify any qualification information (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000000'), the mobile station shall include the requested information records in the response. If the message specifies a band class (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000001'), the mobile station shall only include the requested information records for the specified band class (BAND\_CLASS<sub>r</sub>) in the response. If the message specifies a band class and an operating mode (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000010'), the mobile station shall only include the requested information records for the specified band class (BAND\_CLASS<sub>r</sub>) and operating mode (OP\_MODE<sub>r</sub>) in the response.

If the message specifies a band class or a band class and an operating mode which is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00000110' (message requires a capability that is not supported by the mobile station). If the response to this message exceeds the allowable length, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00001000' (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001' (information record is not supported for the specified band class and operating mode).

17. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code as follows:

- The mobile station shall store the length of the TMSI zone field by setting ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> to TMSI\_ZONE\_LEN<sub>r</sub>,
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> least significant octets of ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> to TMSI\_ZONE<sub>r</sub>, and
- The mobile station shall store the TMSI code by setting TMSI\_CODE<sub>s-p</sub> to TMSI\_CODE<sub>r</sub>.

The mobile station shall set the TMSI expiration time by setting TMSI\_EXP\_TIME<sub>s-p</sub> to TMSI\_EXP\_TIME<sub>r</sub>. The mobile station shall disable the



1 full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment*  
2 *Completion Message* within T<sub>56m</sub> seconds.

3 18. *General Page Message* or *Universal Page Message*: If the mobile station receives a  
4 mobile-station-addressed page, the mobile station may determine whether there is  
5 a page match (see 2.6.2.3). If a match is declared, the mobile station shall perform  
6 the following:

- 7 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any  
8 access attempt in progress.
- 9 • If the mobile station entered this substate with a message transmission  
10 indication, the mobile station may store the *Data Burst Message* for later  
11 transmission.
- 12 • The mobile station shall enter the *Page Response Substate*.

13 19. *Extended Channel Assignment Message*: If the DIRECT\_CH\_ASSIGN\_IND<sub>r</sub> is  
14 included and is set to '1', the mobile station shall perform the following:

- 15 • If the mobile station entered this substate with a message transmission  
16 indication, the mobile station may store the *Data Burst Message* for later  
17 transmission.
- 18 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any  
19 access attempt in progress.
- 20 • The mobile station shall process the message as specified in section 2.6.3.3.

21 Otherwise, the mobile station shall ignore this message.

22 20. *Fast Call Setup Order*:

- 23 • If ORDQ<sub>r</sub> is equal to '00000000', the mobile station shall process the message  
24 and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- 25 • If ORDQ<sub>r</sub> is equal to '00000001', the mobile station shall process the message  
26 as specified in 2.6.12.1.

27 21. *General Extension Message*: The mobile station shall process this message as  
28 specified in section 2.6.18.

29 22. *Any other message*: If the mobile station receives any other message specified in  
30 Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all  
31 other messages.

### 32 2.6.3.8 PACA Cancel Substate

33 In this substate, the mobile station sends a *PACA Cancel Message*. If the base station  
34 responds with an authentication request, the mobile station responds in this substate.

35 Upon entering the *PACA Cancel Substate*, the mobile station shall transmit the *PACA*  
36 *Cancel Message*.

1 If a message received from the base station requires a Layer 2 acknowledgment and does  
 2 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is  
 3 outstanding (see [4]).

4 If a message received from the base station requires a Layer 2 acknowledgment and also a  
 5 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

6 When transmitting a response to a message received from the base station, Layer 3 shall  
 7 indicate to Layer 2 that the type of the message is a response (see [4]).

8 When transmitting an autonomous message (i.e., a message that is not sent as a response  
 9 to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type  
 10 of the message is a request other than a registration request or a message transmission  
 11 request (see [4]).

12 While in this substate, the mobile station shall monitor the Paging Channel or the Forward  
 13 Common Control Channel. If the mobile station declares a loss of the Paging Channel or  
 14 the Forward Common Control Channel (see 2.6.3.1.8), it shall declare an access attempt  
 15 failure and update its registration variables as specified in 2.6.5.5.3.2, disable its  
 16 transmitter and enter the *Mobile Station Idle State*. If the mobile station receives  
 17 confirmation of any message sent by the mobile station in this substate, it shall send a  
 18 response in this substate if required and shall then enter the *Mobile Station Idle State*.

19 If the mobile station is to exit the *System Access State* as a result of processing Layer 3  
 20 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*  
 21 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to  
 22 the message has been sent and acknowledged.

23 If Layer 3 receives a message other than message listed below:

- 24 • *Extended Channel Assignment Message* with DIRECT\_CH\_ASSIGN\_IND field  
 25 included and set to '1'

26 with an indication from Layer 2 that an access attempt for a message being transmitted  
 27 was not terminated as a result of processing the Layer 2 fields of the received message, the  
 28 mobile station shall ignore the received message.

29 The following directed messages and orders can be received. If any field value of the  
 30 message or order is outside its permissible range, the mobile station may send a *Mobile*  
 31 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 32 1. *Authentication Challenge Message*: The mobile station shall respond to the  
 33 message as specified in 2.3.12.1.4, regardless of the value of AUTH<sub>S</sub>.
- 34 2. *Authentication Request Message*: The mobile station shall process the message and  
 35 shall respond as specified in 2.3.12.5.2.
- 36 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the  
 37 message as specified in 2.3.12.1.5.
- 38 4. *Base Station Reject Order*: The mobile station shall perform the procedures as  
 39 specified in 2.6.11.5.
- 40 5. *Data Burst Message*

1        6. *Local Control Order*

2        7. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and  
 3        record the reason for the *Lock Until Power-Cycled Order* in the mobile station's  
 4        semi-permanent memory (LCKRSN<sub>P</sub>-p equals the least significant four bits of  
 5        ORDQ<sub>R</sub>). The mobile station should notify the user of the locked condition. The  
 6        mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
 7        *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the  
 8        *System Access State* again until after the next mobile station power-up or until it  
 9        has received an *Unlock Order*. This requirement shall take precedence over any  
 10       other mobile station requirement specifying entry to the *System Access State*.

11       8. *Maintenance Required Order*: The mobile station shall record the reason for the  
 12       *Maintenance Required Order* in the mobile station's semi-permanent memory  
 13       (MAINTRSN<sub>S</sub>-p equals the least significant four bits of ORDQ<sub>R</sub>). The mobile station  
 14       shall remain in the unlocked condition. The mobile station should notify the user  
 15       of the maintenance required condition.

16       9. *PACA Message*: The mobile station shall send a *Mobile Station Reject Order* with  
 17       the ORDQ field set to '00000010' (message not accepted in this state).

18       10. *Registration Accepted Order*: The mobile station shall perform the procedures as  
 19       specified in 2.6.11.1.

20       11. *Registration Rejected Order*: This order indicates that normal service is not available  
 21       on this system. The mobile station shall disable the full-TMSI timer. If the received  
 22       order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set  
 23       all the bits of the TMSI\_CODE<sub>S</sub>-p to '1'. The mobile station shall enter the *System*  
 24       *Determination Substate* of the *Mobile Station Initialization State* with a registration  
 25       rejected indication (see 2.6.1.1).

26       12. *Retry Order*: The mobile station shall process the message as follows:

- 27       • If RETRY\_TYPE<sub>R</sub> is equal to '000', the mobile station shall set  
 28       RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to '001', '010',  
 29       '011', '100', or '101'.
- 30       • If RETRY\_TYPE<sub>R</sub> is equal to '001', '100', or '101', the mobile station shall perform  
 31       the following:
  - 32       – If RETRY\_DELAY<sub>R</sub> is equal to '00000000', then the mobile station shall set  
 33       RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] to 0.
  - 34       – If RETRY\_DELAY<sub>R</sub> is not equal to '00000000', the mobile station shall set  
 35       RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] as follows:
    - 36       + If the most significant bit of the RETRY\_DELAY<sub>R</sub> is '0', set  
 37       RETRY\_DELAY\_UNIT<sub>S</sub> to 1000ms. If the most significant bit of the  
 38       RETRY\_DELAY<sub>R</sub> is '1', set RETRY\_DELAY\_UNIT<sub>S</sub> to 60000ms.
    - 39       + The mobile station shall set RETRY\_DELAY\_VALUE<sub>S</sub> to the seven least  
 40       significant bits of RETRY\_DELAY<sub>R</sub>.

- 1                   + The mobile station shall store the next system time 80 ms boundary +  
 2                   RETRY\_DELAY\_VALUE<sub>S</sub> × RETRY\_DELAY\_UNIT<sub>S</sub> ms as  
 3                   RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>].
- 4   13. *Security Mode Command Message*: The mobile station shall perform the procedures  
 5       as specified in 2.6.11.4.
- 6   14. *Service Redirection Message*: The mobile station shall process the message as  
 7       follows:
- 8       • If the mobile station is directed to an unsupported operation mode or band  
 9         class, the mobile station shall respond with a *Mobile Station Reject Order* with  
 10        ORDQ equal to '00000110' (message requires a capability that is not supported  
 11        by the mobile station).
  - 12       • If DELETE\_TMSI<sub>R</sub> is equal to '1', the mobile station shall set all the bits of  
 13        TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall disable the full-TMSI timer.
  - 14       • The mobile station shall set RETURN\_IF\_FAIL<sub>S</sub> = RETURN\_IF\_FAIL<sub>R</sub>.
  - 15       • If RECORD\_TYPE<sub>R</sub> is equal to '00000000', the mobile station shall enter the  
 16        *System Determination Substate* of the *Mobile Station Initialization State* with an  
 17        NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the  
 18        redirection record received in the message as REDIRECT\_REC<sub>S</sub> and shall enter  
 19        the *System Determination Substate* of the *Mobile Station Initialization State* with  
 20        a redirection indication (see 2.6.1.1).
- 21   15. *SSD Update Message*: The mobile station shall respond to the message as specified  
 22       in 2.3.12.1.5.
- 23   16. *Status Request Message*: The mobile station shall disable the *System Access State*  
 24       timer and respond to the message. If P\_REV\_IN\_USE<sub>S</sub> is less than or equal to three,  
 25       the mobile station shall respond with a *Status Response Message*. If  
 26       P\_REV\_IN\_USE<sub>S</sub> is greater than three, the mobile station shall respond with an  
 27       *Extended Status Response Message*. If the message does not specify any  
 28       qualification information (QUAL\_INFO\_TYPE<sub>R</sub> is equal to '00000000'), the mobile  
 29       station shall include the requested information records in the response. If the  
 30       message specifies a band class (QUAL\_INFO\_TYPE<sub>R</sub> is equal to '00000001'), the  
 31       mobile station shall only include the requested information records for the specified  
 32       band class (BAND\_CLASS<sub>R</sub>) in the response. If the message specifies a band class  
 33       and an operating mode (QUAL\_INFO\_TYPE<sub>R</sub> is equal to '00000010'), the mobile  
 34       station shall only include the requested information records for the specified band  
 35       class (BAND\_CLASS<sub>R</sub>) and operating mode (OP\_MODE<sub>R</sub>) in the *Status Response*  
 36       *Message*.
- 37       If the message specifies a band class or a band class and an operating mode which  
 38       is not supported by the mobile station, the mobile station shall send a *Mobile*  
 39       *Station Reject Order* with ORDQ set to '00000110' (message requires a capability  
 40       that is not supported by the mobile station). If the response to this message  
 41       exceeds the allowable length, the mobile station shall send a *Mobile Station Reject*  
 42       *Order* with ORDQ set to '00001000' (response message would exceed the allowable

length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001' (information record is not supported for the specified band class and operating mode).

17. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code as follows:

- The mobile station shall store the length of the TMSI zone field by setting ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> to TMSI\_ZONE\_LEN<sub>r</sub>,
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> least significant octets of ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> to TMSI\_ZONE<sub>r</sub>, and
- The mobile station shall store the TMSI code by setting TMSI\_CODE<sub>s-p</sub> to TMSI\_CODE<sub>r</sub>.

The mobile station shall set the TMSI expiration time by setting TMSI\_EXP\_TIME<sub>s-p</sub> to TMSI\_EXP\_TIME<sub>r</sub>. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within T<sub>56m</sub> seconds.

18. *General Page Message* or *Universal Page Message*: If the mobile station receives a mobile-station-addressed page, the mobile station may determine whether there is a page match (see 2.6.2.3). If a match is declared, the mobile station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- The mobile station shall enter the *Page Response Substate*.

19. *Extended Channel Assignment Message*: If the DIRECT\_CH\_ASSIGN\_IND<sub>r</sub> is included and is set to '1', the mobile station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- The mobile station shall process the message as specified in section 2.6.3.3.

Otherwise, the mobile station shall ignore this message.

20. *Fast Call Setup Order*:

- If ORDQ<sub>r</sub> is equal to '00000000', the mobile station shall process the message and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- If ORDQ<sub>r</sub> is equal to '00000001', the mobile station shall process the message as specified in 2.6.12.1.

21. *General Extension Message*: The mobile station shall process this message as specified in section 2.6.18.

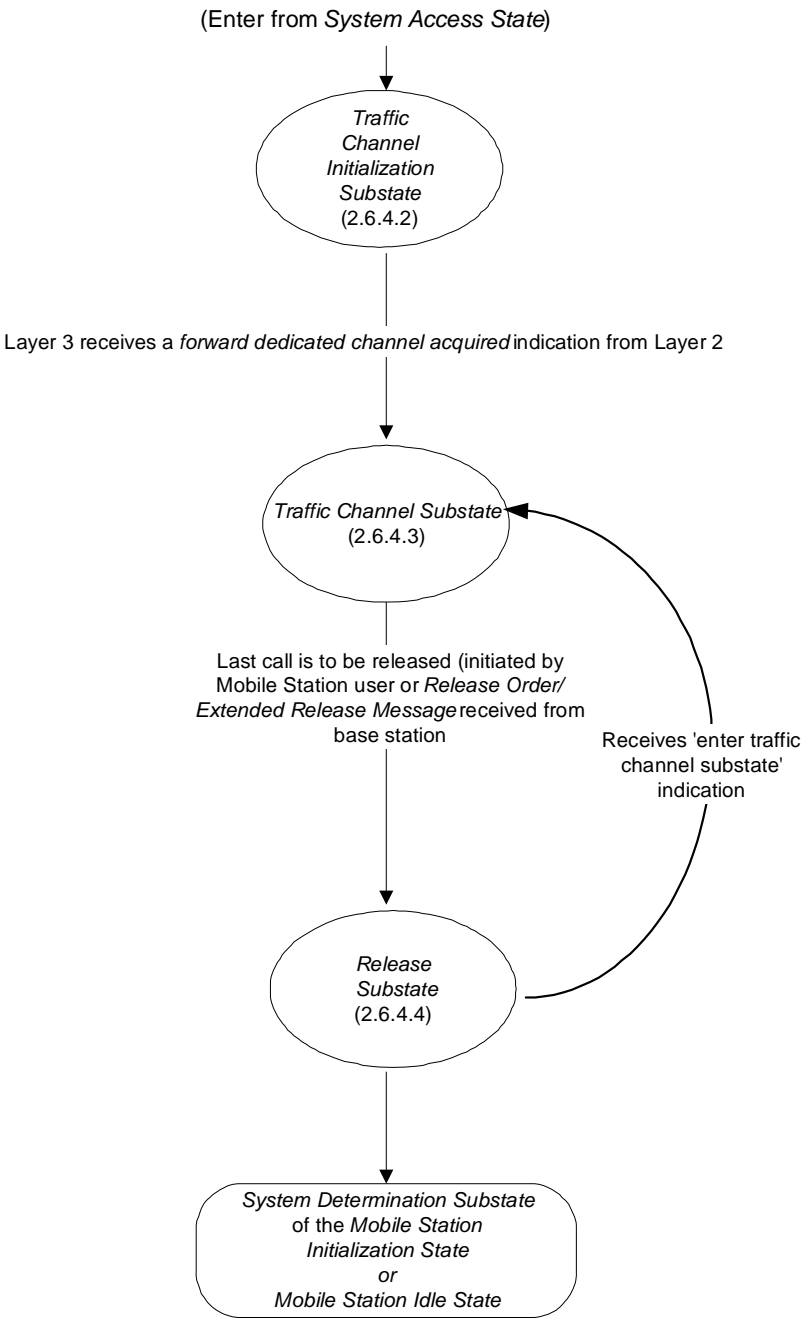
22. *Any other message:* If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

#### 2.6.4 Mobile Station Control on the Traffic Channel State

In this state, the mobile station communicates with the base station using the Forward and Reverse Traffic Channels.

As illustrated in Figure 2.6.4-1, the *Mobile Station Control on the Traffic Channel State* consists of the following substates:

- *Traffic Channel Initialization Substate* - In this substate, the mobile station verifies that it can receive the Forward Traffic Channel and begins transmitting on the Reverse Traffic Channel.
- *Traffic Channel Substate* - In this substate, the mobile station exchanges Traffic Channel frames with the base station in accordance with the current service configuration. The mobile station may perform the gating operation of Reverse Pilot Channel. While in this substate, one or more Call Control instances can be activated (see 2.6.10).
- *Release Substate* - In this substate, the mobile station disconnects the calls and the physical channels.



1  
2  
3

**Figure 2.6.4-1. Mobile Station Control on the Traffic Channel State**

#### 1 2.6.4.1 Special Functions and Actions

2 The mobile station performs special functions and actions in one or more of the substates  
3 of the *Mobile Station Control on the Traffic Channel State*.

##### 4 2.6.4.1.1 Forward Traffic Channel Power Control

5 The mobile station uses FPC\_MODE\_NO\_SCH<sub>S</sub> as FPC\_MODE<sub>S</sub> except during the forward  
6 Supplemental Channel assignment interval. During the forward Supplemental Channel  
7 assignment interval, the mobile station uses FPC\_MODE\_SCH<sub>S</sub> as FPC\_MODE<sub>S</sub>.

8 To support Forward Traffic Channel power control, the mobile station reports frame error  
9 rate statistics to the base station. If the base station enables periodic reporting, the mobile  
10 station reports frame error rate statistics at specified intervals. If the base station enables  
11 threshold reporting, the mobile station reports frame error rate statistics when the frame  
12 error rate reaches a specified threshold.<sup>28</sup>

13 The mobile station shall maintain the following frame counters:

- 14 • A counter (TOT\_FRAMES<sub>S</sub>) for the total number of frames received on the Forward  
15 Fundamental Channel.
- 16 • A counter (BAD\_FRAMES<sub>S</sub>) for the number of bad frames detected on the Forward  
17 Fundamental Channel.
- 18 • A counter (DCCH\_TOT\_FRAMES<sub>S</sub>) for the total number of frames received on the  
19 Forward Dedicated Control Channel, when the Dedicated Control Channel is  
20 assigned.
- 21 • A counter (DCCH\_BAD\_FRAMES<sub>S</sub>) for the total number of bad frames received on  
22 the Forward Dedicated Control Channel, when the Dedicated Control Channel is  
23 assigned.

24 The mobile station shall maintain the following counters for each Supplemental Channel  
25 assigned, if FOR\_SCH\_FER\_REP<sub>S</sub> is equal to '1':

- 26 • A counter (SCH\_TOT\_FRAMES<sub>S</sub>) for the number of frames received on the assigned  
27 Supplemental Channel.
- 28 • A counter (SCH\_BAD\_FRAMES<sub>S</sub>) for the number of bad frames received on the  
29 assigned Supplemental Channel.

30 The mobile station shall increment the counter by 1 at every 20 ms interval if a 20ms  
31 frame or at least one 5ms frame is received from the Forward Fundamental Channel or  
32 Dedicated Control Channel:

---

<sup>28</sup> Periodic reporting and threshold reporting may be independently enabled or disabled by the base station.



- 1       • If the received frame is from the Fundamental Channel, the mobile station shall  
2       perform the following:
- 3       – Increment TOT\_FRAMES<sub>S</sub> by 1.
- 4       – If the received 20ms frame is bad or one of the 5ms frames is bad, the mobile  
5       station shall increment BAD\_FRAMES<sub>S</sub> by 1.
- 6       • If the received frame is from the Forward Dedicated Control Channel, the mobile  
7       station shall perform the following:
- 8       – Increment DCCH\_TOT\_FRAMES<sub>S</sub> by 1.
- 9       – If the received 20ms frame is bad or one of the 5ms frames is bad, the mobile  
10      station shall increment DCCH\_BAD\_FRAMES<sub>S</sub> by 1.
- 11      • If either of the following conditions is true:
- 12      – PWR\_THRESH\_ENABLE<sub>S</sub> is equal to '1' and if one of the following conditions is  
13      true:
- 14          + If the mobile station is to perform the primary inner loop estimation on the  
15          received Forward Fundamental Channel [FPC\_PRI\_CHAN<sub>S</sub> = '0'], and  
16          BAD\_FRAMES<sub>S</sub> is equal to PWR\_REP\_THRESH<sub>S</sub> or
- 17          + If the mobile station is to perform the primary inner loop estimation on the  
18          received Forward Dedicated Control Channel [FPC\_PRI\_CHAN<sub>S</sub> = '1'], and  
19          DCCH\_BAD\_FRAMES<sub>S</sub> is equal to PWR\_REP\_THRESH<sub>S</sub>.
- 20      or
- 21      – PWR\_PERIOD\_ENABLE<sub>S</sub> is equal to '1' and if one of the following conditions is  
22      true:
- 23          + If the mobile station is to perform the primary inner loop estimation on the  
24          received Forward Fundamental Channel [FPC\_PRI\_CHAN<sub>S</sub> = '0'], and  
25          TOT\_FRAMES<sub>S</sub> is equal to  $\lfloor (2^{(PWR\_REP\_FRAMES\_S/2)} \times 5) \rfloor$ , or
- 26          + If the mobile station is to perform the primary inner loop estimation on the  
27          received Forward Dedicated Control Channel [FPC\_PRI\_CHAN<sub>S</sub> = '1'], and  
28          DCCH\_TOT\_FRAMES<sub>S</sub> is equal to  $\lfloor (2^{(PWR\_REP\_FRAMES\_S/2)} \times 5) \rfloor$ ,
- 29      then the mobile station shall send a *Power Measurement Report Message* to the  
30      base station. The mobile station should send the *Power Measurement Report*  
31      *Message* in unassured mode. After sending a *Power Measurement Report Message*,  
32      the mobile station shall set TOT\_FRAMES<sub>S</sub>, BAD\_FRAMES<sub>S</sub> to zero, and if the  
33      Dedicated Control Channel is assigned, shall set DCCH\_TOT\_FRAMES<sub>S</sub> and  
34      DCCH\_BAD\_FRAMES<sub>S</sub> to zero. The mobile station shall not increment the  
35      counters for a period of PWR\_REP\_DELAY<sub>S</sub> × 4 frames following the first  
36      transmission of the message.
- 37      • If FPC\_PRI\_CHAN<sub>S</sub> is equal to '0' and TOT\_FRAMES<sub>S</sub> is equal to  
38       $\lfloor (2^{(PWR\_REP\_FRAMES\_S/2)} \times 5) \rfloor$ , the mobile station shall perform the following:
- 39      – Set TOT\_FRAMES<sub>S</sub> and BAD\_FRAMES<sub>S</sub> to zero.

- 1           – Set  $DCCH\_TOT\_FRAMES_S$  and  $DCCH\_BAD\_FRAMES_S$  to zero, if the Dedicated  
2           Control Channel is assigned.
- 3           • If  $FPC\_PRI\_CHAN_S$  is equal to '1' and  $DCCH\_TOT\_FRAMES_S$  is equal to  
4            $\lfloor (2(PWR\_REP\_FRAMES_S/2) \times 5) \rfloor$ , the mobile station shall set  
5            $TOT\_FRAMES_S$ ,  $BAD\_FRAMES_S$ ,  $DCCH\_TOT\_FRAMES_S$ , and  $DCCH\_BAD\_FRAMES_S$   
6           to zero.
- 7   For each received frame from an assigned Supplemental Channel, the mobile station shall  
8   perform the following, if  $FOR\_SCH\_FER\_REP_S$  is equal to '1':
- 9           • Increment  $SCH\_TOT\_FRAMES_S$  by 1.
- 10          • If the received frame is bad, increment  $SCH\_BAD\_FRAMES_S$  by 1.
- 11   At the end of a burst on each assigned Supplemental Channel, if  $FOR\_SCH\_FER\_REP_S$  is  
12   equal to '1', the mobile station shall report the total number of frames received on this  
13   Supplemental Channel ( $SCH\_TOT\_FRAMES_S$ ) and the bad frames detected  
14   ( $SCH\_BAD\_FRAMES_S$ ) with the fields  $SCH\_PWR\_MEAS\_FRAMES$  and  
15    $SCH\_ERRORS\_DETECTED$  in the *Power Measurement Report Message* respectively. After  
16   sending the *Power Measurement Report Message* for the Supplemental Channel, the  
17   mobile station shall set  $SCH\_TOTAL\_FRAMES_S$  and  $SCH\_BAD\_FRAMES_S$  of the reported  
18   SCH to zero.
- 19   If both Forward Fundamental Channel and the Forward Dedicated Control Channel are  
20   assigned to the mobile station, the mobile station shall perform the following:
- 21          • The mobile station shall set  $FPC\_DELTA\_SETPT_S$  to  $(FPC\_FCH\_CURR\_SETPT_S -$   
22           $FPC\_DCCH\_CURR\_SETPT_S)$ .
- 23          • For each received frame, if  $|FPC\_FCH\_CURR\_SETPT_S - FPC\_DCCH\_CURR\_SETPT_S$   
24           $- FPC\_DELTA\_SETPT_S|$  is equal to or greater than its assigned threshold  
25           $FPC\_SETPT\_THRESH_S$ , the mobile station shall send the *Outer Loop Report*  
26          *Message* requiring acknowledgment to the base station, and the mobile station  
27          shall then set  $FPC\_DELTA\_SETPT_S$  to  $(FPC\_FCH\_CURR\_SETPT_S -$   
28           $FPC\_DCCH\_CURR\_SETPT_S)$ .
- 29   For each of the supplemental channels assigned to the mobile station and  $FPC\_MODE_S$  is  
30   set to '000', the mobile station shall perform the following:
- 31          • The mobile station shall set  $FPC\_DELTA\_SCH\_SETPT_S$  to  
32           $(FPC\_FCH\_CURR\_SETPT_S - FPC\_SCH\_CURR\_SETPT_S)$  if  $FPC\_PRI\_CHAN_S$  is equal  
33          to '0'.
- 34          • The mobile station shall set  $FPC\_DELTA\_SCH\_SETPT_S$  to  
35           $(FPC\_DCCH\_CURR\_SETPT_S - FPC\_SCH\_CURR\_SETPT_S)$  if  $FPC\_PRI\_CHAN_S$  is equal  
36          to '1'.

- 1 • For each received frame, if  $FPC\_PRI\_CHAN_S$  is equal to '0' and  
2  $|FPC\_FCH\_CURR\_SETPT_S - FPC\_SCH\_CURR\_SETPT_S -$   
3  $FPC\_DELTA\_SCH\_SETPT_S|$  is equal to or greater than its assigned threshold  
4  $FPC\_SETPT\_THRESH\_SCH_S$ , the mobile station shall send the *Outer Loop Report*  
5 *Message* in assured mode, and the mobile station shall then set  
6  $FPC\_DELTA\_SCH\_SETPT_S$  to  $(FPC\_FCH\_CURR\_SETPT_S -$   
7  $FPC\_SCH\_CURR\_SETPT_S)$ .
- 8 • For each received frame, if  $FPC\_PRI\_CHAN_S$  is equal to '1' and  
9  $|FPC\_DCCH\_CURR\_SETPT_S - FPC\_SCH\_CURR\_SETPT_S -$   
10  $FPC\_DELTA\_SCH\_SETPT_S|$  is equal to or greater than its assigned threshold  
11  $FPC\_SETPT\_THRESH\_SCH_S$ , the mobile station shall send the *Outer Loop Report*  
12 *Message* in assured mode, and the mobile station shall then set  
13  $FPC\_DELTA\_SCH\_SETPT_S$  to  $(FPC\_DCCH\_CURR\_SETPT_S -$   
14  $FPC\_SCH\_CURR\_SETPT_S)$ .

15 If the Supplemental channels are assigned to the mobile station and  $FPC\_MODE_S$  is set to  
16 '001', '010', '101', or '110', for each additional Forward Supplemental Channel other than  
17 the Forward Supplemental Channel specified by  $FPC\_SEC\_CHAN_S$ , the mobile station shall  
18 perform the following:

- 19 • The mobile station shall set  $FPC\_DELTA\_SCH\_SETPT_S$  to  
20  $(FPC\_SCH\_CURR\_SETPT_S[FPC\_SEC\_CHAN_S] - FPC\_SCH\_CURR\_SETPT_S)$  for the  
21 Supplemental Channel.
- 22 • For each received frame, if  $|FPC\_SCH\_CURR\_SETPT_S[FPC\_SEC\_CHAN_S] -$   
23  $FPC\_SCH\_CURR\_SETPT_S - FPC\_DELTA\_SCH\_SETPT_S|$  is equal to or greater than  
24 its assigned threshold  $FPC\_SETPT\_THRESH\_SCH_S$ , the mobile station shall send  
25 the *Outer Loop Report Message* in assured mode, and the mobile station shall then  
26 set  $FPC\_DELTA\_SCH\_SETPT_S$  to  $(FPC\_SCH\_CURR\_SETPT_S[FPC\_SEC\_CHAN_S] -$   
27  $FPC\_SCH\_CURR\_SETPT_S)$ .

#### 28 2.6.4.1.1.1 Forward Traffic Channel Power Control Initialization

29 To initialize Forward Traffic Channel power control, the mobile station shall set  
30  $TOT\_FRAMES_S$ ,  $BAD\_FRAMES_S$ ,  $DCCH\_TOT\_FRAMES_S$ , and  $DCCH\_BAD\_FRAMES_S$  to  
31 zero. The mobile station shall initialize the frame counters  $SCH\_TOT\_FRAMES_S$  and  
32  $SCH\_BAD\_FRAMES_S$  for each assigned Supplemental Channel to zero. The mobile station  
33 shall initialize  $FOR\_SCH\_FER\_REP_S$  to zero.

#### 34 2.6.4.1.1.2 Processing the Power Control Parameters Message

35 The mobile station shall store the following parameters from the *Power Control Parameters*  
36 *Message*:

- 37 • Power control reporting threshold ( $PWR\_REP\_THRESH_S = PWR\_REP\_THRESH_T$ )
- 38 • Power control reporting frame count ( $PWR\_REP\_FRAMES_S = PWR\_REP\_FRAMES_T$ )
- 39 • Threshold report mode indicator  
40 ( $PWR\_THRESH\_ENABLE_S = PWR\_THRESH\_ENABLE_T$ )

- 1 • Periodic report mode indicator  
2 (PWR\_PERIOD\_ENABLE<sub>S</sub> = PWR\_PERIOD\_ENABLE<sub>T</sub>)
- 3 • Power report delay (PWR\_REP\_DELAY<sub>S</sub> = PWR\_REP\_DELAY<sub>T</sub>)

4 The mobile station shall set TOT\_FRAMES<sub>S</sub> and BAD\_FRAMES<sub>S</sub> to zero if FCH is assigned.  
5 The mobile station shall set DCCH\_TOT\_FRAMES<sub>S</sub> and DCCH\_BAD\_FRAMES<sub>S</sub> to zero if  
6 DCCH is assigned.

#### 7 2.6.4.1.1.3 Processing the Power Control Message

8 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to  
9 '00000110' (message requires a capability that is not supported by the mobile station) if  
10 any of the following conditions are detected:

- 11 • If the mobile station does not support any Radio Configuration greater than 2 and  
12 FPC\_MODE<sub>T</sub> is not supported by the mobile station.
- 13 • If the mobile station does not support Supplemental Channel and FPC\_MODE<sub>T</sub> is  
14 set to the '001', '010', '101', or '110'.
- 15 • If PWR\_CNTL\_STEP<sub>T</sub> corresponds to a power control step size (see [2]) is not  
16 supported by the mobile station.

17 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to  
18 '00000111' (message cannot be handled by the current mobile station configuration) if any  
19 of the following conditions are detected:

- 20 • FPC\_PRI\_CHAN<sub>T</sub> is set to '1' and only the Fundamental Channel is assigned.
- 21 • FPC\_PRI\_CHAN<sub>T</sub> is set to '0' and only the Dedicated Control Channel is assigned.

22 If none of the above conditions are true, the mobile station shall process the message as  
23 follows at the action time (see 2.6.4.1.5) specified in the message:

- 24 • The mobile station shall store the power control step size (PWR\_CNTL\_STEP<sub>S</sub> =  
25 PWR\_CNTL\_STEP<sub>T</sub>).
- 26 • If FPC\_INCL<sub>T</sub> is equal to '1', the mobile station shall perform the following:
  - 27 – The mobile station shall set FPC\_MODE\_NO\_SCH<sub>S</sub> = FPC\_MODE<sub>T</sub>.
  - 28 – The mobile station shall set FPC\_MODE<sub>S</sub> = FPC\_MODE\_NO\_SCH<sub>S</sub> if there is no  
29 forward Supplemental Channel burst in progress (see 2.6.6.2.5.1.1).
  - 30 – The mobile station shall set FPC\_PRI\_CHAN<sub>S</sub> to FPC\_PRI\_CHAN<sub>T</sub>
  - 31 – If FPC\_OLPC\_FCH\_INCL is equal to '1', the mobile station shall:
    - 32 + Set FPC\_FCH\_FER<sub>S</sub> to FPC\_FCH\_FER<sub>T</sub>.
    - 33 + If FPC\_FCH\_MIN\_SETPT<sub>T</sub> is not equal to '1111111', set  
34 FPC\_FCH\_MIN\_SETPT<sub>S</sub> to FPC\_FCH\_MIN\_SETPT<sub>T</sub>; otherwise, set  
35 FPC\_FCH\_MIN\_SETPT<sub>S</sub> to FPC\_FCH\_CURR\_SETPT<sub>S</sub>.

- 1           + If FPC\_FCH\_MAX\_SETPT<sub>R</sub> is not equal to '11111111', set
- 2           FPC\_FCH\_MAX\_SETPT<sub>S</sub> to FPC\_FCH\_MAX\_SETPT<sub>R</sub>; otherwise, set
- 3           FPC\_FCH\_MAX\_SETPT<sub>S</sub> to FPC\_FCH\_CURR\_SETPT<sub>S</sub>.
- 4       - If FPC\_OLPC\_DCCH\_INCL is equal to '1', the mobile station shall:
- 5           + Set FPC\_DCCH\_FER<sub>S</sub> to FPC\_DCCH\_FER<sub>R</sub>.
- 6           + If FPC\_DCCH\_MIN\_SETPT<sub>R</sub> is not equal to '11111111', set
- 7           FPC\_DCCH\_MIN\_SETPT<sub>S</sub> to FPC\_DCCH\_MIN\_SETPT<sub>R</sub>; otherwise, set
- 8           FPC\_DCCH\_MIN\_SETPT<sub>S</sub> to FPC\_DCCH\_CURR\_SETPT<sub>S</sub>.
- 9           + If FPC\_DCCH\_MAX\_SETPT<sub>R</sub> is not equal to '11111111', set
- 10          FPC\_DCCH\_MAX\_SETPT<sub>S</sub> to FPC\_DCCH\_MAX\_SETPT<sub>R</sub>; otherwise, set
- 11          FPC\_DCCH\_MAX\_SETPT<sub>S</sub> to FPC\_DCCH\_CURR\_SETPT<sub>S</sub>.
- 12       - If FPC\_INCL is equal to '1' and FPC\_MODE is equal to '001', '010', '101', or '110',
- 13          the mobile station shall:
- 14           + Set FPC\_SEC\_CHAN<sub>S</sub> to FPC\_SEC\_CHAN<sub>R</sub>.
- 15           + Set FPC\_BCMC\_CHAN<sub>S</sub> to FPC\_BCMC\_CHAN<sub>R</sub>.
- 16       - If NUM\_SUP<sub>R</sub> is not equal to '00', for each Supplemental Channel included in
- 17          the message, the mobile station shall:
- 18           + Set SCH\_ID<sub>S</sub> to SCH\_ID<sub>R</sub>.
- 19           + Set FPC\_SCH\_FER<sub>S</sub>[SCH\_ID<sub>S</sub>] to FPC\_SCH\_FER<sub>R</sub>.
- 20           + If FPC\_SCH\_MIN\_SETPT<sub>R</sub> is not equal to '11111111', set
- 21           FPC\_SCH\_MIN\_SETPT<sub>S</sub>[SCH\_ID<sub>S</sub>] to FPC\_SCH\_MIN\_SETPT<sub>R</sub>; otherwise, set
- 22           FPC\_SCH\_MIN\_SETPT<sub>S</sub>[SCH\_ID<sub>S</sub>] to FPC\_SCH\_CURR\_SETPT<sub>S</sub>.
- 23           + If FPC\_SCH\_MAX\_SETPT<sub>R</sub> is not equal to '11111111', set
- 24           FPC\_SCH\_MAX\_SETPT<sub>S</sub>[SCH\_ID<sub>S</sub>] to FPC\_SCH\_MAX\_SETPT<sub>R</sub>; otherwise, set
- 25           FPC\_SCH\_MAX\_SETPT<sub>S</sub>[SCH\_ID<sub>S</sub>] to FPC\_SCH\_CURR\_SETPT<sub>S</sub>.
- 26       - If FPC\_THRESH\_INCL is equal to '1', the mobile station shall set
- 27          FPC\_SETPT\_THRESH<sub>S</sub> to FPC\_SETPT\_THRESH<sub>R</sub>.
- 28       - If FPC\_THRESH\_SCH\_INCL is equal to '1', the mobile station shall set
- 29          FPC\_SETPT\_THRESH\_SCH<sub>S</sub> to FPC\_SETPT\_THRESH\_SCH<sub>R</sub>.
- 30       • If RPC\_INCL<sub>R</sub> is equal to '1' and the mobile station supports any Radio
- 31          Configuration greater than 2, the mobile station shall perform the following:
- 32           - If RPC\_ADJ\_REC\_TYPE is equal to '0000', the mobile station shall update the
- 33           Reverse Channel Adjustment Gain Table (see [2]) containing an offset relative to
- 34           the Reverse Pilot Channel power for each reverse link code channel received in
- 35           this message.
- 36           - If RPC\_ADJ\_REC\_TYPE is equal to '0001' or '0010', the mobile station shall
- 37           update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing
- 38           an offset relative to the Reverse Pilot Channel power for each transmission rate,
- 39           frame length, coding type received in this message.

- 1       – If `RPC_ADJ_REC_TYPE` is equal to '0011', at the action time of the message, the  
2       mobile station shall update the Reverse Link Attribute Adjustment Gain Table  
3       (see [2]) containing an offset relative to the Reverse Pilot Channel power for the  
4       R-CQICH.
- 5       – If `RPC_ADJ_REC_TYPE` is equal to '0100', the mobile station shall perform the  
6       following:
  - 7       + At the first R-PDCH frame boundary at or after the action time of the  
8       message, the mobile station shall update the Reverse Link Attribute  
9       Adjustment Gain Table (see [2]) containing an offset relative to the Reverse  
10      Pilot Channel power for any combination of the following channels:
    - 11      o R-REQCH,
    - 12      o R-SPICH,
    - 13      o R-PDCCH possibly for each encoder packet size, or for the boosted and  
14      non boosted modes
    - 15      o R-PDCH possibly for each encoder packet size, or for the boosted and  
16      non boosted modes, or for each encoder packet size and transmission  
17      round.
  - 18      + At the action time of the message, the mobile station shall update the  
19      Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset  
20      relative to the Reverse Pilot Channel power for the R-ACKCH.
  - 21      + If `REV_SPICH_ADJ_INCLr` is equal to '1', the mobile station shall set  
22      `REV_SPICH_EP_SIZEs` to `REV_SPICH_EP_SIZEr+1`.
  - 23      + If `REV_PDCH_PARMS_INCLr` is equal to '1', the mobile station shall set  
24      `REV_PDCH_NUM_ARQ_ROUNDS_NORMALs` to  
25      `REV_PDCH_NUM_ARQ_ROUNDS_NORMALr+1`, and  
26      `REV_PDCH_NUM_ARQ_ROUNDS_BOOSTs` to  
27      `REV_PDCH_NUM_ARQ_ROUNDS_BOOSTr+1`.

#### 28   2.6.4.1.1.4 Processing the Rate Change Message

29   The mobile station shall process this message as follows at the action time (see 2.6.4.1.5)  
30   specified in the message:

- 31      • The mobile station shall set `FULL_CI_FEEDBACK_INDs` to  
32      `FULL_CI_FEEDBACK_INDr`.
- 33      • If `REV_CQICH_RATE_CHANGE_INCLr` is equal to '1', the mobile station shall set  
34      `REV_CQICH_REPSs` to `REV_CQICH_REPSr`. In addition, if  
35      `RL_CQICH_ATT_ADJ_GAIN_INCLr` is equal to '1', the mobile station shall update  
36      the Reverse Link Attribute Adjustment Gain Table (see [2]) containing the offsets  
37      relative to the Reverse Pilot Channel power for the corresponding transmission  
38      power level (HIGH or LOW).

- 1       • If SWITCHING\_PARMES\_INCL<sub>r</sub> is included and equal to '1', the mobile station shall  
2       set NUM\_SOFT\_SWITCHING\_FRAMES<sub>s</sub> to NUM\_SOFT\_SWITCHING\_FRAMES<sub>r</sub> + 1,  
3       and, NUM\_SOFTER\_SWITCHING\_FRAMES<sub>s</sub> to  
4       NUM\_SOFTER\_SWITCHING\_FRAMES<sub>r</sub> + 1.
- 5       • If CHM\_SWITCHING\_PARMES\_INCL is included and equal to '1', the mobile station  
6       shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to  
7       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>r</sub> + 1, and  
8       NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to  
9       NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM<sub>r</sub> + 1.
- 10      • If CHM\_SWITCHING\_PARMES\_INCL is included and equal to '0', the mobile station  
11      shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to  
12      NUM\_SOFT\_SWITCHING\_FRAMES<sub>r</sub> + 1, and  
13      NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to  
14      NUM\_SOFTER\_SWITCHING\_FRAMES<sub>r</sub> + 1.
- 15      • If REV\_ACKCH\_RATE\_CHANGE\_INCL<sub>r</sub> is equal to '1', the mobile station shall set  
16      REV\_ACKCH\_REPS<sub>s</sub> to REV\_ACKCH\_REPS<sub>r</sub>.
- 17      • If REV\_PDCH\_MAX\_PARMES\_INCL<sub>r</sub> is equal to '1', the base station shall set  
18      REV\_PDCH\_MAX\_AUTO\_TPR<sub>s</sub> to REV\_PDCH\_MAX\_AUTO\_TPR<sub>r</sub>, and  
19      REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>s</sub> to  
20      REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>r</sub>+1.
- 21      • If REV\_PDCH\_PARMES\_INCL<sub>r</sub> is equal to '1', the mobile station shall set  
22      REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>s</sub> to  
23      REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>r</sub>+1, and  
24      REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST<sub>s</sub> to  
25      REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST<sub>r</sub>+1.
- 26
- 27

#### 2.6.4.1.2 Service Configuration and Negotiation

During Traffic Channel operation, the mobile station and base station communicate through the exchange of Forward and Reverse Traffic Channel frames. The mobile station and base station use a common set of attributes for building and interpreting Traffic Channel frames. This set of attributes, referred to as a service configuration, consists of both negotiable and non-negotiable parameters.

The set of negotiable service configuration parameters consists of the following:

1. *Forward and Reverse Multiplex Options:* These control the way in which the information bits of the Forward and Reverse Traffic Channel frames, respectively, are divided into various types of traffic, such as signaling traffic, primary traffic and secondary traffic. A multiplex option together with a radio configuration specifies the frame structures and transmission rates (see [3]). The multiplex options which support Supplemental Code Channel transmission and Supplemental Channel transmission on the Forward and Reverse Traffic Channels are included in [3]. Multiplex Options 3 through 16 also indicate the capability for supporting Supplemental Code Channel transmission on the Forward and Reverse Traffic Channels. Invocation of Supplemental Code Channel operation on the Forward or Reverse Traffic Channels occurs by the *Supplemental Channel Request Message*, the *Supplemental Channel Assignment Message*, and the *General Handoff Direction Message*. Invocation of Supplemental Channel operation on the Forward or Reverse Traffic Channels occurs by the *Supplemental Channel Request Mini Message*, the *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental Channel Assignment Mini Message*, *Universal Handoff Direction Message*, and the *Reverse Supplemental Channel Assignment Mini Message*. The multiplex option used for the Forward Traffic Channel can be the same as that used for the Reverse Traffic Channel, or it can be different.
2. *Forward and Reverse Traffic Channel Configurations:* These include the Radio Configurations and other necessary attributes for the Forward and Reverse Traffic Channels. The Traffic Channel Configuration used can be different for the Forward and Reverse Traffic Channels or it can be the same.
3. *Forward and Reverse Traffic Channel Transmission Rates:* These are the transmission rates actually used for the Forward and Reverse Traffic Channels respectively. The transmission rates for the Forward Traffic Channel can include all of the transmission rates supported by the radio configuration associated with the Forward Traffic Channel multiplex option, or a subset of the supported rates. Similarly, the transmission rates used for the Reverse Traffic Channel can include all rates supported by the radio configuration associated with the Reverse Traffic Channel multiplex option, or a subset of the supported rates. The transmission rates used for the Forward Traffic Channel can be the same as those used for the Reverse Traffic Channel, or they can be different.
4. *Service Option Connections:* These are the services in use on the Traffic Channel. There can be multiple service option connections. It is also possible that there is no service option connection, in which case the mobile station uses the Reverse



Traffic Channel as follows:

- Sends null traffic on the Reverse Fundamental Channel, if the Fundamental Channel is present.
- Sends signaling traffic on the Reverse Traffic Channel where r-dsch is mapped to.

Associated with each service option connection are a service option, a Forward Traffic Channel traffic type, a Reverse Traffic Channel traffic type, and a service option connection reference. The associated service option formally defines the way in which traffic bits are processed by the mobile station and base station. The associated Forward and Reverse Traffic Channel traffic types specify the types of traffic used to support the service option. A service option can require the use of a particular type of traffic, such as primary or secondary, or it can accept more than one traffic type. A service option can be one-way, in which case it can be supported on the Forward Traffic Channel only or the Reverse Traffic Channel only. Alternatively, a service option can be two-way, in which case it can be supported on the Forward and Reverse Traffic Channels simultaneously. Connected service options can also invoke operation on Supplemental Code Channels in either one or both of the Forward and Reverse Traffic Channels by negotiating a multiplex option that supports operation on Supplemental Code Channels (see [3] for Multiplex options applicable to Supplemental Code Channels), and by using the appropriate Supplemental Code Channel related messages (i.e., the *Supplemental Channel Request Message*, the *Supplemental Channel Assignment Message*, and the *General Handoff Direction Message*). After Supplemental Code Channels have been assigned by the base station, the connected service option can transmit primary and/or secondary traffic on Supplemental Code Channels. Connected service options can also invoke operation on Supplemental Channels in either one or both of the Forward and Reverse Traffic Channels by negotiating a multiplex option that supports operation on Supplemental Channels (see [3] for Multiplex Options applicable to Supplemental Channel) and by using the appropriate Supplemental Channel related messages (i.e., the *Supplemental Channel Request Mini Message*, the *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental Channel Assignment Mini Message*, the *Reverse Supplemental Channel Assignment Mini Message*, and the *Universal Handoff Direction Message*). After Supplemental Channels have been assigned by the base station, the connected service option can transmit primary and/or secondary traffic on Supplemental Channels. The associated service option connection reference provides a means for uniquely identifying the service option connection. The reference serves to resolve ambiguity when there are multiple service option connections in use.

The non-negotiable service configuration parameters are sent from the base station to the mobile stations only, and consists of the following:

1. *Reverse Pilot Gating Rate*: This controls the way in which the reverse pilot is gated on the Reverse Pilot Channel. The base station specifies the reverse pilot gating rate to be used in the *Service Connect Message*, the *General Handoff Direction*

1            *Message, and the Universal Handoff Direction Message.*

- 2            2. *Forward and Reverse Power Control Parameters:* These consist of forward power  
3            control operation mode, outer loop power control parameters (e.g. target frame error  
4            rate, minimum  $E_b/N_t$  setpoint, and maximum  $E_b/N_t$  setpoint) for the Forward  
5            Fundamental Channel and Forward Dedicated Control Channel, and Power Control  
6            Subchannel indicator which indicates where the mobile station is to perform the  
7            primary inner loop estimation and the base station is to multiplex the Power  
8            Control Subchannel.
- 9            3. *Logical to Physical Mapping:* This is a table of logical to physical mapping entries,  
10           consisting of service reference identifier, logical resource, physical resource,  
11           forward flag, reverse flag, and priority.

12           The mobile station can request a default service configuration associated with a service  
13           option at call origination, and can request new service configurations during Traffic  
14           Channel operation. A requested service configuration can differ greatly from its  
15           predecessor or can be very similar. For example, the mobile station can request a service  
16           configuration in which all of the service option connections are different from those of the  
17           existing configuration; or the mobile station can request a service configuration in which  
18           the existing service option connections are maintained with only minor changes, such as a  
19           different set of transmission rates or a different mapping of service option connections to  
20           Forward and Reverse Traffic Channel traffic types.

21           If the mobile station requests a service configuration that is acceptable to the base station,  
22           they both begin using the new service configuration. If the mobile station requests a  
23           service configuration that is not acceptable to the base station, the base station can reject  
24           the requested service configuration or propose an alternative service configuration. If the  
25           base station proposes an alternative service configuration, the mobile station can accept or  
26           reject the base station's proposed service configuration, or propose yet another service  
27           configuration. This process, called service negotiation, ends when the mobile station and  
28           the base station find a mutually acceptable service configuration, or when either the  
29           mobile station or the base station rejects a service configuration proposed by the other.

30           It is also possible for the base station to request a default service configuration associated  
31           with a service option when paging the mobile station and to request new service  
32           configurations during Traffic Channel operation. The service negotiation proceeds as  
33           described above, but with the roles of the mobile station and base station reversed.

34           For CDMA mode operation in Band Class 0, the mobile station and base station can also  
35           use an alternative method for negotiating a service configuration known as service option  
36           negotiation. Service option negotiation is similar to service negotiation, but offers less  
37           flexibility for specifying the attributes of the service configuration. During service option  
38           negotiation, the base station or the mobile station specifies only which service option is to  
39           be used. There is no facility for explicitly specifying the multiplex options, traffic types or  
40           transmission rates to be used on the Forward and Reverse Traffic Channels in conjunction  
41           with the service option. Instead, implicit service configuration attributes are assumed. In  
42           particular, the Forward and Reverse multiplex options and transmission rates are  
43           assumed to be the default multiplex options and transmission rates associated with the

requested service option, and the traffic type for both the Forward and Reverse Traffic Channels is assumed to be primary traffic; furthermore, a service configuration established using service option negotiation is restricted to having only a single service option connection.

At mobile station origination and termination, the type of negotiation to use, either service negotiation or service option negotiation, is indicated in the *Channel Assignment Message*. Service negotiation is always used after the mobile station receives an *Extended Channel Assignment Message*. If a CDMA-to-CDMA hard handoff occurs during the call, the type of negotiation to use following the handoff is indicated in the *Extended Handoff Direction Message*, the *General Handoff Direction Message*, or the *Universal Handoff Direction Message*.

For CDMA mode operation in band classes other than Band Class 0, only service negotiation is to be used.

The following messages are used to support service negotiation:

1. *Service Request Message*: The mobile station can use this message to propose a service configuration, or to accept or reject a service configuration proposed in a *Service Response Message*. The base station can use this message to propose a service configuration, or to reject a service configuration proposed in a *Service Response Message*.
2. *Service Response Message*: The mobile station can use this message to accept or reject a service configuration proposed in a *Service Request Message*, or to propose an alternative service configuration. The base station can use this message to reject a service configuration proposed in a *Service Request Message*, or to propose an alternative service configuration.
3. *Service Connect Message*: The base station can use this message to accept a service configuration proposed in a *Service Request Message* or *Service Response Message*, and to instruct the mobile station to begin using the service configuration.
4. *Service Connect Completion Message*: The mobile station can use this message to acknowledge the transition to a new service configuration.
5. *Service Option Control Message*: The mobile station and base station can use this message to invoke service-option-specific functions.
6. *Extended Channel Assignment Message*: The base station can use this message to accept or reject the initial service configuration proposed by the mobile station in an *Origination Message* or a *Page Response Message*.

The following messages are used to support service option negotiation:

1. *Service Option Request Order*: The mobile station and base station can use this message either to request a service option or to suggest an alternative service option.
2. *Service Option Response Order*: The mobile station and base station can use this message to accept or to reject a service option request.

1       3. *Service Option Control Order*: The mobile station and base station can use this  
2       message to invoke service option specific functions.

3       The following messages are used to support both service negotiation and service option  
4       negotiation:

5       1. *Origination Message*: The mobile station can use this message to propose an initial  
6       service configuration.

7       2. *Channel Assignment Message*: The base station can use this message to accept or to  
8       reject the initial service configuration proposed by the mobile station in an  
9       *Origination Message* or a *Page Response Message* and to indicate which type of  
10      negotiation, either service negotiation or service option negotiation, is to be used  
11      during the call.

12      3. *Extended Handoff Direction Message*: The base station can use this message to  
13      indicate which type of negotiation, either service negotiation or service option  
14      negotiation, is to be used following a CDMA-to-CDMA hard handoff.

15      4. *General Handoff Direction Message*: The base station can use this message to  
16      indicate which type of negotiation, either service negotiation or service option  
17      negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base  
18      station can use this message to accept a service configuration proposed in a  
19      *Service Request Message* or *Service Response Message*. The base station can also  
20      use this message to instruct the mobile station to begin using the service  
21      configuration.

22      5. *General Page Message* or *Universal Page Message*: The base station can use a  
23      mobile-station-addressed page in a *General Page Message* or in a *Universal Page*  
24      *Message* to propose an initial service configuration.

25      6. *Page Response Message*: The mobile station can use this message to accept or to  
26      reject the initial service configuration proposed by the base station in a mobile-  
27      station-addressed page, or to propose an alternative initial service configuration.

28      7. *Status Request Message*: The base station can use this message to request service  
29      capability information from the mobile station.

30      8. *Status Response Message*: The mobile station can use this message to return the  
31      service capability information requested by the base station in a *Status Request*  
32      *Message*.

33      9. *Extended Status Response Message*: The mobile station can use this message to  
34      return the service capability information requested by the base station in a *Status*  
35      *Request Message*.

36      10. *Universal Handoff Direction Message*: The base station can use this message to  
37      indicate which type of negotiation, either service negotiation or service option  
38      negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base  
39      station can use this message to accept a service configuration proposed in a  
40      *Service Request Message* or *Service Response Message*. The base station can also  
41      use this message to instruct the mobile station to begin using the service

1 configuration.

2 11. General Extension Message: The mobile station shall process this message as  
3 specified in section 2.6.18.

#### 4 2.6.4.1.2.1 Use of Variables

##### 5 2.6.4.1.2.1.1 Maintaining the Service Request Sequence Number

6 The mobile station shall maintain a service request sequence number variable,  
7 SERV\_REQ\_NUM<sub>S</sub> for use with service negotiation. Upon entering the *Mobile Station*  
8 *Control On the Traffic Channel State*, the mobile station shall set SERV\_REQ\_NUM<sub>S</sub> to 0.  
9 Each time the mobile station sends a new *Service Request Message*, it shall set the  
10 SERV\_REQ\_SEQ field of the message to the current value of SERV\_REQ\_NUM<sub>S</sub>, and shall  
11 then set SERV\_REQ\_NUM<sub>S</sub> equal to (SERV\_REQ\_NUM<sub>S</sub> + 1) modulo 8.

##### 12 2.6.4.1.2.1.2 Maintaining the Service Negotiation Indicator Variable

13 The mobile station shall maintain a service negotiation indicator variable, SERV\_NEG<sub>S</sub>, to  
14 indicate which type of negotiation to use, either service negotiation or service option  
15 negotiation. The mobile station shall set SERV\_NEG<sub>S</sub> to enabled whenever service  
16 negotiation is to be used, and shall set SERV\_NEG<sub>S</sub> to disabled whenever service option  
17 negotiation is to be used. The precise rules for setting SERV\_NEG<sub>S</sub> are specified in 2.6.4.2  
18 and 2.6.6.2.5.1.

19 For CDMA operation in band classes other than Band Class 0, the mobile station shall set  
20 SERV\_NEG<sub>S</sub> to enabled.

##### 21 2.6.4.1.2.1.3 Maintaining the Service Option Request Number

22 The mobile station shall maintain a service option request number variable, SO\_REQ<sub>S</sub>, for  
23 use with service option negotiation. The mobile station shall set SO\_REQ<sub>S</sub> to a special  
24 value, NULL, if the mobile station does not have an outstanding service option request. If  
25 the mobile station has an outstanding service option request, the mobile station shall set  
26 SO\_REQ<sub>S</sub> to the number of the service option associated with the outstanding request.

##### 27 2.6.4.1.2.1.4 Stored Service Configuration and Reconnection

28 This section provides an overview of how the mobile station and the base station may store  
29 the service configuration and how the stored service configuration may be restored upon  
30 re-establishing dedicated channels.

31 Upon establishing a call and entering the *Mobile Station Control on the Traffic Channel*  
32 *State*, service negotiation procedures are performed as specified in 2.6.4.1.2.2 to establish  
33 a mutually acceptable service configuration between the mobile station and the base  
34 station. The service configuration consists of parameters specified via the Service  
35 Configuration information record (see 3.7.5.7) and Non-Negotiable Service Configuration  
36 information record (see 3.7.5.20). The mobile station and the base station may store the  
37 established service configuration. This is done so that when the call is re-established, the  
38 stored service configuration may be restored and without performing the service  
39 negotiation procedures. In order to ensure that the service configuration restored at the

mobile station and the base station are identical (that is, the values of the service configuration parameters are identical), a service configuration synchronization identifier (called SYNC\_ID) is associated with each stored service configuration. SYNC\_ID is a variable length identifier assigned by the base station corresponding to a particular Service Configuration information record and Non-negotiable Service Configuration information record. The SYNC\_ID value is used by the base station to determine whether these two information records may be omitted from the *Service Connect Message*.

When P\_REV\_IN\_USE<sub>s</sub> is less than or equal to six, there is no requirement on storing the established service configuration for future use. In this case, when a call is re-established and the mobile station enters the *Mobile Station Control on the Traffic Channel State*, service configuration must be re-established by performing service negotiation procedures again.

When P\_REV\_IN\_USE<sub>s</sub> is greater than six, based on the value of SYNC\_ID included by the mobile station in the *Origination Message*, *Page Response Message*, or *Enhanced Origination Message* the base station may not send the Service Configuration information record and the Non-negotiable Service Configuration information record over the air and instructs the mobile station to start using the stored information records corresponding to the SYNC\_ID reported by the mobile station.

When P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than nine, the mobile station is required to store minimum of four service configurations. Also, the stored service configuration can be restored incrementally as well. That is, if N service option connections are contained in the stored service configuration, then the mobile station can request to restore one of these service option connections upon establishing dedicated channels. This is achieved via the SR\_ID field of the *Origination Message* or *Reconnect Message*. Once operating on the dedicated channels, the mobile station can request to restore additional service option connections via the *Enhanced Origination Message*. The base station in turn can grant the mobile station request via *Extended Channel Assignment Message*, *Service Connect Message*, or *Call Assignment Message*. If the base station uses *Extended Channel Assignment Message* to grant the mobile station request, then the base station is not required to send a *Service Connect Message*. During traffic channel operation, service option connections are to be restored only from the SYNC\_ID that is currently in use (if any).

When P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than 11, the base station can autonomously order the mobile station to restore a stored service configuration via the *Extended Channel Assignment Message* or *Service Connect Message* even when the mobile station has not requested to restore a service configuration, or when the mobile station has requested to restore a different service configuration. Additionally, the base station can signal the SYNC\_ID value corresponding to the currently used service configuration using the *Universal Handoff Direction Message*.

#### 2.6.4.1.2.2 Service Subfunctions

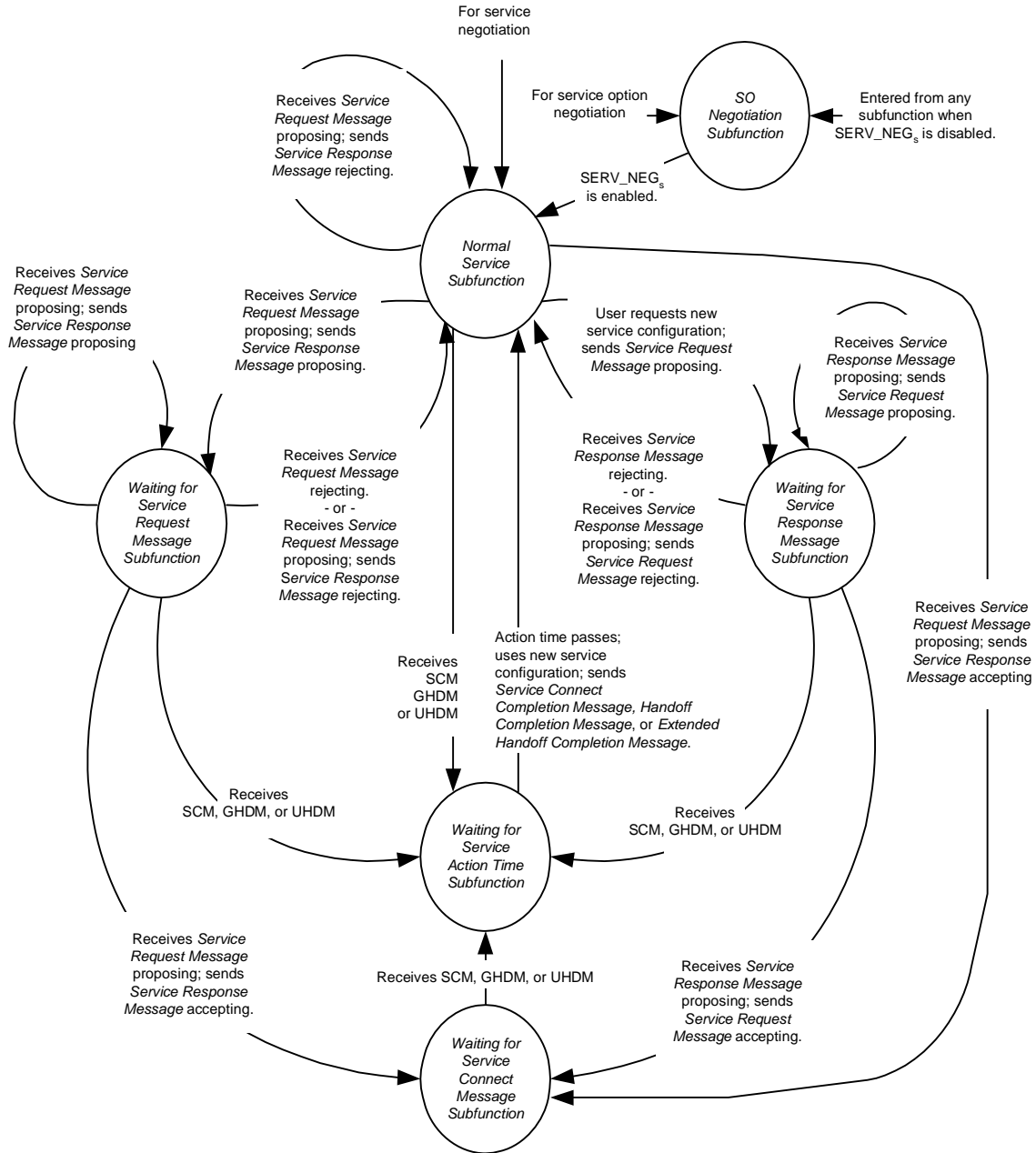
As illustrated in Figure 2.6.4.1.2.2-1, the mobile station supports service configuration and negotiation by performing the following set of service subfunctions:

- 1 • *Normal Service Subfunction* - While this subfunction is active, the mobile station  
2 processes service configuration requests from the user and from the base station.
- 3 • *Waiting for Service Request Message Subfunction* - While this subfunction is active,  
4 the mobile station waits to receive a *Service Request Message*.
- 5 • *Waiting for Service Response Message Subfunction* - While this subfunction is  
6 active, the mobile station waits to receive a *Service Response Message*.
- 7 • *Waiting for Service Connect Message Subfunction* - While this subfunction is active,  
8 the mobile station waits to receive a *Service Connect Message*, a *General Handoff*  
9 *Direction Message*, or a *Universal Handoff Direction Message* containing a service  
10 configuration record.
- 11 • *Waiting for Service Action Time Subfunction* - While this subfunction is active, the  
12 mobile station waits for the action time associated with a new service configuration  
13 and then sends a *Service Connect Completion Message*, a *Handoff Completion*  
14 *Message*, or an *Extended Handoff Completion Message*.
- 15 • *SO Negotiation Subfunction* - While this subfunction is active, the mobile station  
16 supports service option negotiation with the base station. This subfunction is only  
17 used while operating in Band Class 0.

18 The *SO Negotiation Subfunction* supports service option negotiation. All of the other  
19 service subfunctions support service negotiation.

20 At any given time during Traffic Channel operation, only one of the service subfunctions is  
21 active. For example, when the mobile station first enters the *Traffic Channel Initialization*  
22 *Substate* of the *Mobile Station Control on the Traffic Channel State*, the *Normal Service*  
23 *Subfunction*, the *Waiting for Service Connect Message Subfunction* or the *SO Negotiation*  
24 *Subfunction* is active. Each of the other service subfunctions may become active in  
25 response to various events which occur during the Traffic Channel substates. Typically,  
26 the mobile station processes events pertaining to service configuration and negotiation in  
27 accordance with the requirements for the active service subfunction, however, some Traffic  
28 Channel substates do not allow for the processing of certain events pertaining to service  
29 configuration and negotiation, or specify requirements for processing such events which  
30 supersede the requirements of the active service subfunction.

31  
32



## Notes:

- SCM stands for *Service Connect Message*.
- GHDM stands for *General Handoff Direction Message*.
- UHDM stands for *Universal Handoff Direction Message*.
- Processing for special cases, such as timeouts and errors, is not shown in this diagram.

Figure 2.6.4.1.2.2-1. Mobile Station Service Subfunctions



#### 2.6.4.1.2.2.1 Normal Service Subfunction

While this subfunction is active, the mobile station processes service configuration requests from the user and from the base station.

While the *Normal Service Subfunction* is active, the mobile station shall perform the following:

- The mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.
- To initiate service negotiation for a new service configuration, the mobile station shall send a *Service Request Message* to propose the new service configuration. The mobile station shall activate the *Waiting for Service Response Message Subfunction*.
- For any service option connection that is part of the current service configuration, the mobile station may send a *Service Option Control Message* to invoke a service option specific function in accordance with the requirements for the associated service option.
- If SERV\_NEG<sub>S</sub> changes from enabled to disabled (see 2.6.6.2.5.1), the mobile station shall activate the *SO Negotiation Subfunction*.
- If the mobile station receives one of the following service negotiation messages, the mobile station shall process the message according to the specified requirements:
  1. *Service Connect Message*: The mobile station shall perform the following:
    - If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01' or '10', and if the mobile station entered the *Mobile Station Control on the Traffic Channel State* due to receiving an *Extended Channel Assignment Message* with GRANTED\_MODE set to '11', the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00010100' (stored configuration already restored at channel assignment) within T<sub>56m</sub> seconds and shall not perform the rest of the procedures below.
    - If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '00', the mobile station shall perform the following: If the mobile station accepts the service configuration specified in the message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub> seconds.

- 1                   • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01', the mobile station shall perform  
2                   the following: If the mobile station accepts the service configuration  
3                   currently stored at the mobile station, the mobile station shall activate the  
4                   Waiting for Service Action Time Subfunction; otherwise, the mobile station  
5                   shall send a Mobile Station Reject Order (ORDQ = '00000111') within T<sub>56m</sub>  
6                   seconds.
- 7                   • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '10', the mobile station shall perform  
8                   the following: If the mobile station accepts the service configuration  
9                   resulting from updating the stored service configuration with the service  
10                  configuration received in this message, the mobile station shall activate the  
11                  Waiting for Service Action Time Subfunction; otherwise, the mobile station  
12                  shall send a Mobile Station Reject Order (ORDQ = '00000111') within T<sub>56m</sub>  
13                  seconds.
- 14                  • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '11', the mobile station shall perform  
15                  the following: if the mobile station accepts the service configuration  
16                  resulting from restoring the indicated service option connection records  
17                  from the stored service configuration and releasing the indicated service  
18                  option connection records from the current service configuration, the mobile  
19                  station shall activate the Waiting for Service Action Time Subfunction;  
20                  otherwise, the mobile station shall send a *Mobile Station Reject Order*  
21                  (ORDQ = '00000111') within T<sub>56m</sub> seconds.
- 22           2. *Service Option Control Message*: If the service option connection specified by  
23           the message is part of the current service configuration, and the service option  
24           specified by the message is the same as the service option associated with the  
25           service option connection, the mobile station shall interpret the action time of  
26           the message as specified in 2.6.4.1.5, and shall process the message in  
27           accordance with the requirements for the service option; otherwise, the mobile  
28           station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within  
29           T<sub>56m</sub> seconds.
- 30           3. *Service Request Message*: The mobile station shall process the message as  
31           follows:
- 32           – If the purpose of the message is to reject a proposed service configuration,  
33           the mobile station shall send a *Mobile Station Reject Order* (ORDQ =  
34           '00000010') within T<sub>56m</sub> seconds.
- 35           – If the purpose of the message is to propose a service configuration, the  
36           mobile station shall process the message as follows:
- 37           + If the mobile station accepts the proposed service configuration, the  
38           mobile station shall send a *Service Response Message* to accept the  
39           proposed service configuration within T<sub>59m</sub> seconds. The mobile station  
40           shall activate the *Waiting for Service Connect Message Subfunction*.

- 1                   + If the mobile station does not accept the proposed service configuration  
2                   and does not have an alternative service configuration to propose, the  
3                   mobile station shall send a *Service Response Message* to reject the  
4                   proposed service configuration within T<sub>59m</sub> seconds.
- 5                   + If the mobile station does not accept the proposed service configuration  
6                   and has an alternative service configuration to propose, the mobile  
7                   station shall send a *Service Response Message* to propose the alternative  
8                   service configuration within T<sub>59m</sub> seconds. The mobile station shall  
9                   activate the *Waiting for Service Request Message Subfunction*.
- 10           4. *Service Response Message*: The mobile station shall send a *Mobile Station*  
11           *Reject Order* (ORDQ = '00000010') within T<sub>56m</sub> seconds.
- 12           5. *General Handoff Direction Message*: If the SCR\_INCLUDED field is included in  
13           this message and is set to '1':  
14           If the mobile station has not rejected this message, the mobile station shall  
15           activate the *Waiting for Service Action Time Subfunction*.
- 16           6. *Universal Handoff Direction Message*: If the SCR\_INCLUDED field is included in  
17           this message and is set to '1':  
18           If the mobile station has not rejected this message, the mobile station shall  
19           activate the *Waiting for Service Action Time Subfunction*.
- 20           • If the mobile station receives one of the following service option negotiation  
21           messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =  
22           '00000010') within T<sub>56m</sub> seconds:  
23           1. *Service Option Request Order*  
24           2. *Service Option Response Order*  
25           3. *Service Option Control Order*
- 26   2.6.4.1.2.2.2 *Waiting for Service Request Message Subfunction*  
27   While this subfunction is active, the mobile station waits to receive a *Service Request*  
28   *Message*.  
29   Upon activation of the *Waiting for Service Request Message Subfunction*, the mobile station  
30   shall set the subfunction timer for T<sub>68m</sub> seconds.  
31   While the *Waiting for Service Request Message Subfunction* is active, the mobile station  
32   shall perform the following:  
33   • If the subfunction timer expires, the mobile station shall activate the *Normal*  
34   *Service Subfunction*.

- 1 • The mobile station shall process Forward and Reverse Traffic Channel frames in  
2 accordance with the current service configuration. The mobile station shall discard  
3 any Forward Traffic Channel frame which has a format that is not supported by the  
4 mobile station. The mobile station may discard any type of Forward Traffic  
5 Channel traffic that is not signaling traffic and is not part of the current service  
6 configuration.
- 7 • The mobile station shall not initiate service negotiation for a new service  
8 configuration.
- 9 • For any service option connection that is part of the current service configuration,  
10 the mobile station may send a *Service Option Control Message* to invoke a service  
11 option specific function in accordance with the requirements for the associated  
12 service option.
- 13 • If SERV\_NEG<sub>s</sub> changes from enabled to disabled (see 2.6.6.2.5.1), the mobile  
14 station shall activate the *SO Negotiation Subfunction*.
- 15 • If the mobile station receives one of the following service negotiation messages, the  
16 mobile station shall process the message according to the specified requirements:  
17 1. *Service Connect Message*: The mobile station shall perform the following:  
18 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01' or '10', and if the mobile station  
19 entered the *Mobile Station Control on the Traffic Channel State* due to  
20 receiving an *Extended Channel Assignment Message* with  
21 GRANTED\_MODE set to '11', the mobile station shall send a *Mobile*  
22 *Station Reject Order* with the ORDQ field set to '00010100' (stored  
23 configuration already restored at channel assignment) within T<sub>56m</sub>  
24 seconds, and shall activate the *Normal Service Subfunction*.
- 25 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '00', the mobile station shall  
26 perform the following: If the mobile station accepts the service  
27 configuration specified in the message, the mobile station shall activate  
28 the *Waiting for Service Action Time Subfunction*; otherwise, the mobile  
29 station shall send a *Mobile Station Reject Order* (ORDQ = '00000111')  
30 within T<sub>56m</sub> seconds and shall activate the *Normal Service Subfunction*.
- 31 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01', the mobile station shall  
32 perform the following: If the mobile station accepts the service  
33 configuration currently stored at the mobile station, the mobile station  
34 shall activate the *Waiting for Service Action Time Subfunction*;  
35 otherwise, the mobile station shall send a *Mobile Station Reject Order*  
36 (ORDQ = '00000111') within T<sub>56m</sub> seconds and shall activate the *Normal*  
37 *Service Subfunction*.
- 38 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '10', the mobile station shall  
39 perform the following: If the mobile station accepts the service  
40 configuration resulting from updating the stored service configuration  
41 with the service configuration received in this message, the mobile  
42 station shall activate the *Waiting for Service Action Time Subfunction*;

otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = '00000111') within T<sub>56m</sub> seconds and shall activate the *Normal Service Subfunction*.

- If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '11', the mobile station shall perform the following: if the mobile station accepts the service configuration resulting from restoring the indicated service option connection records from the stored service configuration and releasing the indicated service option connection records from the current service configuration, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub> seconds and shall activate the *Normal Service Subfunction*.

2. *Service Option Control Message*: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the mobile station shall interpret the action time of the message as specified in 2.6.4.1.5, and shall process the message in accordance with the requirements for the service option; otherwise, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub> seconds.

3. *Service Request Message*: The mobile station shall process the message as follows:

- If the purpose of the message is to reject a proposed service configuration, the mobile station shall activate the *Normal Service Subfunction*.
- If the purpose of the message is to propose a service configuration, the mobile station shall process the message as follows:
  - + If the mobile station accepts the proposed service configuration, the mobile station shall send a *Service Response Message* to accept the proposed service configuration within T<sub>59m</sub> seconds. The mobile station shall activate the *Waiting for Service Connect Message Subfunction*.
  - + If the mobile station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the mobile station shall send a *Service Response Message* to reject the proposed service configuration within T<sub>59m</sub> seconds. The mobile station shall activate the *Normal Service Subfunction*.
  - + If the mobile station does not accept the proposed service configuration and has an alternative service configuration to propose, the mobile station shall send a *Service Response Message* to propose the alternative service configuration within T<sub>59m</sub> seconds. The mobile station shall reset the subfunction timer for T<sub>68m</sub> seconds.

4. *Service Response Message*: The mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000010') within T<sub>56m</sub> seconds.

5. *General Handoff Direction Message*: If the SCR\_INCLUDED field is included in this message and is set to '1':

If the mobile station has not rejected this message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall activate the *Normal Service Subfunction*.

6. *Universal Handoff Direction Message*: If the SCR\_INCLUDED field is included in this message and is set to '1':

If the mobile station has not rejected this message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall activate the *Normal Service Subfunction*.

- If the mobile station receives one of the following service option negotiation messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000010') within T<sub>56m</sub> seconds:

1. *Service Option Request Order*
2. *Service Option Response Order*
3. *Service Option Control Order*

#### 2.6.4.1.2.2.3 Waiting for Service Response Message Subfunction

While this subfunction is active, the mobile station waits to receive a *Service Response Message*.

Upon activation of the *Waiting for Service Response Message Subfunction*, the mobile station shall set the subfunction timer for T<sub>68m</sub> seconds.

While the *Waiting for Service Response Message Subfunction* is active, the mobile station shall perform the following:

- If the subfunction timer expires, the mobile station shall activate the *Normal Service Subfunction*.
- The mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.
- The mobile station shall not initiate service negotiation for a new service configuration.
- For any service option connection that is part of the current service configuration, the mobile station may send a *Service Option Control Message* to invoke a service option specific function in accordance with the requirements for the associated service option.
- If SERV\_NEG<sub>s</sub> changes from enabled to disabled (see 2.6.6.2.5.1), the mobile station shall activate the *SO Negotiation Subfunction*.

- 1 • If the mobile station receives one of the following service negotiation messages, the  
2 mobile station shall process the message according to the specified requirements:
- 3 1. *Service Connect Message*: The mobile station shall perform the following:
  - 4 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01' or '10', and if the mobile station  
5 entered the *Mobile Station Control on the Traffic Channel State* due to  
6 receiving an *Extended Channel Assignment Message* with GRANTED\_MODE  
7 set to '11', the mobile station shall send a *Mobile Station Reject Order* with  
8 the ORDQ field set to '00010100' (stored configuration already restored at  
9 channel assignment) within T<sub>56m</sub> seconds, and shall activate the *Normal*  
10 *Service Subfunction*.
  - 11 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '00', the mobile station shall perform  
12 the following: If the mobile station accepts the service configuration  
13 specified in the message, the mobile station shall activate the *Waiting for*  
14 *Service Action Time Subfunction*; otherwise, the mobile station shall send a  
15 *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub> seconds and  
16 shall activate the *Normal Service Subfunction*.
  - 17 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01', the mobile station shall perform  
18 the following: If the mobile station accepts the service configuration  
19 currently stored at the mobile station, the mobile station shall activate the  
20 *Waiting for Service Action Time Subfunction*; otherwise, the mobile station  
21 shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub>  
22 seconds and shall activate the *Normal Service Subfunction*.
  - 23 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '10', the mobile station shall perform  
24 the following: If the mobile station accepts the service configuration  
25 resulting from updating the stored service configuration with the service  
26 configuration received in this message, the mobile station shall activate the  
27 *Waiting for Service Action Time Subfunction*; otherwise, the mobile station  
28 shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub>  
29 seconds and shall activate the *Normal Service Subfunction*.
  - 30 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '11', the mobile station shall perform  
31 the following: if the mobile station accepts the service configuration  
32 resulting from restoring the indicated service option connection records  
33 from the stored service configuration and releasing the indicated service  
34 option connection records from the current service configuration, the mobile  
35 station shall activate the *Waiting for Service Action Time Subfunction*;  
36 otherwise, the mobile station shall send a *Mobile Station Reject Order*  
37 (ORDQ = '00000111') within T<sub>56m</sub> seconds and shall activate the *Normal*  
38 *Service Subfunction*.

- 1        2. *Service Option Control Message*: If the service option connection specified by  
2        the message is part of the current service configuration, and the service option  
3        specified by the message is the same as the service option associated with the  
4        service option connection, the mobile station shall interpret the action time of  
5        the message as specified in 2.6.4.1.5, and shall process the message in  
6        accordance with the requirements for the service option; otherwise, the mobile  
7        station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within  
8        T<sub>56m</sub> seconds.
- 9        3. *Service Request Message*: The mobile station shall process the message as  
10       follows:
- 11       – If the purpose of the message is to reject a proposed service configuration,  
12       the mobile station shall send a *Mobile Station Reject Order* (ORDQ =  
13       '00000010') within T<sub>56m</sub> seconds.
- 14       – If the purpose of the message is to propose a service configuration, the  
15       mobile station shall discontinue processing the service configuration  
16       requested by the user and shall process the message as follows:
- 17       + If the mobile station accepts the proposed service configuration, the  
18       mobile station shall send a *Service Response Message* to accept the  
19       proposed service configuration within T<sub>59m</sub> seconds. The mobile station  
20       shall activate the *Waiting for Service Connect Message Subfunction*.
- 21       + If the mobile station does not accept the proposed service configuration  
22       and does not have an alternative service configuration to propose, the  
23       mobile station shall send a *Service Response Message* to reject the  
24       proposed service configuration within T<sub>59m</sub> seconds. The mobile station  
25       shall activate the *Normal Service Subfunction*.
- 26       + If the mobile station does not accept the proposed service configuration  
27       and has an alternative service configuration to propose, the mobile  
28       station shall send a *Service Response Message* to propose the alternative  
29       service configuration within T<sub>59m</sub> seconds. The mobile station shall  
30       activate the *Waiting for Service Request Message Subfunction*.
- 31       4. *Service Response Message*: The mobile station shall process the message as  
32       follows:
- 33       – If the service request sequence number (SERV\_REQ\_SEQ<sub>r</sub>) from the  
34       message does not match the sequence number of the *Service Request*  
35       *Message* for which the mobile station is expecting a response, the mobile  
36       station shall not process the other Layer 3 fields of the message.
- 37       – If the purpose of the message is to reject the service configuration proposed  
38       in the corresponding *Service Request Message*, the mobile station shall  
39       activate the *Normal Service Subfunction*. The mobile station may indicate to  
40       the user that the requested service configuration has been rejected.
- 41       – If the purpose of the message is to propose a service configuration, the  
42       mobile station shall process the message as follows:



- 1                   + If the mobile station accepts the proposed service configuration, the
- 2                   mobile station shall send a *Service Request Message* to accept the
- 3                   proposed service configuration within T<sub>59m</sub> seconds. The mobile station
- 4                   shall activate the *Waiting for Service Connect Message Subfunction*.
- 5                   + If the mobile station does not accept the proposed service configuration
- 6                   and does not have an alternative service configuration to propose, the
- 7                   mobile station shall send a *Service Request Message* to reject the
- 8                   proposed service configuration within T<sub>59m</sub> seconds. The mobile station
- 9                   shall activate the *Normal Service Subfunction*.
- 10                  + If the mobile station does not accept the proposed service configuration
- 11                  and has an alternative service configuration to propose, the mobile
- 12                  station shall send a *Service Request Message* to propose the alternative
- 13                  service configuration within T<sub>59m</sub> seconds. The mobile station shall
- 14                  reset the subfunction timer for T<sub>68m</sub> seconds.
- 15                  5. *General Handoff Direction Message*: If the SCR\_INCLUDED field is included in
- 16                  this message and is set to '1':
- 17                  If the mobile station has not rejected this message, the mobile station shall
- 18                  activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
- 19                  station shall activate the *Normal Service Subfunction*.
- 20                  6. *Universal Handoff Direction Message*: If the SCR\_INCLUDED field is included
- 21                  in this message and is set to '1':
- 22                  If the mobile station has not rejected this message, the mobile station shall
- 23                  activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
- 24                  station shall activate the *Normal Service Subfunction*.
- 25                  • If the mobile station receives one of the following service option negotiation
- 26                  messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
- 27                  '00000010') within T<sub>56m</sub> seconds:
- 28                  1. *Service Option Request Order*
- 29                  2. *Service Option Response Order*
- 30                  3. *Service Option Control Order*

#### 31 2.6.4.1.2.2.4 Waiting for Service Connect Message Subfunction

32 While this subfunction is active, the mobile station waits to receive a *Service Connect*  
 33 *Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*  
 34 containing a service configuration record.

35 Upon activation of the *Waiting for Service Connect Message Subfunction*, the mobile station  
 36 shall set the subfunction timer for T<sub>65m</sub> seconds.

37 While the *Waiting for Service Connect Message Subfunction* is active, the mobile station  
 38 shall perform the following:

- 1 • If the subfunction timer expires, the mobile station shall activate the *Normal*  
2 *Service Subfunction*.
- 3 • The mobile station shall process Forward and Reverse Traffic Channel frames in  
4 accordance with the current service configuration. The mobile station shall discard  
5 any Forward Traffic Channel frame which has a format that is not supported by the  
6 mobile station. The mobile station may discard any type of Forward Traffic  
7 Channel traffic that is not signaling traffic and is not part of the current service  
8 configuration.
- 9 • The mobile station shall not initiate service negotiation for a new service  
10 configuration.
- 11 • For any service option connection that is part of the current service configuration,  
12 the mobile station may send a *Service Option Control Message* to invoke a service  
13 option specific function in accordance with the requirements for the associated  
14 service option.
- 15 • If SERV\_NEG<sub>s</sub> changes from enabled to disabled (see 2.6.6.2.5.1), the mobile  
16 station shall activate the *SO Negotiation Subfunction*.
- 17 • If the mobile station receives one of the following service negotiation messages, the  
18 mobile station shall process the message according to the specified requirements:  
19 1. *Service Connect Message*: The mobile station shall perform the following:  
20 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01' or '10', and if the mobile station  
21 entered the *Mobile Station Control on the Traffic Channel State* due to  
22 receiving an *Extended Channel Assignment Message* with GRANTED\_MODE  
23 set to '11', the mobile station shall send a *Mobile Station Reject Order* with  
24 the ORDQ field set to '00010100' (stored configuration already restored at  
25 channel assignment) within T<sub>56m</sub> seconds, and shall activate the *Normal*  
26 *Service Subfunction*.  
27 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '00', the mobile station shall perform  
28 the following: If the mobile station accepts the service configuration  
29 specified in the message, the mobile station shall activate the *Waiting for*  
30 *Service Action Time Subfunction*; otherwise, the mobile station shall send a  
31 *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub> seconds and  
32 shall activate the *Normal Service Subfunction*.  
33 • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01', the mobile station shall perform  
34 the following: If the mobile station accepts the service configuration  
35 currently stored at the mobile station, the mobile station shall activate the  
36 *Waiting for Service Action Time Subfunction*; otherwise, the mobile station  
37 shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub>  
38 seconds, and shall activate the *Normal Service Subfunction*.

- 1                   • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '10', the mobile station shall perform  
2                   the following: If the mobile station accepts the service configuration  
3                   resulting from updating the stored service configuration with the service  
4                   configuration received in this message, the mobile station shall activate the  
5                   Waiting for Service Action Time Subfunction; otherwise, the mobile station  
6                   shall send a Mobile Station Reject Order (ORDQ = '00000111') within T<sub>56m</sub>  
7                   seconds, and shall activate the *Normal Service Subfunction*.
- 8                   • If USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '11', the mobile station shall perform  
9                   the following: if the mobile station accepts the service configuration  
10                  resulting from restoring the indicated service option connection records  
11                  from the stored service configuration and releasing the indicated service  
12                  option connection records from the current service configuration, the mobile  
13                  station shall activate the Waiting for Service Action Time Subfunction;  
14                  otherwise, the mobile station shall send a *Mobile Station Reject Order*  
15                  (ORDQ = '00000111') within T<sub>56m</sub> seconds, and shall activate the *Normal*  
16                  *Service Subfunction*.
- 17           2. *Service Option Control Message*: If the service option connection specified by  
18           the message is part of the current service configuration, and the service option  
19           specified by the message is the same as the service option associated with the  
20           service option connection, the mobile station shall interpret the action time of  
21           the message as specified in 2.6.4.1.5, and shall process the message in  
22           accordance with the requirements for the service option; otherwise, the mobile  
23           station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within  
24           T<sub>56m</sub> seconds.
- 25           3. *Service Request Message*: The mobile station shall process the message as  
26           follows:
- 27           – If the purpose of the message is to reject a proposed service configuration,  
28           the mobile station shall send a *Mobile Station Reject Order* (ORDQ =  
29           '00000010') within T<sub>56m</sub> seconds.
- 30           – If the purpose of the message is to propose a service configuration, the  
31           mobile station shall process the message as follows:
- 32           + If the mobile station accepts the proposed service configuration, the  
33           mobile station shall send a *Service Response Message* to accept the  
34           proposed service configuration within T<sub>59m</sub> seconds. The mobile station  
35           shall reset the subfunction timer for T<sub>65m</sub> seconds.
- 36           + If the mobile station does not accept the proposed service configuration  
37           and does not have an alternative service configuration to propose, the  
38           mobile station shall send a *Service Response Message* to reject the  
39           proposed service configuration within T<sub>59m</sub> seconds. The mobile station  
40           shall activate the *Normal Service Subfunction*.

- + If the mobile station does not accept the proposed service configuration and has an alternative service configuration to propose, the mobile station shall send a *Service Response Message* to propose the alternative service configuration within  $T_{59m}$  seconds. The mobile station shall activate the *Waiting for Service Request Message Subfunction*.

4. *Service Response Message*: The mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000010') within  $T_{56m}$  seconds.

5. *General Handoff Direction Message*: If the SCR\_INCLUDED field is included in this message and is set to '1':

If the mobile station has not rejected this message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall activate the *Normal Service Subfunction*.

6. *Universal Handoff Direction Message*: If the SCR\_INCLUDED field is included in this message and is set to '1':

If the mobile station has not rejected this message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall activate the *Normal Service Subfunction*.

- If the mobile station receives one of the following service option negotiation messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000010') within  $T_{56m}$  seconds:

1. *Service Option Request Order*
2. *Service Option Response Order*
3. *Service Option Control Order*

#### 2.6.4.1.2.2.5 Waiting for Service Action Time Subfunction

While this subfunction is active, the mobile station waits for the action time associated with a new service configuration. If the action time was specified by a *Service Connect Message*, the mobile station shall send the *Service Connect Completion Message* at the action time.

While the *Waiting for Service Action Time Subfunction* is active, the mobile station shall perform the following:

- Prior to the action time associated with the *Service Connect Message*, *General Handoff Direction Message* (containing a service configuration record), or *Universal Handoff Direction Message* (containing a service configuration record), the mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

- 1       • At the action time associated with the *Service Connect Message*, *General Handoff*  
2       *Direction Message* (containing a service configuration record) or *Universal Handoff*  
3       *Direction Message* (containing a service configuration record), the mobile station  
4       shall perform the following<sup>29</sup>:
  - 5       – If this is a *Service Connect Message* and USE\_TYPE0\_PLCM<sub>r</sub> equals '1', the  
6       mobile station shall perform the following:
    - 7       + If P\_REV\_IN\_USE<sub>s</sub> is less than 11, set PLCM\_TYPE<sub>s</sub> to '0000'; otherwise set  
8       PLCM\_TYPE<sub>s</sub> to '0100'.
    - 9       + The mobile station shall use the Public Long Code Mask derived from  
10       PLCM\_TYPE<sub>s</sub> as specified in 2.3.6.
  - 11      – If this is a *Service Connect Message* with USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '01',  
12      the mobile station shall perform the following:
    - 13      + If SYNC\_ID\_INCL<sub>r</sub> is included and set to '1', the SYNC\_ID<sub>r</sub> indicates the  
14      stored service configuration to be restored; otherwise, the SYNC\_ID  
15      conveyed by the mobile station indicates the stored service configuration to  
16      be restored.
    - 17      + The Call Control instance identified by NULL shall also be identified by the  
18      connection reference assigned to the first service option connection in the  
19      stored Service Configuration information record.
    - 20      + For each service option connection (with corresponding connection  
21      reference CON\_REF<sub>i</sub>) in the stored service configuration record, if any,  
22      except for the first one, Layer 3 shall instantiate a Call Control instance (as  
23      specified in 2.6.10) with a 'restore indication'. The mobile station shall  
24      identify each of these Call Control instances by the corresponding  
25      CON\_REF<sub>i</sub>.
    - 26      + The mobile station shall begin to use the stored service configuration  
27      corresponding to this SYNC\_ID as the current service configuration as  
28      specified in 2.6.4.1.2.2.5.2 and shall begin to process Forward and Reverse  
29      Traffic Channel frames accordingly. The mobile station shall send a *Service*  
30      *Connect Completion Message* within T<sub>56m</sub> seconds after the action time.
    - 31      + The mobile station shall store the synchronization identifier corresponding  
32      to the stored service configuration as SYNC\_ID<sub>s</sub>.

---

<sup>29</sup> Note that these procedures that take place at the action time may not occur for this message if a GHDM/UHDM with SCR\_INCLUDED equal to '1' is received before the action time of this message. In this case, these procedures take place for the new message. One exception is that the call assignments from this message take effect at the action time of this message regardless of the call assignments from the new message.

- 1           + The mobile station shall exit this subfunction and activate the *Normal*
- 2           *Service Subfunction*.
- 3       - If this is a *Service Connect Message* with USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '10',
- 4       the mobile station shall perform the following:
- 5           + If SYNC\_ID\_INCL<sub>r</sub> is included and set to '1' and
- 6           SYNC\_ID\_BS\_INITIATED\_IND<sub>r</sub> is set to '1', the SYNC\_ID<sub>r</sub> indicates the
- 7           stored service configuration to be restored; otherwise, the SYNC\_ID
- 8           conveyed by the mobile station indicates the stored service configuration to
- 9           be restored.
- 10          + The mobile station shall update the stored service configuration with the
- 11          received service configuration as follows:
- 12           o The mobile station shall restore the stored service configuration as
- 13           specified in 2.6.4.1.2.2.5.2.
- 14           o The mobile station shall process the received Service Configuration
- 15           Record as specified in 2.6.4.1.12.
- 16           o The mobile station shall process the received Non-negotiable Service
- 17           Configuration Record as specified in 2.6.4.1.13.
- 18          + For each service option connection (with corresponding connection
- 19          reference CON\_REF<sub>i</sub>) in the stored service configuration record, if any,
- 20          except for the first one, Layer 3 shall instantiate a Call Control instance (as
- 21          specified in 2.6.10) with a 'restore indication'. The mobile station shall
- 22          identify each of these Call Control instances by the corresponding
- 23          CON\_REF<sub>i</sub>.
- 24          + The mobile station shall begin to use the updated service configuration as
- 25          the current service configuration and shall begin to process Forward and
- 26          Reverse Traffic Channel frames accordingly. The mobile station shall send a
- 27          *Service Connect Completion Message* within T<sub>56m</sub> seconds after the action
- 28          time.
- 29          + If SYNC\_ID\_INCL<sub>r</sub> is set to '1' and SYNC\_ID\_BS\_INITIATED\_IND<sub>r</sub> is set to '0',
- 30          the mobile station shall perform the following::
- 31           o The mobile station shall store the synchronization identifier received
- 32           from the base station (SYNC\_ID<sub>s</sub> = SYNC\_ID<sub>r</sub>).
- 33           o The mobile station shall store the new service configuration
- 34           corresponding to SYNC\_ID<sub>s</sub> as specified in 2.6.4.1.2.2.5.1.
- 35          Otherwise, the mobile station shall set SYNC\_ID<sub>s</sub> to NULL.
- 36          + The mobile station shall exit this subfunction and activate the *Normal*
- 37          *Service Subfunction*.

- 1       – If this is a *Service Connect Message* with USE\_OLD\_SERV\_CONFIG<sub>r</sub> equals '11',  
2       the mobile station shall perform the following:
  - 3       + If the SYNC\_ID\_INCL field is included in this message and set to '1', the  
4       SYNC\_ID included in this message indicates the stored service configuration  
5       to be restored; otherwise, the SYNC\_ID conveyed by the mobile station  
6       indicates the stored service configuration to be restored.
    - 7       o Prior to this message, if an *Extended Channel Assignment Message* with  
8       GRANTED\_MODE set to '11' was not received and a *Service Connect*  
9       *Message*, *General Handoff Direction Message* (with service  
10       configuration), or *Universal Handoff Direction Message* (with service  
11       configuration) was not successfully received or accepted by the mobile  
12       station since entering the *Traffic Channel Substate*, the mobile station  
13       shall perform the following:
      - 14       ◇ The mobile station shall begin to use the service configuration which  
15       was stored by the mobile station when it left the *Mobile Station*  
16       *Control on the Traffic Channel State* as the current service  
17       configuration as specified in 2.6.4.1.2.2.5.2 where only the service  
18       option connection record corresponding to SR\_ID<sub>r</sub> received in the  
19       *Service Connect Message* shall be restored.
      - 20       ◇ The Call Control instance identified by NULL shall also be identified  
21       by the connection reference assigned to the restored service option  
22       connection.
      - 23       ◇ The mobile station shall begin to process Forward and Reverse  
24       Traffic Channel frames accordingly with the restored service  
25       configuration. The mobile station shall send a *Service Connect*  
26       *Completion Message* within T<sub>56m</sub> seconds after the action time.
      - 27       ◇ The mobile station shall store the synchronization identifier  
28       corresponding to the stored service configuration as SYNC\_ID<sub>s</sub>.
      - 29       ◇ The mobile station shall exit this subfunction and activate the  
30       *Normal Service Subfunction*.
    - 31       o Otherwise, the mobile station shall perform the following at the action  
32       time of this message:
      - 33       ◇ The mobile station shall restore the indicated service option  
34       connection record(s) from the stored service configuration as  
35       specified in 2.6.4.1.2.2.5.2, where the service option connection  
36       records to be restored are determined as follows:
        - 37       ➤ If SR\_ID<sub>r</sub> equals '111', the mobile station shall restore all  
38       remaining service option connection records. Otherwise, if

SR\_ID<sub>r</sub> equals '000', the mobile station shall restore service option connection records corresponding to SR\_ID<sub>s</sub> indicated by SR\_ID\_RESTORE\_BITMAP<sub>r</sub> received in this message; otherwise the mobile station shall restore the service option connection record corresponding to the SR\_ID<sub>r</sub> received in this message.

➤ Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) for each of the restored service option connections with a 'restore indication' and Layer 3 shall identify each of these Call Control instances by the value of the CON\_REF field corresponding to the restored service option connection.

➤ The mobile station shall perform the following:

– If SR\_ID<sub>r</sub> equals '111', the mobile station shall disable the enhanced origination timers corresponding to each *Enhanced Origination Message* sent with SYNC\_ID\_INCL field set to '1' and shall remove the corresponding TAG value from the list TAG\_OUTSTANDING\_LIST.

– Otherwise, the mobile station shall disable the enhanced origination timer corresponding to the *Enhanced Origination Message* with SR\_ID field set to either '111' or to the SR\_ID<sub>r</sub> value received in this message and shall remove the corresponding TAG value from the list TAG\_OUTSTANDING\_LIST.

◇ If the SR\_ID\_RELEASE\_BITMAP\_INCL field is included and is set to '1', the mobile station shall release the indicated service option connection record(s) from the current service configuration, where the service option connection records to be released are determined as follows:

➤ The mobile station shall release service option connection records corresponding to SR\_IDs indicated by SR\_ID\_RELEASE\_BITMAP<sub>r</sub> received in this message.

➤ Layer 3 shall terminate a Call Control instance for each of the released service option connections.

– Otherwise, the mobile station shall perform the following:

+ Prior to this message, if a *Service Connect Message*, *General Handoff Direction Message* (with service configuration), or *Universal Handoff Direction Message* (with service configuration) was not successfully received or accepted by the mobile station since entering the *Traffic Channel Substate*, the mobile station shall perform the following:



- 1           o The mobile station shall set the service configuration parameters (i.e.  
2           those signaled via the Service Configuration information record and the  
3           Non-Negotiable Service Configuration information record) to their default  
4           values as specified in 2.6.4.2.
- 5           + The mobile station shall process the received Service Configuration Record  
6           as specified in 2.6.4.1.12, shall process the received Non-negotiable Service  
7           Configuration Record as specified in 2.6.4.1.13 (if included), and shall begin  
8           to use the service configuration specified by the *Service Connect Message*,  
9           *General Handoff Direction Message* or *Universal Handoff Direction Message*  
10          containing a service configuration record as the current service  
11          configuration and shall begin to process Forward and Reverse Traffic  
12          Channel frames accordingly. If the action time was specified by a *Service*  
13          *Connect Message*, the mobile station shall send a *Service Connect*  
14          *Completion Message* within  $T_{56m}$  seconds after the action time.
- 15          + If SYNC\_ID\_INCL<sub>r</sub> is set to '1', the mobile station shall perform the following:
  - 16           o The mobile station shall store the synchronization identifier received  
17           from the base station (SYNC\_ID<sub>s</sub> = SYNC\_ID<sub>r</sub>).
  - 18           o The mobile station shall store the new service configuration  
19           corresponding to SYNC\_ID<sub>s</sub> as specified in 2.6.4.1.2.2.5.1.
- 20          Otherwise, the mobile station shall set SYNC\_ID<sub>s</sub> to NULL.
- 21          + If P\_REV\_IN\_USE<sub>s</sub> is greater than six, the Non-Negotiable Service  
22          Configuration information record is not included in this message, and the  
23          value of SR\_ID corresponding to the logical resource of '0000' in the  
24          LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE is NULL, the mobile station  
25          shall set this SR\_ID field to the value specified in the Service Configuration  
26          information record.
- 27          + If CC\_INFO\_INCL<sub>r</sub> equals '1', then for each of the NUM\_CALLS\_ASSIGN<sub>r</sub>  
28          occurrences of the call control parameters included in the message, the  
29          mobile station shall perform the following:
  - 30           o If RESPONSE\_IND<sub>r</sub> equals '1', and TAG<sub>r</sub> matches any of the TAG values  
31           contained in the list TAG\_OUTSTANDING\_LIST, the Layer 3 shall  
32           instantiate a Call Control instance (as specified in 2.6.10). The mobile  
33           station shall identify this Call Control instance by CON\_REF<sub>r</sub>. The  
34           mobile station shall disable the enhanced origination timer associated  
35           with TAG<sub>r</sub> and remove the TAG value specified by TAG<sub>r</sub> from the list  
36           TAG\_OUTSTANDING\_LIST.
  - 37           o If RESPONSE\_IND<sub>r</sub> equals '0', the mobile station shall store the bypass  
38           indicator (BYPASS\_ALERT\_ANSWER<sub>s</sub> = BYPASS\_ALERT\_ANSWER<sub>r</sub>) and  
39           the Layer 3 shall instantiate a Call Control instance (as specified in  
40           2.6.10). The mobile station shall identify this Call Control instance by  
41           CON\_REF<sub>r</sub>.
- 42          + The mobile station shall exit this subfunction and activate the *Normal*

1                    *Service Subfunction.*

- 2            • The mobile station shall not initiate service negotiation for a new service  
3            configuration.
- 4            • For any service option connection that is part of the current or pending service  
5            configuration, the mobile station may send a *Service Option Control Message* to  
6            invoke a service option specific function in accordance with the requirements for  
7            the associated service option.
- 8            • If SERV\_NEG<sub>S</sub> changes from enabled to disabled (see 2.6.6.2.5.1), the mobile  
9            station shall activate the *SO Negotiation Subfunction*.
- 10          • If the mobile station receives one of the following service negotiation messages, the  
11          mobile station shall process the message according to the specified requirements:
  - 12            1. *Service Connect Message*: The mobile station shall send a *Mobile Station Reject*  
13            *Order* (ORDQ = '00000010') within T<sub>56m</sub> seconds.
  - 14            2. *Service Option Control Message*: If the service option connection specified by  
15            the message is part of the current or pending service configuration, and the  
16            service option specified by the message is the same as the service option  
17            associated with the service option connection, the mobile station shall interpret  
18            the action time of the message as specified in 2.6.4.1.5, and shall process the  
19            message in accordance with the requirements for the service option; otherwise,  
20            the mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000111')  
21            within T<sub>56m</sub> seconds.
  - 22            3. *Service Request Message*: The mobile station shall send a *Mobile Station Reject*  
23            *Order* (ORDQ = '00000010') within T<sub>56m</sub> seconds.
  - 24            4. *Service Response Message*: The mobile station shall send a *Mobile Station*  
25            *Reject Order* (ORDQ = '00000010') within T<sub>56m</sub> seconds.
  - 26            5. *General Handoff Direction Message*: If the SCR\_INCLUDED field is included in  
27            this message and is set to '1':  
28            If the mobile station has not rejected this message, the mobile station shall  
29            remain in this subfunction until the action time specified in the message, and  
30            shall perform the following:
    - 31                o The mobile station shall not perform the above procedures for the previous  
32                message. But the call assignments from the previous message (if any) shall  
33                take effect at the action time of the previous message.
    - 34                o The mobile station shall perform the above procedures for this message  
35                (that is, begin to use the service configuration specified by the *General*  
36                *Handoff Direction Message*) at the action time of this message.
  - 37            6. *Universal Handoff Direction Message*: If the SCR\_INCLUDED field is included in  
38            this message and is set to '1':  
39            If the mobile station has not rejected this message, the mobile station shall

1 remain in this subfunction until the action time specified in the message, and  
2 shall perform the following:

3       o The mobile station shall not perform the above procedures for the previous  
4 message. But the call assignments from the previous message (if any) shall  
5 take effect at the action time of the previous message.

6       o The mobile station shall perform the above procedures for this message  
7 (that is, begin to use the service configuration and call assignments (if any)  
8 specified by the *Universal Handoff Direction Message*) at the action time of  
9 this message.

10       • If the mobile station receives one of the following service option negotiation  
11 messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =  
12 '00000010') within T<sub>56m</sub> seconds:

- 13       1. *Service Option Request Order*
- 14       2. *Service Option Response Order*
- 15       3. *Service Option Control Order*

#### 16 2.6.4.1.2.2.5.1 Storing a Service Configuration with SYNC\_ID

17 The mobile station shall set NUM\_SYNC\_ID\_SUPPORTED as follows:

- 18       • If the mobile station has not reported the Capability Information information record  
19 with the ADD\_NUM\_SYNC\_ID field, the mobile station shall set  
20 NUM\_SYNC\_ID\_SUPPORTED to four.
- 21       • If the mobile station has reported the Capability Information information record  
22 with the ADD\_NUM\_SYNC\_ID field, the mobile station shall set  
23 NUM\_SYNC\_ID\_SUPPORTED to five plus the value of the ADD\_NUM\_SYNC\_ID field  
24 included in the Capability Information information record.

25 The mobile station shall be capable of storing a minimum of NUM\_SYNC\_ID\_SUPPORTED  
26 service configurations along with their corresponding SYNC\_ID, SID and NID.

27 Two SYNC\_IDs are considered to be equal if and only if both the length and value of the  
28 SYNC\_IDs is equal.

29 The mobile station shall use the following procedure in the order listed below to store the  
30 current service configuration when it is associated with a SYNC\_ID:

- 31       • If the mobile station has a stored service configuration associated with SID<sub>s</sub>, NID<sub>s</sub>  
32 and SYNC\_ID<sub>s</sub>, then the mobile station shall delete the stored service configuration.

- If the number of stored service configurations is NUM\_SYNC\_ID\_SUPPORTED or more, the mobile station shall not delete the (NUM\_SYNC\_ID\_SUPPORTED - 1) most recently used<sup>30</sup> service configuration(s) and corresponding synchronization identifier(s), SID(s), NID(s).
- The mobile station shall store the current service configuration (that is, parameters conveyed by both the Service Configuration information record and the Non-negotiable Service Configuration information record) and the SYNC\_ID<sub>S</sub> corresponding to the current service configuration along with SID<sub>S</sub> and NID<sub>S</sub>.

#### 2.6.4.1.2.2.5.2 Restoring a stored Service Configuration based on SYNC\_ID

When restoring a stored service configuration based on SYNC\_ID, the mobile station shall restore only those parameters defined in the current P\_REV\_IN\_USE<sub>S</sub>.

#### 2.6.4.1.2.2.6 SO Negotiation Subfunction

The *SO Negotiation Subfunction* is only supported for mobile stations operating in Band Class 0.

Service option negotiation is not supported for P\_REV\_IN\_USE<sub>S</sub> greater than six.

Upon activation of the *SO Negotiation Subfunction*, the mobile station shall delete from the current service configuration any service option connection which does not use primary traffic on both the Forward and Reverse Traffic Channels and the Layer 3 shall terminate the corresponding Call Control instances. The Call Control instance corresponding to the service option connection which uses primary traffic, if any, shall be identified by NULL.

While the *SO Negotiation Subfunction* is active, the mobile station shall perform the following:

- If the current service configuration includes a service option connection, the mobile station shall process the received primary traffic bits in accordance with the requirements for the service option associated with the service option connection; otherwise, the mobile station shall discard the received primary traffic bits.
- If the current service configuration includes a service option connection, the mobile station shall transmit primary traffic bits in accordance with the requirements for the service option associated with the service option connection; otherwise, the mobile station shall transmit null traffic on the Reverse Fundamental Channel, if the Fundamental Channel is present or transmit power control bits on the Reverse Pilot Channel, if only the Dedicated Control Channel is present.

---

<sup>30</sup> The stored service configuration is considered used when it is stored for the first time or when it is used again during a call using the SYNC\_ID feature.

- 1       • If the current service configuration includes a service option connection, the mobile  
2       station may send a *Service Option Control Order* to invoke a service option specific  
3       function in accordance with the requirements for the service option associated with  
4       the service option connection.
- 5       • To initiate service option negotiation, the mobile station shall set SO\_REQ<sub>s</sub> to the  
6       number of the requested service option and shall send a *Service Option Request*  
7       *Order* containing the requested service option number.
- 8       • If SERV\_NEG<sub>s</sub> changes from disabled to enabled (see 2.6.6.2.5.1), the mobile  
9       station shall set SO\_REQ<sub>s</sub> to NULL and shall activate the *Normal Service*  
10      *Subfunction*.
- 11      • If the mobile station receives a *Service Option Request Order*, it shall process the  
12      order as follows:
  - 13      – If the mobile station accepts the requested service option, the mobile station  
14      shall set SO\_REQ<sub>s</sub> to NULL and shall send a *Service Option Response Order*  
15      accepting the requested service option within T<sub>58m</sub> seconds. The mobile  
16      station shall interpret the message action time of the *Service Option Request*  
17      *Order* in accordance with the requirements for the requested service option and  
18      the mobile station shall begin using the service configuration implied by the  
19      requested service option in accordance with those requirements. The implied  
20      service configuration shall include the default Forward and Reverse multiplex  
21      options and radio configurations associated with the requested service option,  
22      and shall include one service option connection for which the service option  
23      connection reference is 1, the service option is the requested service option, and  
24      the Forward and Reverse Traffic Channel types are both primary traffic. If a Call  
25      Control instance currently exists, the Layer 3 shall use this Call Control  
26      instance for a new service option connection; otherwise, the Layer 3 shall  
27      instantiate a Call Control instance (as specified in 2.6.10) and this Call Control  
28      instance shall be identified by both a connection reference with a value of 1 and  
29      a default identifier with a value of NULL.
  - 30      – If the mobile station does not accept the requested service option and has an  
31      alternative service option to request, the mobile station shall set SO\_REQ<sub>s</sub> to  
32      the alternative service option number and shall send a *Service Option Request*  
33      *Order* requesting the alternative service option within T<sub>58m</sub> seconds.
  - 34      – If the mobile station does not accept the requested service option and does not  
35      have an alternative service option to request, the mobile station shall set  
36      SO\_REQ<sub>s</sub> to NULL and shall send a *Service Option Response Order* to reject the  
37      request within T<sub>58m</sub> seconds. The mobile station shall continue to use the  
38      current service configuration.
- 39      • If the mobile station receives a *Service Option Response Order*, it shall process the  
40      order as follows:

- 1       – If the service option number specified in the order is equal to SO\_REQ<sub>s</sub>, the  
2       mobile station shall set SO\_REQ<sub>s</sub> to NULL. The mobile station shall interpret  
3       the message action time of the *Service Option Response Order* in accordance  
4       with the requirements for the specified service option, and the mobile station  
5       shall begin using the service configuration implied by the specified service  
6       option in accordance with those requirements. The implied service  
7       configuration shall include the default Forward and Reverse multiplex options  
8       and radio configurations associated with the specified service option, and shall  
9       include one service option connection for which the service option connection  
10      reference is 1, the service option is the specified service option, and the Forward  
11      and Reverse Traffic Channel types are both primary traffic. If a Call Control  
12      instance currently exists, the Layer 3 shall use this Call Control instance for a  
13      new service option connection; otherwise, the Layer 3 shall instantiate a Call  
14      Control instance (as specified in 2.6.10) and this Call Control instance shall be  
15      identified by both a connection reference with a value of 1 and a default  
16      identifier with a value of NULL.
- 17      – If the order indicates a service option rejection, the mobile station shall set  
18      SO\_REQ<sub>s</sub> to NULL. The mobile station shall continue to use the current service  
19      configuration.
- 20      – If the order does not indicate a service option rejection and the service option  
21      specified in the order is not equal to SO\_REQ<sub>s</sub>, the mobile station shall set  
22      SO\_REQ<sub>s</sub> to NULL and shall send a *Mobile Station Reject Order* (ORDQ =  
23      '00000100') within T<sub>58m</sub> seconds. The mobile station shall continue to use the  
24      current service configuration.
- 25      • If the mobile station receives a *Service Option Control Order*, it shall process the  
26      order as follows:
  - 27       – If the current service configuration includes a service option connection, the  
28       mobile station shall interpret the message action time of the *Service Option*  
29       *Control Order* in accordance with the requirements for the service option  
30       associated with the service option connection and the mobile station shall  
31       process the *Service Option Control Order* in accordance with those  
32       requirements;
  - 33       – otherwise, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =  
34       '00000001') within T<sub>56m</sub> seconds.
- 35      • If the mobile station receives one of the following service negotiation messages, the  
36      mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000010') within  
37      T<sub>56m</sub> seconds:
  - 38       1. *Service Connect Message*
  - 39       2. *Service Option Control Message*
  - 40       3. *Service Request Message*
  - 41       4. *Service Response Message*

### 1 2.6.4.1.3 Ordering of Messages

2 The Layer 2 protocol does not guarantee delivery of messages in any order. If the mobile  
3 station requires that the base station receive a set of messages in a certain order, the  
4 mobile station shall send each message in assured mode requiring confirmation of delivery  
5 and shall wait for the confirmation of delivery of each message before transmitting the next  
6 message in the set.

### 7 2.6.4.1.4 Processing the In-Traffic System Parameters Message

8 The mobile station shall store the following parameters from the *In-Traffic System*  
9 *Parameters Message*:

- 10 • System identification ( $SID_S = SID_T$ )
- 11 • Network identification ( $NID_S = NID_T$ )
- 12 • Search window size for the Active Set and the Candidate Set  
13 ( $SRCH\_WIN\_A_S = SRCH\_WIN\_A_T$ )
- 14 • Search window size for the Neighbor Set ( $SRCH\_WIN\_N_S = SRCH\_WIN\_N_T$ )
- 15 • Search window size for the Remaining Set ( $SRCH\_WIN\_R_S = SRCH\_WIN\_R_T$ )
- 16 • Pilot detection threshold ( $T\_ADD_S = T\_ADD_T$ )
- 17 • Pilot drop threshold ( $T\_DROP_S = T\_DROP_T$ )
- 18 • Active Set versus Candidate Set comparison threshold ( $T\_COMP_S = T\_COMP_T$ )
- 19 • Drop timer value ( $T\_TDROP_S = T\_TDROP_T$ )
- 20 • Drop timer range value ( $T\_TDROP\_RANGE_S = T\_TDROP\_RANGE_T$ ) if  
21  $T\_TDROP\_RANGE\_INCL_T$  is equal to '1'; otherwise, ( $T\_TDROP\_RANGE_S = '0000'$ )
- 22 • Forward Packet Data Channel supported indicator ( $FOR\_PDCH\_SUPPORTED_S =$   
23  $FOR\_PDCH\_SUPPORTED_T$ )
- 24 • Short Data Burst supported indicator ( $SDB\_SUPPORTED_S = SDB\_SUPPORTED_T$ )
- 25 • If included, permission for the mobile station to request QoS settings in the *Origination*  
26 *Message*, *Origination Continuation Message*, or *Enhanced Origination Message*  
27 ( $MOB\_QOS_S = MOB\_QOS_T$ )
- 28 • Mobile station initiated position location determination supported indicator  
29 ( $MS\_INIT\_POS\_LOC\_SUP\_IND_S = MS\_INIT\_POS\_LOC\_SUP\_IND_T$ ).
- 30 • PDCH Control Hold Mode supported indicator ( $PDCH\_CHM\_SUPPORTED_S =$   
31  $PDCH\_CHM\_SUPPORTED_T$ ) if included; otherwise, set  $PDCH\_CHM\_SUPPORTED_S$  to  
32 '0'.
- 33 • Reverse Packet Data Channel supported indicator ( $REV\_PDCH\_SUPPORTED_S =$   
34  $REV\_PDCH\_SUPPORTED_T$ ) if included; otherwise, set  $REV\_PDCH\_SUPPORTED_S$  to '0'.
- 35 • Channel configuration request allowed indicator ( $USE\_CH\_CFG\_RRM_S =$   
36  $USE\_CH\_CFG\_RRM_T$ ) if included; otherwise, set  $USE\_CH\_CFG\_RRM_S$  to '0'.

- 1 • Maximum age for retention of Neighbor Set members  
2 (NGHBR\_MAX\_AGE<sub>S</sub> = NGHBR\_MAX\_AGE<sub>T</sub>)
- 3 • Protocol revision level (P\_REV<sub>S</sub> = P\_REV<sub>T</sub>), and protocol revision level currently in use  
4 (P\_REV\_IN\_USE<sub>S</sub> = min (P\_REV<sub>S</sub>, MOB\_P\_REV<sub>P</sub> of the current band class) )
- 5 • Slope of the handoff add/drop criterion (SOFT\_SLOPE<sub>S</sub> = SOFT\_SLOPE<sub>T</sub>)
- 6 • Intercept of the handoff add criterion (ADD\_INTERCEPT<sub>S</sub> = ADD\_INTERCEPT<sub>T</sub>)
- 7 • Intercept of the handoff drop criterion (DROP\_INTERCEPT<sub>S</sub> = DROP\_INTERCEPT<sub>T</sub>)
- 8 • If included, neighbor pilot strength measurement threshold offset (T\_MULCHAN<sub>S</sub> =  
9 T\_MULCHAN<sub>T</sub>)
- 10 • If included, Reverse Supplemental Code Channel beginning of transmission preamble  
11 length (BEGIN\_PREAMBLE<sub>S</sub> = BEGIN\_PREAMBLE<sub>T</sub>)
- 12 • If included, Reverse Supplemental Code Channel discontinuous transmission  
13 resumption preamble length (RESUME\_PREAMBLE<sub>S</sub> = RESUME\_PREAMBLE<sub>T</sub>)
- 14 • If included, Slotted Timer (T\_SLOTTED<sub>S</sub> = T\_SLOTTED<sub>T</sub>)
- 15 • If the mobile station supports packet data service options, the mobile station shall  
16 store the packet data services zone identifier (PACKET\_ZONE\_ID<sub>S</sub> =  
17 PACKET\_ZONE\_ID<sub>T</sub>).
- 18 • If the mobile station supports packet data service options and the PZ\_HYST\_ENABLED  
19 field is included, the mobile station shall store the packet zone hysteresis enabled  
20 indicator (PZ\_HYST\_ENABLED<sub>S</sub> = PZ\_HYST\_ENABLED<sub>T</sub>); otherwise, the mobile station  
21 shall set PZ\_HYST\_ENABLED<sub>S</sub> to '1'.
- 22 • If the PZ\_HYST\_LIST\_LEN field is included, the mobile station shall store the packet  
23 zone hysteresis list length (PZ\_HYST\_LIST\_LEN<sub>S</sub> = PZ\_HYST\_LIST\_LEN<sub>T</sub>); otherwise,  
24 the mobile station shall set PZ\_HYST\_LIST\_LEN<sub>S</sub> to 4.
- 25 • If the PZ\_HYST\_ACT\_TIMER field is included, the mobile station shall store the packet  
26 zone hysteresis activation timer (PZ\_HYST\_ACT\_TIMER<sub>S</sub> = PZ\_HYST\_ACT\_TIMER<sub>T</sub>);  
27 otherwise, the mobile station shall set PZ\_HYST\_ACT\_TIMER<sub>S</sub> to 30 seconds.
- 28 • If the PZ\_HYST\_TIMER\_MUL field and the PZ\_HYST\_TIMER\_EXP field are included, the  
29 mobile station shall store the packet zone hysteresis timer (PZ\_HYST\_TIMER<sub>S</sub> =  
30 PZ\_HYST\_TIMER\_MUL<sub>T</sub> × 8 ^ PZ\_HYST\_TIMER\_EXP<sub>T</sub>); otherwise, the mobile station  
31 shall set PZ\_HYST\_TIMER<sub>S</sub> to 60 seconds.
- 32 • If ENC\_SUPPORTED<sub>T</sub> is equal to '1', the mobile station shall store:
  - 33 – Signaling encryption supported indicator (SIG\_ENCRYPT\_SUP<sub>S</sub> =  
34 SIG\_ENCRYPT\_SUP<sub>T</sub>)
  - 35 – User information encryption supported indicator (UI\_ENCRYPT\_SUP<sub>S</sub> =  
36 UI\_ENCRYPT\_SUP<sub>T</sub>)
- 37 • Concurrent services supported indicator (CS\_SUPPORTED<sub>S</sub> = CS\_SUPPORTED<sub>T</sub>).



- 1 • Maximum number of additional service reference identifiers allowed in origination  
2 (MAX\_ADD\_SERV\_INSTANCES<sub>s</sub> = MAX\_ADD\_SERV\_INSTANCES<sub>r</sub>), if included; otherwise,  
3 the mobile station shall set MAX\_ADD\_SERV\_INSTANCES<sub>s</sub> to 0.
  - 4 • Control Hold Mode supported indicator (CHM\_SUPPORTED<sub>s</sub> = CHM\_SUPPORTED<sub>r</sub>) if  
5 included; otherwise, the mobile station shall perform the following:
    - 6 - If P\_REV\_IN\_USE<sub>s</sub> is less than six, set CHM\_SUPPORTED<sub>s</sub> to '0'.
    - 7 - Otherwise, set CHM\_SUPPORTED<sub>s</sub> to '1'.
  - 8 • CDMA off time report supported indicator  
9 (CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>s</sub> = CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>r</sub>).
  - 10 • If CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>r</sub> is equal to '1', the mobile station shall store CDMA  
11 off time report threshold (CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>s</sub> =  
12 CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>r</sub> in units specified by  
13 CDMA\_OFF\_TIME\_REP\_UNIT<sub>r</sub>).
  - 14 • The mobile station shall set BCMC\_ON\_TRAFFIC\_SUP<sub>s</sub> to BCMC\_ON\_TRAFFIC\_SUP<sub>r</sub>. If  
15 BCMC\_ON\_TRAFFIC\_SUP<sub>r</sub> is set to '1', the mobile station shall store  
16 AUTO\_REQ\_TRAF\_ALLOWED\_IND<sub>s</sub> = AUTO\_REQ\_TRAF\_ALLOWED\_IND<sub>r</sub>.
- 17 The mobile station shall determine its roaming status (see 2.6.5.3). The mobile station  
18 should indicate to the user whether the mobile station is roaming.

#### 19 2.6.4.1.5 Message Action Times

20 A Forward Traffic Channel message without a USE\_TIME field or with a USE\_TIME field set  
21 to '0' has an implicit action time. A message that has its USE\_TIME field set to '1' has an  
22 explicit action time that is specified in the ACTION\_TIME field of the message.

23 A message with an explicit action time is called a pending message.

24 Unless otherwise specified, a message having an implicit action time shall take effect no  
25 later than the first 80 ms boundary (relative to System Time plus FRAME\_OFFSET<sub>s</sub> × 1.25  
26 ms) occurring at least 80 ms after the end of the frame containing the last bit of the  
27 message. A message with an explicit action time, except for a *Power Up Function Message*,  
28 shall take effect when System Time minus FRAME\_OFFSET<sub>s</sub> × 1.25 ms (in 80 ms units)  
29 modulo 64 becomes equal to the message's ACTION\_TIME field. A *Power Up Function*  
30 *Message* shall take effect ACTION\_TIME\_FRAME frames after the time when System Time  
31 minus FRAME\_OFFSET<sub>s</sub> × 1.25 ms (in 80 ms units) modulo 64 becomes equal to the  
32 message's ACTION\_TIME field. The difference in time between ACTION\_TIME and the end  
33 of the frame containing the last bit of the message shall be at least 80 ms.

34 The mobile station shall support two pending messages at any given time, not including  
35 pending *Service Option Control Orders* or *Service Option Control Messages*. The number of  
36 pending *Service Option Control Orders* or *Service Option Control Messages* that the mobile  
37 station is required to support is specific to the service option (see the relevant service  
38 option description). In addition, the mobile station shall support one pending *Power Up*  
39 *Function Message*.

#### 2.6.4.1.6 Long Code Transition Request Processing

The mobile station performs these procedures upon receiving a *Long Code Transition Request Order*.

If the *Long Code Transition Request Order* requests a transition to the private long code, and the mobile station is able to generate the private long code (see 2.3.12.3), and the mobile station accepts the request, the mobile station shall send a *Long Code Transition Response Order* (ORDQ = '00000011') within  $T_{56m}$  seconds. The mobile station shall use the private long code on both the Forward Traffic Channel and the Reverse Traffic Channel. The mobile station shall store the public long code mask and  $PLCM\_TYPE_S$  currently in use and begin using the private long code at the explicit action time (see 2.6.4.1.5) specified in the message. At the action time of the message, the mobile station should indicate to the user that the voice privacy mode is active. If the *Long Code Transition Request Order* requests a private long code transition, and the mobile station is not able to generate the private long code or the mobile station does not accept the request, the mobile station shall send a *Long Code Transition Response Order* (ORDQ = '00000010') within  $T_{56m}$  seconds.

If the *Long Code Transition Request Order* requests a transition to the public long code and the mobile station accepts the request, the mobile station shall send a *Long Code Transition Response Order* (ORDQ = '00000010') within  $T_{56m}$  seconds. The mobile station shall use the public long code on both the Forward Traffic Channel and the Reverse Traffic Channel. The mobile station shall begin using the public long code that is stored previously, derived from  $PLCM\_TYPE_S$  as specified in 2.3.6, at the explicit action time (see 2.6.4.1.5) specified in the message. At the action time of the message, the mobile station should indicate to the user that the voice privacy mode is inactive. If the *Long Code Transition Request Order* requests a public long code transition, and the mobile station does not accept the request, the mobile station shall send a *Long Code Transition Response Order* (ORDQ = '00000011') within  $T_{56m}$  seconds.

#### 2.6.4.1.7 Power Up Function (PUF)

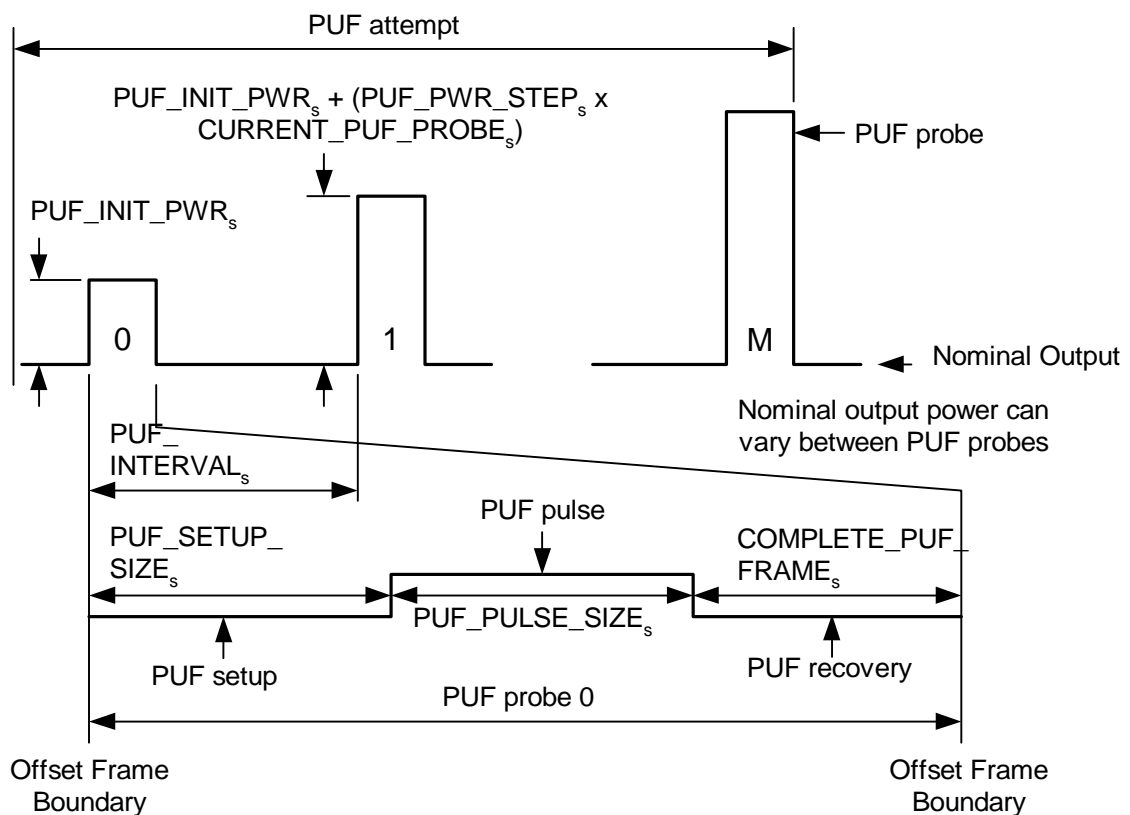
Figure 2.6.4.1.7-1 illustrates the general structure of a PUF attempt. A PUF pulse is the interval during which the mobile station transmits at the specified power level while executing the Power Up Function.

A PUF probe is one or more consecutive Traffic Channel frames. A PUF probe consists of three parts: PUF setup, PUF pulse, and PUF recovery.  $PUF\_SETUP\_SIZE$  is the duration of the PUF setup part, in power control groups.  $PUF\_PULSE\_SIZE$  is the duration of the PUF pulse, in power control groups. The PUF recovery period occupies the remainder of the last frame of the PUF probe.

A PUF attempt is a sequence of PUF probes sent by the mobile station in response to a *Power Up Function Message*. A PUF attempt begins at an offset frame boundary within 80 ms of the  $ACTION\_TIME$  specified in the *Power Up Function Message*. A PUF attempt can be terminated in one of four ways:

- The mobile station receives a *Power Up Function Completion Message*.

- The mobile station has transmitted the maximum number of PUF probes specified in the *Power Up Function Message*.
- The mobile station has transmitted the maximum number of probes allowed at its maximum output power.
- The mobile station receives a new *Power Up Function Message*.



**Figure 2.6.4.1.7-1. Structure of PUF Attempt**

#### 2.6.4.1.7.1 Processing the Power Up Function Message

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (message requires a capability that is not supported by the mobile station) if any of the following conditions are detected:

- $PUF\_FREQ\_INCL_r$  is set to '1' and  $PUF\_BAND\_CLASS_r$  is not supported by the mobile station.
- $PUF\_FREQ\_INCL_r$  is set to '1' and the mobile station is unable to re-tune to the PUF Target Frequency during  $(PUF\_SETUP\_SIZE_r + 1)$  power control groups.
- $MOB\_P\_REV_p$  is not equal to five and the mobile station does not support the Power Up Function.

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001100' (invalid Frequency Assignment), if the Frequency Assignment specified in the message is the same as the Serving Frequency ( $\text{PUF\_FREQ\_INCL}_r$  is equal to '1',  $\text{PUF\_BAND\_CLASS}_r$  is equal to  $\text{CDMABAND}_s$  and  $\text{PUF\_CDMA\_FREQ}_r$  is equal to  $\text{CDMACH}_s$ ).

If the mobile station is processing a PUF probe, the mobile station shall wait for the PUF probe to complete. It shall then terminate the current PUF attempt. The mobile station shall store the following parameters:

- Maximum number of PUF probes transmitted at full power level ( $\text{MAX\_PWR\_PUF}_s = \text{MAX\_PWR\_PUF}_r + 1$ )
- Total number of PUF probes ( $\text{TOTAL\_PUF\_PROBES}_s = \text{TOTAL\_PUF\_PROBES}_r + 1$ )
- PUF interval ( $\text{PUF\_INTERVAL}_s = \text{PUF\_INTERVAL}_r$ )
- Number of PUF setup power control groups ( $\text{PUF\_SETUP\_SIZE}_s = \text{PUF\_SETUP\_SIZE}_r + 1$ )
- Number of PUF pulse power control groups ( $\text{PUF\_PULSE\_SIZE}_s = \text{PUF\_PULSE\_SIZE}_r + 1$ )
- Power increase of initial PUF pulse ( $\text{PUF\_INIT\_PWR}_s = \text{PUF\_INIT\_PWR}_r$ )
- Power increase for each successive PUF pulse ( $\text{PUF\_PWR\_STEP}_s = \text{PUF\_PWR\_STEP}_r$ )
- Frequency included indicator ( $\text{PUF\_FREQ\_INCL}_s = \text{PUF\_FREQ\_INCL}_r$ )

If  $\text{PUF\_FREQ\_INCL}_s$  equals '1', the mobile station shall store the following:

- PUF probe Target Frequency CDMA Channel number ( $\text{PUF\_TF\_CDMACH}_s = \text{PUF\_CDMA\_FREQ}_r$ )
- PUF probe Target Frequency CDMA band class ( $\text{PUF\_TF\_CDMABAND}_s = \text{PUF\_BAND\_CLASS}_r$ )

The mobile station shall set  $\text{CURRENT\_PUF\_PROBE}_s$  equal to 0.

The mobile station shall then begin the PUF attempt at the time specified in 2.6.4.1.7.2.

#### 2.6.4.1.7.2 Power Up Function Procedures

The mobile station shall process the initial PUF probe beginning at the start of the frame which starts  $\text{ACTION\_TIME\_FRAME}_r \times 20 \text{ ms} + \text{FRAME\_OFFSET}_s \times 1.25 \text{ ms}$  after the System Time specified by  $\text{ACTION\_TIME}_r$ . The mobile station shall process additional PUF probes beginning at intervals of  $\text{PUF\_INTERVAL}_s$  frames from the beginning of the initial PUF probe.

The mobile station shall transmit the PUF probes as described in 2.6.4.1.7.2.1 and 2.6.4.1.7.2.2.

##### 2.6.4.1.7.2.1 PUF Probe On Serving Frequency

The mobile station shall process each PUF probe as follows:

- 1 • The mobile station shall use closed loop power control procedures as specified in
- 2 [2].
- 3 • The mobile station shall use the gated output procedures specified in [2].
- 4 • The mobile station shall control its mean output power as specified in [2].
- 5 • The mobile station shall monitor its output power during the PUF pulse, and
- 6 should monitor its output power at least once during each power control group of
- 7 the PUF pulse. If the mobile station detects that the transmit power level specified
- 8 in [2] is equal to or greater than the maximum power output of the mobile station
- 9 at any time during a PUF pulse, the mobile station shall decrement
- 10  $MAX\_PWR\_PUF_S$  by one for that PUF pulse.
- 11 • The mobile station shall transmit the traffic channel preamble for the duration of
- 12 the PUF probe on the Reverse Fundamental Channel.

13 After the processing of each PUF probe, the mobile station shall increment  
 14  $CURRENT\_PUF\_PROBE_S$  by 1. If  $MAX\_PWR\_PUF_S$  is equal to 0, the mobile station shall  
 15 terminate the PUF attempt. If  $CURRENT\_PUF\_PROBE_S$  equal to  $TOTAL\_PUF\_PROBE_S$ , the  
 16 mobile station shall terminate the PUF attempt.

#### 17 2.6.4.1.7.2.2 PUF Probe On PUF Target Frequency

18 The mobile station shall process each PUF probe as follows:

- 19 • The mobile station shall use closed loop power control procedures as specified in
- 20 [2].
- 21 • The mobile station shall use the gated output procedures specified in [2].
- 22 • The mobile station shall control its mean output power as specified in [2].
- 23 • The mobile station shall store the following Serving Frequency parameters from its
- 24 current configuration:
  - 25 – CDMA Band Class ( $PUF\_SF\_CDMABAND_S = CDMABAND_S$ )
  - 26 – Frequency assignment ( $PUF\_SF\_CDMACH_S = CDMACH_S$ )
- 27 • The mobile station shall monitor its output power during the PUF pulse, and
- 28 should monitor its output power at least once during each power control group of
- 29 PUF pulse. If the mobile station detects that the transmit power level specified in
- 30 [2] is equal to or greater than the maximum power output of the mobile station at
- 31 any time during a PUF pulse, the mobile station shall decrement the
- 32  $MAX\_PWR\_PUF_S$  by one for that PUF pulse.
- 33 • At the beginning of the PUF probe, the mobile station shall disable its transmitter,
- 34 stop processing the Forward Supplemental Code Channel (if any), or the Forward
- 35 Supplemental Channel (if any), disable all corrections to the mobile station time
- 36 reference (see [2]), tune to the CDMA channel specified by  $PUF\_TF\_CDMACH_S$ , and
- 37  $PUF\_TF\_CDMABAND_S$  and re-enable its transmitter.
- 38 • The mobile station shall transmit the traffic channel preamble on the Reverse
- 39 Fundamental Channel during the PUF pulse at  $PUF\_TX\_PWR_S$ .

- 1 • The mobile station should disable its transmitter immediately after the end of the
- 2 PUF pulse, and shall disable its transmitter before the end of the first power control
- 3 group after the PUF pulse. It shall then tune to its assigned CDMA channel as
- 4 given by  $CDMACH_S$  and  $CDMABAND_S$ .
- 5 • If the interval between the time that the mobile station tunes to the PUF Target
- 6 Frequency and the time that it re-tunes to the Serving Frequency is equal to or
- 7 greater than  $(N_{2m} \times 0.02)$  seconds, the mobile station shall wait to receive a period
- 8 of  $(N_{3m} \times 20)$  ms with sufficient signal quality on the physical channel
- 9 corresponding to  $FPC\_PRI\_CHAN_S$ .
- 10 • The mobile station shall then re-enable its transmitter and re-enable any
- 11 adjustments to the mobile station time reference.
- 12 • If the Forward Supplemental Code Channel assignment has not expired while the
- 13 mobile station has tuned to the PUF Target Frequency, then the mobile station
- 14 shall resume processing the Forward Supplemental Code Channels after re-tuning
- 15 to the Serving Frequency.
- 16 • If the Forward Supplemental Channel assignment has not expired while the mobile
- 17 station has tuned to the PUF Target Frequency, then the mobile station shall
- 18 resume processing the Forward Supplemental Channels after re-tuning to the
- 19 Serving Frequency.
- 20 • If the Reverse Supplemental Code Channel assignment has not expired while the
- 21 mobile station has tuned to the PUF Target Frequency, then the mobile station may
- 22 resume transmitting the Reverse Supplemental Code Channels after re-tuning to
- 23 the Serving Frequency.
- 24 • If the Reverse Supplemental Channel assignment has not expired while the mobile
- 25 station has tuned to the PUF Target Frequency, then the mobile station may
- 26 resume transmitting the Reverse Supplemental Code Channels after re-tuning to
- 27 the Serving Frequency.

28 After the processing of each PUF probe, the mobile station shall increment  
 29  $CURRENT\_PUF\_PROBE_S$  by one. If  $MAX\_PWR\_PUF_S$  is equal to 0, the mobile station shall  
 30 terminate the PUF attempt. If  $CURRENT\_PUF\_PROBE_S$  is equal to  $TOTAL\_PUF\_PROBE_S$ ,  
 31 the mobile station shall terminate the PUF attempt.

#### 32 2.6.4.1.7.3 Processing the Power Up Function Completion Message

33 The mobile station shall terminate any PUF attempt no later than the completion of the  
 34 current probe in progress and shall discard any pending *Power Up Function Message*. If  
 35  $LOC\_IND_R$  is equal to '1', the mobile station may store the following parameters:

- 36 • Mobile Station Latitude ( $MS\_LAT_S = MS\_LAT_R$ )
- 37 • Mobile Station Longitude ( $MS\_LONG_S = MS\_LONG_R$ )
- 38 • Time stamp ( $MS\_LOC\_TSTAMP_S = MS\_LOC\_TSTAMP_R$ )

#### 2.6.4.1.8 Forward Traffic Channel Supervision

When in the *Mobile Station Control on the Traffic Channel State*, the mobile station shall continuously monitor the Forward Channel, except:

- During a PUF probe in which it transmits on a PUF target frequency (see 2.6.4.1.7),
- During a search of pilots on a CDMA Candidate Frequency (see 2.6.6.2.8.3),

When a Forward Common Power Control Channel is not assigned, the mobile station shall perform the procedure described in 2.6.4.1.8.1. When a Forward Forward Common Power Control Channel is assigned, the mobile station shall perform the procedure described in 2.6.4.1.8.2.

##### 2.6.4.1.8.1 Forward Traffic Channel Supervision when a Forward Common Power Control Channel is not assigned

The mobile station shall monitor the physical channel corresponding to FPC\_PRI\_CHAN<sub>S</sub> as follows:

- If RESQ\_ENABLED<sub>S</sub> is equal to '1' and FPC\_PRI\_CHAN<sub>S</sub> is equal to '0', the mobile station shall perform the following:
  - While the mobile station's transmitter is enabled:
    - + If the rescue attempt timer is not enabled and the mobile station detects a 'forward link error' trigger as specified in 2.6.4.1.8.1.1, then the mobile station shall perform the following:
      - o disable its transmitter, and
      - o enable the rescue delay timer with an initial value of (RESQ\_DELAY\_TIME<sub>S</sub> × 80) ms.
    - + If the rescue attempt timer is enabled and the mobile station detects a 'good forward link' trigger as specified in 2.6.4.1.8.1.1, then the mobile station shall disable the rescue attempt timer, and shall resume Forward and Reverse Traffic Channel power control as specified in 2.6.4.1.1 and 2.6.6.2.7.2, respectively.
  - While the mobile station's transmitter is disabled:
    - + If the mobile station did not disable its transmitter due to an acknowledgment failure and the mobile station detects a 'good forward link' trigger as specified in 2.6.4.1.8.1.1, then the mobile station should re-enable its transmitter, and shall also perform the following:
      - o disable the rescue delay timer or rescue allowed timer, if either is enabled.
      - o send a *Call Rescue Cancel Order* in assured mode, if the mobile station is not otherwise required to send an *Extended Pilot Strength Measurement Message*.
- Otherwise, the mobile station shall perform the following:

- 1           – If the mobile station detects a ‘forward link error’ trigger as specified in  
2           2.6.4.1.8.1.1, it shall disable its transmitter.
- 3           – Thereafter, if the mobile station detects a ‘good forward link’ trigger as specified  
4           in 2.6.4.1.8.1.1, then the mobile station should re-enable its transmitter.

5 The mobile station shall establish a Forward Traffic Channel fade timer. The timer shall be  
6 enabled when the mobile station first enables its transmitter when in the *Traffic Channel*  
7 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*. The fade  
8 timer shall be reset for  $T_{5m}$  seconds whenever the mobile station detects a ‘good forward  
9 link’ trigger as specified in 2.6.4.1.8.1.1. The mobile station shall disable the fade timer  
10 when it tunes to a PUF target frequency, and shall re-enable the fade timer at the end of  
11 the PUF probe. If the timer expires, the mobile station shall disable its transmitter and  
12 declare a loss of the Forward Traffic Channel. If  $CRRM\_MSG\_IND_S$  equals ‘1’ and if no  
13 other access channel message is transmitted after loss of the Forward Traffic Channel, the  
14 mobile station may enter the *Update Overhead Information Substate* of the *System Access*  
15 *State* (see 2.6.3) with an origination indication, within 20 seconds of the loss of the  
16 Forward Traffic Channel, to transmit the *Call Recovery Request Message*.

17 The mobile station also enables, disables, and resets the fade timer as described in  
18 2.6.6.2.8 and 2.6.6.2.10 when it performs a hard handoff or a periodic search.

#### 19 2.6.4.1.8.1.1 Triggers

20 The mobile station shall detect ‘good forward link’ trigger as specified below:

- 21       • If RC11 or RC12 is used on Forward Link and blanking is enabled (i.e.  
22       FOR\_FCH\_BLANKING\_DUTYCYCLE is set to value other than ‘000’), then the  
23       mobile station shall detect ‘good forward link’ trigger when any one of the following  
24       condition is met:
  - 25       – Mobile station receives a period of  $(N_{3m} \times 20)$  ms with sufficient signal quality  
26       on the physical channel corresponding to  $FPC\_PRI\_CHAN_S$ .
  - 27       – Mobile station receives a  $N_{3m}$  consecutive guaranteed transmission frames  
28       with sufficient signal quality on the physical channel corresponding to  
29        $FPC\_PRI\_CHAN_S$ .
- 30       • Otherwise, the mobile station shall detect ‘good forward link’ trigger when it  
31       receives a period of  $(N_{3m} \times 20)$  ms with sufficient signal quality on the physical  
32       channel corresponding to  $FPC\_PRI\_CHAN_S$ .

33 The mobile station shall detect ‘forward link error’ trigger as specified below:

- 34       • If RC11 or RC12 is used on Forward Link and blanking is enabled (i.e.  
35       FOR\_FCH\_BLANKING\_DUTYCYCLE is set to value other than ‘000’), then the  
36       mobile station shall detect ‘forward link error’ trigger when it receives  
37       FOR\_N2M\_IND\_S consecutive guaranteed transmission frames with insufficient  
38       signal quality on the physical channel corresponding to  $FPC\_PRI\_CHAN_S$ .



- 1 • Otherwise, the mobile station shall detect 'forward link error' trigger when it  
2 receives a period of  $(N_{2m} \times 20)$  ms with insufficient signal quality on the physical  
3 channel corresponding to FPC\_PRI\_CHAN<sub>S</sub>.

#### 4 2.6.4.1.8.2 Forward Traffic Channel Supervision when a Forward Common Power Control 5 Channel is assigned

6 The mobile station shall monitor the Forward Common Power Control Channel as follows:

- 7 • If the mobile station receives a period of  $(N_{16m} \times 1.25)$  ms with insufficient signal  
8 quality on the Forward Common Power Control Subchannels assigned to this  
9 mobile, it shall disable its transmitter.
- 10 • Thereafter, if the mobile station receives a period of  $(N_{17m} \times 1.25)$  ms with  
11 sufficient signal quality on the Forward Common Power Control Subchannels  
12 assigned to this mobile, then the mobile station should re-enable its transmitter.

13 The mobile station shall establish a Forward Traffic Channel fade timer. The timer shall be  
14 enabled when the mobile station first enables its transmitter when in the *Traffic Channel*  
15 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*. The fade  
16 timer shall be reset for  $T_{5m}$  seconds whenever the mobile station receives a period of  
17  $(N_{17m} \times 1.25)$  ms with sufficient signal quality on the Forward Common Power Control  
18 Subchannels assigned to this mobile. If the timer expires, the mobile station shall disable  
19 its transmitter and declare a loss of the Forward Traffic Channel. If CRRM\_MSG\_IND<sub>S</sub>  
20 equals '1' and if no other access channel message is transmitted after loss of the Forward  
21 Traffic Channel, the mobile station may enter the *Update Overhead Information Substate* of  
22 the *System Access State* (see 2.6.3) with an origination indication, within 20 seconds of the  
23 loss of the Forward Traffic Channel, to transmit the *Call Recovery Request Message*.

24 The mobile station also enables, disables, and resets the fade timer as described in  
25 2.6.6.2.7, 2.6.6.2.8 and 2.6.6.2.10 when it performs a soft handoff, a hard handoff or a  
26 periodic search.

27 Additionally, the mobile station shall perform a ping as follows:

- 28 • The mobile station shall establish a Forward Traffic Channel ping timer as follows:  
29 – When the mobile station first enables its transmitter in the *Traffic Channel*  
30 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*,  
31 the mobile station shall enable the Forward Traffic Channel ping timer and set  
32 it to  $T_{78m}$  seconds.
- 33 – When the mobile station receives a message that assigns a F-CPCCH, the  
34 mobile station shall enable the Forward Traffic Channel ping timer and set it to  
35  $T_{78m}$  seconds.
- 36 • When the mobile station receives a Physical Layer SDU destined for this mobile  
37 station on the F-PDCH or on the shared F-DCCH (See [3]), the Forward Traffic  
38 Channel ping timer shall be reset for  $T_{78m}$  seconds.

- When the Forward Traffic Channel ping timer expires, the mobile station shall send a *L2 Acknowledgment Order* in assured mode if there is no other Layer 3 message to be sent in assured mode available for transmission.

#### 2.6.4.1.9 Processing the Extended Release Message and the Extended Release Mini Message

- Upon receiving the *Extended Release Message* or the *Extended Release Mini Message*, the mobile station shall process the message as follows:
  - If USE\_EXT\_CH\_IND<sub>R</sub> is equal to '1', then the mobile station shall set USE\_EXT\_CH\_IND<sub>S</sub> to USE\_EXT\_CH\_IND<sub>R</sub>; otherwise, the mobile station shall set USE\_EXT\_CH\_IND<sub>S</sub> to '0'.
  - If the mobile station determines that the configuration specified by CH\_IND<sub>R</sub> or EXT\_CH\_IND<sub>R</sub> is not valid (see Tables 3.7.3.3.2.34-1, and 3.7.3.3.2.34-3), the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000111' (message can not be handled by the current mobile station configuration) and the mobile station shall not perform the remaining procedures in this section.
  - If USE\_EXT\_CH\_IND<sub>S</sub> is equal to '0' and CH\_IND<sub>R</sub> is equal to '111' or the physical channels indicated by the two least significant bits of CH\_IND<sub>R</sub> includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, the Layer 3 shall send a "release indication" to all Call Control instances and shall perform the following:
    - + The mobile station shall set TBR\_RAND\_SUPPR\_ENABLE<sub>S</sub> = TBR\_RAND\_SUPPR\_ENABLE<sub>R</sub>.
    - + The mobile station shall set TBR\_RAND\_WINDOW<sub>S</sub> to TBR\_RAND\_WINDOW<sub>R</sub>.
    - + Enter the *Release Substate* with a base station extended release indication if the message is the *Extended Release Message*.
    - + Enter the *Release Substate* with a base station extended release mini message indication if the message is the *Extended Release Mini Message*.
  - Otherwise, the mobile station shall perform the following:
    - + If the received message is the *Extended Release Message*, the mobile station shall send an *Extended Release Response Message* to the base station. If the received message is the *Extended Release Mini Message*, the mobile station shall send an *Extended Release Response Mini Message* to the base station.
    - + If USE\_EXT\_CH\_IND<sub>S</sub> is equal to '1', then the mobile station shall perform the following:
      - o If SWITCHING\_PARMs\_INCL<sub>R</sub> is included and equal to '1', the mobile station shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1, and

1 NUM\_SOFTEN\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to  
 2 NUM\_SOFTEN\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1.

- 3       o If EXT\_CH\_IND<sub>R</sub> indicates that F-DCCH is assigned and F-FCH is not  
 4 assigned, the mobile station shall set FPC\_PRI\_CHAN<sub>S</sub> to '1' at the  
 5 action time of the message.
- 6       o If EXT\_CH\_IND<sub>R</sub> indicates that F-FCH is assigned and F-DCCH is not  
 7 assigned, the mobile station shall set FPC\_PRI\_CHAN<sub>S</sub> to '0' at the  
 8 action time of the message.
- 9       o If EXT\_CH\_IND<sub>R</sub> indicates that an R-FCH is to be released, then the  
 10 mobile station shall stop transmitting on R-FCH at the action time  
 11 specified by the message. If EXT\_CH\_IND<sub>R</sub> indicates that an F-FCH is to  
 12 be released, then the mobile station shall stop processing F-FCH at the  
 13 action time specified by the message.
- 14       o If EXT\_CH\_IND<sub>R</sub> indicates that an R-DCCH is to be released, then the  
 15 mobile station shall stop transmitting on R-DCCH at the action time  
 16 specified by the message. If EXT\_CH\_IND<sub>R</sub> indicates that an F-DCCH is  
 17 to be released, then the mobile station shall stop processing F-DCCH at  
 18 the action time specified by the message.
- 19       o If EXT\_CH\_IND<sub>R</sub> indicates that an R-PDCH is to be released, then the  
 20 mobile station shall stop transmitting on R-PDCH at the action time  
 21 specified by the message.
- 22       o If GATING\_RATE\_INCL<sub>R</sub> is equal to '1', the mobile station shall set  
 23 PILOT\_GATING\_RATE<sub>S</sub> = PILOT\_GATING\_RATE<sub>R</sub> at the action time of the  
 24 message.
- 25       o If PDCH\_CONTROL\_HOLD<sub>R</sub> is equal to '1', the mobile station shall  
 26 perform the following:
  - 27           ◇ Set PILOT\_GATING\_USE\_RATE to '1' and start the reverse pilot  
 28 gating and R-CQICH gating at PILOT\_GATING\_RATE<sub>S</sub> at the action  
 29 time of the message.
  - 30           ◇ The mobile station shall cancel the forward and reverse  
 31 supplemental channel assignment, if any, at the action time of the  
 32 message.
- 33       o The mobile station shall set EXT\_CH\_IND<sub>S</sub> to EXT\_CH\_IND<sub>R</sub>.
- 34       + Otherwise (USE\_EXT\_CH\_IND<sub>S</sub> is equal to '0'), the mobile station shall  
 35 perform the following:
  - 36           o The mobile station shall update CH\_IND<sub>S</sub> as follows: If the least

- 1                   significant bit of CH\_IND<sub>r</sub> equals '1', the mobile station shall set  
 2                   CH\_IND<sub>s</sub> = '10'. If the second most significant bit of CH\_IND<sub>r</sub> equals '1',  
 3                   the mobile station shall set CH\_IND<sub>s</sub> = '01'.
- 4                   o If CH\_IND<sub>r</sub> is equal to '001' or '101', the mobile station shall set  
 5                   FPC\_PRI\_CHAN<sub>s</sub> to '1' at the action time of the message.
- 6                   o If CH\_IND<sub>r</sub> is equal to '010', the mobile station shall set FPC\_PRI\_CHAN<sub>s</sub>  
 7                   to '0' at the action time of the message.
- 8                   o If the least significant bit of CH\_IND<sub>r</sub> equals '1', then the mobile station  
 9                   shall stop transmitting on R-FCH and stop processing F-FCH, if  
 10                  assigned, at the action time specified by the message.
- 11                  o If the second most significant bit of CH\_IND<sub>r</sub> equals '1', then the mobile  
 12                  station shall stop transmitting on R-DCCH and stop processing F-  
 13                  DCCH, if assigned, at the action time specified by the message.
- 14                  o If GATING\_RATE\_INCL<sub>r</sub> equals '1', the mobile station shall set  
 15                  PILOT\_GATING\_RATE<sub>s</sub> = PILOT\_GATING\_RATE<sub>r</sub> at the action time of the  
 16                  message.
- 17                  o If the most significant bit of CH\_IND<sub>r</sub> equals '1', the mobile station shall  
 18                  set PILOT\_GATING\_USE\_RATE to '1'. The mobile station shall start the  
 19                  reverse pilot gating at PILOT\_GATING\_RATE<sub>s</sub> at the action time of the  
 20                  message. Furthermore, if the least significant bit of CH\_IND<sub>r</sub> equals '1'  
 21                  (that is, the Fundamental Channel is being released), the mobile station  
 22                  shall store the configuration used for the Fundamental Channel. The  
 23                  mobile station shall cancel the forward and reverse supplemental  
 24                  channel assignment, if any, at the action time of the message.
- 25                  o If a Forward Packet Data Channel is assigned, the mobile station shall  
 26                  perform the following:
- 27                    ◇ Stop processing the Forward Packet Data Channel at the action time  
 28                    specified by the message.
- 29                    ◇ If a Reverse Packet Data Channel is assigned, the mobile station  
 30                    shall stop transmitting on the Reverse Packet Data Channel at the  
 31                    action time specified by the message.
- 32                    ◇ If the two least significant bits of CH\_IND<sub>r</sub> is equal to '00', the mobile  
 33                    station shall perform the following:
- 34                      – If EXT\_CH\_IND<sub>s</sub> signals the allocation of F-FCH and R-FCH, and  
 35                      does not signal allocation of F-DCCH nor R-DCCH, the mobile  
 36                      station shall set CH\_IND<sub>s</sub> = '01' at the action time specified by  
 37                      the message.

- 1                   – If EXT\_CH\_IND<sub>S</sub> signals the allocation of F-DCCH and R-DCCH,  
2                   and does not signal allocation of F-FCH nor R-FCH, the mobile  
3                   station shall set CH\_IND<sub>S</sub> = '10' at the action time specified by  
4                   the message.
- 5                   – If EXT\_CH\_IND<sub>S</sub> signals the allocation of F-FCH, R-FCH, F-DCCH  
6                   and R-DCCH, the mobile station shall set CH\_IND<sub>S</sub> = '11' at the  
7                   action time specified by the message.

#### 8   2.6.4.1.10 Processing the Resource Allocation Message and Resource Allocation Mini 9   Message

10   The mobile station shall process the *Resource Allocation Message* and the *Resource*  
11   *Allocation Mini Message* as follows:

- 12       • The mobile station shall set FPC\_PRI\_CHAN<sub>S</sub> = FPC\_PRI\_CHAN<sub>T</sub> at the action time  
13       of the message.
- 14       • If a F-PDCH is not assigned and the Fundamental Channel was previously  
15       established prior to transitioning to the *Control Hold Mode*, the mobile station shall  
16       start processing F-FCH and start transmitting on R-FCH at the action time of the  
17       message. The mobile station shall establish the Fundamental Channel with the  
18       same configuration as previously used, and shall set CH\_IND<sub>S</sub> to '11'.
- 19       • The mobile station shall set PILOT\_GATING\_USE\_RATE to '0' and shall start the  
20       continuous reverse pilot at the action time of the message and, if a F-PDCH is  
21       assigned, the mobile station shall start the continuous R-CQICH as defined in [3].

#### 22   2.6.4.1.11 Reserved

#### 23   2.6.4.1.12 Processing the Service Configuration Record

24   The mobile station shall update the Service Configuration information record currently in  
25   use as follows:

- 26       • If P\_REV\_IN\_USE<sub>S</sub> is less than eight, the mobile station shall update the multiplex  
27       option information as follows:
  - 28           – The mobile station shall store the forward Fundamental Channel multiplex  
29           option [FOR\_FCH\_MUX\_OPTION<sub>S</sub> = FOR\_MUX\_OPTION<sub>T</sub>].
  - 30           – The mobile station shall store the reverse Fundamental Channel multiplex  
31           option [REV\_FCH\_MUX\_OPTION<sub>S</sub> = REV\_MUX\_OPTION<sub>T</sub>].
  - 32           – The mobile station shall store the forward Dedicated Control Channel multiplex  
33           option [FOR\_DCCH\_MUX\_OPTION<sub>S</sub> = FOR\_MUX\_OPTION<sub>T</sub>].
  - 34           – The mobile station shall store the reverse Dedicated Control Channel multiplex  
35           option [REV\_DCCH\_MUX\_OPTION<sub>S</sub> = REV\_MUX\_OPTION<sub>T</sub>].
- 36       • If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to eight, the mobile station shall update  
37       the multiplex option information as follows:

- 1       – If FCH\_DCCH\_MUX\_OPTION\_IND is equal to '00':
  - 2           + The mobile station shall store the forward Fundamental Channel multiplex
  - 3           option (FOR\_FCH\_MUX\_OPTION<sub>S</sub> = FOR\_MUX\_OPTION<sub>T</sub>).
  - 4           + The mobile station shall store the forward Dedicated Control Channel
  - 5           multiplex option (FOR\_DCCH\_MUX\_OPTION<sub>S</sub> = FOR\_MUX\_OPTION<sub>T</sub>).
  - 6           + The mobile station shall store the reverse Fundamental Channel multiplex
  - 7           option (REV\_FCH\_MUX\_OPTION<sub>S</sub> = REV\_MUX\_OPTION<sub>T</sub>).
  - 8           + The mobile station shall store the reverse Dedicated Control Channel
  - 9           multiplex option (REV\_DCCH\_MUX\_OPTION<sub>S</sub> = REV\_MUX\_OPTION<sub>T</sub>).
- 10      – If FCH\_DCCH\_MUX\_OPTION\_IND is equal to '01':
  - 11           + The mobile station shall store the forward Fundamental Channel multiplex
  - 12           option (FOR\_FCH\_MUX\_OPTION<sub>S</sub> = FOR\_MUX\_OPTION<sub>T</sub>).
  - 13           + The mobile station shall store the reverse Fundamental Channel multiplex
  - 14           option (REV\_FCH\_MUX\_OPTION<sub>S</sub> = REV\_MUX\_OPTION<sub>T</sub>).
- 15      – If FCH\_DCCH\_MUX\_OPTION\_IND is equal to '10':
  - 16           + The mobile station shall store the forward Dedicated Control Channel
  - 17           multiplex option (FOR\_DCCH\_MUX\_OPTION<sub>S</sub> = FOR\_MUX\_OPTION<sub>T</sub>).
  - 18           + The mobile station shall store the reverse Dedicated Control Channel
  - 19           multiplex option (REV\_DCCH\_MUX\_OPTION<sub>S</sub> = REV\_MUX\_OPTION<sub>T</sub>).
- 20      – If FCH\_DCCH\_MUX\_OPTION\_IND is equal to '11':
  - 21           + The mobile station shall store the forward Fundamental Channel multiplex
  - 22           option (FOR\_FCH\_MUX\_OPTION<sub>S</sub> = FOR\_MUX\_OPTION<sub>T</sub>).
  - 23           + The mobile station shall store the reverse Fundamental Channel multiplex
  - 24           option (REV\_FCH\_MUX\_OPTION<sub>S</sub> = REV\_MUX\_OPTION<sub>T</sub>).
  - 25           + The mobile station shall store the forward Dedicated Control Channel
  - 26           multiplex option (FOR\_DCCH\_MUX\_OPTION<sub>S</sub> =
  - 27           FOR\_DCCH\_MUX\_OPTION<sub>T</sub>).
  - 28           + The mobile station shall store the reverse Dedicated Control Channel
  - 29           multiplex option (REV\_DCCH\_MUX\_OPTION<sub>S</sub> =
  - 30           REV\_DCCH\_MUX\_OPTION<sub>T</sub>).
- 31      • The mobile station shall store the set of number of bits per frame of the forward
- 32      Fundamental Channel and Dedicated Control Channel [FOR\_NUM\_BITS<sub>S</sub> =
- 33      FOR\_NUM\_BITS<sub>T</sub>].
- 34      • The mobile station shall store the set of number of bits per frame of the reverse
- 35      Fundamental Channel and Dedicated Control Channel [REV\_NUM\_BITS<sub>S</sub> =
- 36      REV\_NUM\_BITS<sub>T</sub>].
- 37      • If a service option connection has been omitted from the service option connection
- 38      records, the Layer 3 shall terminate the call control instance (currently existing or

- 1 pending instantiation) identified by the connection reference corresponding to the  
 2 omitted service option connection.
- 3 • If this is the first Service Configuration Record received from the base station in a  
 4 *Service Connect Message*, *General Handoff Direction Message*, or *Universal Handoff*  
 5 *Direction Message* and accepted by the mobile station since entering the *Traffic*  
 6 *Channel substate*, the mobile station shall also identify the Call Control instance  
 7 currently identified by NULL by the connection reference assigned to the first  
 8 service option connection, CON\_REF<sub>r</sub>; otherwise, the mobile station shall identify  
 9 the Call Control instance corresponding to the first service option connection listed  
 10 in this Service Configuration information record by the NULL identifier.
  - 11 • The mobile station shall delete all instances of current service option connection  
 12 records. For each of the NUM\_CON\_REC<sub>r</sub> occurrences of the service option  
 13 connection record (SO\_CON\_REC[i]), the mobile station shall perform the following:
    - 14 – The mobile station shall store the service option connection reference  
 15 (SO\_CON\_REC<sub>s</sub>[i].CON\_REF = CON\_REF<sub>r</sub>).
    - 16 – The mobile station shall store the service option  
 17 (SO\_CON\_REC<sub>s</sub>[i].SERVICE\_OPTION = SERVICE\_OPTION<sub>r</sub>).
    - 18 – The mobile station shall store the forward traffic channel traffic type  
 19 (SO\_CON\_REC<sub>s</sub>[i].FOR\_TRAFFIC = FOR\_TRAFFIC<sub>r</sub>).
    - 20 – The mobile station shall store the reverse traffic channel traffic type  
 21 (SO\_CON\_REC<sub>s</sub>[i].REV\_TRAFFIC = REV\_TRAFFIC<sub>r</sub>).
    - 22 – The mobile station shall store the encryption mode indicator for user  
 23 information privacy (SO\_CON\_REC<sub>s</sub>[i].UI\_ENCRYPT\_MODE =  
 24 UI\_ENCRYPT\_MODE<sub>r</sub>).
    - 25 – The mobile station shall store the service reference identifier  
 26 (SO\_CON\_REC<sub>s</sub>[i].SR\_ID = SR\_ID<sub>r</sub>).
    - 27 – If RLP\_INFO\_INCL<sub>r</sub> equals '1', the mobile station shall store the Radio Link  
 28 Protocol block of bits (SO\_CON\_REC<sub>s</sub>[i].RLP\_BLOB = RLP\_BLOB<sub>r</sub>).
    - 29 – If QOS\_PARMS\_INCL<sub>r</sub> equals '1', the mobile station shall store the QoS  
 30 parameters block (SO\_CON\_REC<sub>s</sub>[i].QOS\_PARMS = QOS\_PARMS<sub>r</sub>).
  - 31 • If FCH\_CC\_INCL<sub>r</sub> equals '1', the mobile station shall perform the following:
    - 32 – The mobile station shall store the indicator for 5ms frames on Fundamental  
 33 Channel as follows: if FCH\_FRAME\_SIZE<sub>r</sub> equals '1', the mobile station shall set  
 34 FCH\_5MS\_FRAMES<sub>s</sub> = '1'; otherwise, it is set to '0'.
    - 35 – The mobile station shall store the Forward Fundamental Channel Radio  
 36 Configuration (FOR\_FCH\_RC<sub>s</sub> = FOR\_FCH\_RC<sub>r</sub>).

- 1        - The mobile station shall store the Reverse Fundamental Channel Radio  
2        Configuration (REV\_FCH\_RC<sub>S</sub> = REV\_FCH\_RC<sub>T</sub>).
- 3        • If DCCH\_CC\_INCL<sub>T</sub> equals '1', the mobile station shall perform the following:
  - 4        - The mobile station shall store the indicator for 5ms frames on Dedicated  
5        Control Channel as follows: If DCCH\_FRAME\_SIZE<sub>T</sub> equals '10' or '11', the  
6        mobile station shall set DCCH\_5MS\_FRAMES<sub>S</sub> = '1'; otherwise, it is set to '0'.
  - 7        - The mobile station shall store the Forward Dedicated Control Channel Radio  
8        Configuration (FOR\_DCCH\_RC<sub>S</sub> = FOR\_DCCH\_RC<sub>T</sub>).
  - 9        - The mobile station shall store the Reverse Dedicated Control Channel Radio  
10       Configuration (REV\_DCCH\_RC<sub>S</sub> = REV\_DCCH\_RC<sub>T</sub>).
- 11       • If FOR\_SCH\_CC\_INCL<sub>T</sub> equals '1', the mobile station shall store the  
12       NUM\_FOR\_SCH<sub>T</sub> occurrences of the Forward Supplemental Channel channel  
13       configuration records as follows:
  - 14       - The mobile station shall store the Forward Supplemental Channel Identification  
15       (FOR\_SCH\_ID[FOR\_SCH\_ID<sub>T</sub>]<sub>S</sub> = FOR\_SCH\_ID<sub>T</sub>).
  - 16       - The mobile station shall store the Forward Supplemental Channel Multiplex  
17       Option (FOR\_SCH\_MUX[FOR\_SCH\_ID<sub>T</sub>]<sub>S</sub> = FOR\_SCH\_MUX<sub>T</sub>).
  - 18       - The mobile station shall store the Forward Supplemental Channel Radio  
19       Configuration (FOR\_SCH\_RC[FOR\_SCH\_ID<sub>T</sub>]<sub>S</sub> = SCH\_RC<sub>T</sub>).
  - 20       - The mobile station shall store the Forward Supplemental Channel Coding Type  
21       (FOR\_SCH\_CODING[FOR\_SCH\_ID<sub>T</sub>]<sub>S</sub> = CODING<sub>T</sub>).
  - 22       - If FRAME\_40\_USED<sub>T</sub> and FRAME\_80\_USED<sub>T</sub> are both equal to '0', the mobile  
23       station shall set FOR\_SCH\_FRAME\_LENGTH<sub>S</sub>[FOR\_SCH\_ID<sub>T</sub>] to '00' (i.e., 20 ms  
24       frame length).
  - 25       - If FRAME\_40\_USED<sub>T</sub> is equal to '1', the mobile station shall set  
26       FOR\_SCH\_FRAME\_LENGTH<sub>S</sub>[FOR\_SCH\_ID<sub>T</sub>] to '01' (i.e., 40 ms frame length).
  - 27       - If FRAME\_80\_USED<sub>T</sub> is equal to '1', the mobile station shall set  
28       FOR\_SCH\_FRAME\_LENGTH<sub>S</sub>[FOR\_SCH\_ID<sub>T</sub>] to '10' (i.e., 80 ms frame length).
  - 29       - F\_MAX\_RATE\_IDX<sub>S</sub>[FOR\_SCH\_ID<sub>T</sub>] = MAX\_RATE<sub>T</sub>.
- 30       • If REV\_SCH\_CC\_INCL<sub>T</sub> equals '1', the mobile station shall store the  
31       NUM\_REV\_SCH<sub>T</sub> occurrences of the Reverse Supplemental Channel channel  
32       configuration records as follows:
  - 33       - The mobile station shall store the Reverse Supplemental Channel Identification  
34       (REV\_SCH\_ID[REV\_SCH\_ID<sub>T</sub>]<sub>S</sub> = REV\_SCH\_ID<sub>T</sub>).
  - 35       - The mobile station shall store the Reverse Supplemental Channel Multiplex  
36       Option (REV\_SCH\_MUX[REV\_SCH\_ID<sub>T</sub>]<sub>S</sub> = REV\_SCH\_MUX<sub>T</sub>).
  - 37       - The mobile station shall store the Reverse Supplemental Channel Radio  
38       Configuration (REV\_SCH\_RC[REV\_SCH\_ID<sub>T</sub>]<sub>S</sub> = SCH\_RC<sub>T</sub>).



- 1       - The mobile station shall store the Reverse Supplemental Channel Coding Type  
2       (REV\_SCH\_CODING[REV\_SCH\_ID<sub>r</sub>]<sub>s</sub> = CODING<sub>r</sub>).
- 3       - If FRAME\_40\_USED<sub>r</sub> and FRAME\_80\_USED<sub>r</sub> are both equal to '0', the mobile  
4       station shall set REV\_SCH\_FRAME\_LENGTH<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to '00' (i.e., 20 ms  
5       frame length).
- 6       - If FRAME\_40\_USED<sub>r</sub> is equal to '1', the mobile station shall set  
7       REV\_SCH\_FRAME\_LENGTH<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to '01' (i.e., 40 ms frame length).
- 8       - If FRAME\_80\_USED<sub>r</sub> is equal to '1', the mobile station shall set  
9       REV\_SCH\_FRAME\_LENGTH<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to '10' (i.e., 80 ms frame length).
- 10      - R\_MAX\_RATE\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = MAX\_RATE<sub>r</sub>.
- 11      • If FOR\_PDCH\_CC\_INCL<sub>r</sub> equals '1', the mobile station shall perform the following:
  - 12      - The mobile station shall store the Forward Packet Data Channel multiplex  
13      option (FOR\_PDCH\_MUX\_OPTION<sub>s</sub> = FOR\_PDCH\_MUX\_OPTION<sub>r</sub>).
  - 14      - The mobile station shall store the Forward Packet Data Channel Radio  
15      Configuration (FOR\_PDCH\_RC<sub>s</sub> = FOR\_PDCH\_RC<sub>r</sub>).
- 16      • If REV\_PDCH\_CC\_INCL<sub>r</sub> equals '1', the mobile station shall store the following:
  - 17      - The Reverse Packet Data Channel multiplex option for the higher data rates  
18      (REV\_PDCH\_MUX\_OPTION\_HIGH\_RATE<sub>s</sub> =  
19      REV\_PDCH\_MUX\_OPTION\_HIGH\_RATE<sub>r</sub>).
  - 20      - The Reverse Packet Data Channel multiplex option for the lower data rates  
21      (REV\_PDCH\_MUX\_OPTION\_LOW\_RATE<sub>s</sub> =  
22      REV\_PDCH\_MUX\_OPTION\_LOW\_RATE<sub>r</sub>).
  - 23      - The Reverse Packet Data Channel Radio Configuration (REV\_PDCH\_RC<sub>s</sub> =  
24      REV\_PDCH\_RC<sub>r</sub>).

#### 25   2.6.4.1.13 Processing the Non-Negotiable Service Configuration Record

26   The mobile station shall update the Non-Negotiable Service Configuration information  
27   record currently in use as follows:

- 28      • If FPC\_INCL<sub>r</sub> equals '1', the mobile station shall perform the following:
  - 29      - The mobile station shall store the Power Control Subchannel indicator  
30      (FPC\_PRI\_CHAN<sub>s</sub> = FPC\_PRI\_CHAN<sub>r</sub>).
  - 31      - The mobile station shall store the forward power control operation mode  
32      (FPC\_MODE\_NO\_SCH<sub>s</sub> = FPC\_MODE<sub>r</sub>).
  - 33      - The mobile station shall set FPC\_MODE<sub>s</sub> = FPC\_MODE\_NO\_SCH<sub>s</sub> if there is no  
34      forward Supplemental Channel assignment in progress (see 2.6.6.2.5.1.1).
  - 35      - If FPC\_OLPC\_FCH\_INCL<sub>r</sub> equals '1', the mobile station shall perform the  
36      following:
    - 37      + The mobile station shall store the Fundamental Channel target Frame Error

- 1                   Rate ( $FPC\_FCH\_FER_S = FPC\_FCH\_FER_T$ ).
- 2           +   The mobile station shall store the minimum Fundamental Channel Outer  
3           Loop  $E_b/N_t$  setpoint ( $FPC\_FCH\_MIN\_SETPT_S = FPC\_FCH\_MIN\_SETPT_T$ ).
- 4           +   The mobile station shall store the maximum Fundamental Channel Outer  
5           Loop  $E_b/N_t$  setpoint ( $FPC\_FCH\_MAX\_SETPT_S = FPC\_FCH\_MAX\_SETPT_T$ ).
- 6           -   If  $FPC\_OLPC\_DCCH\_INCL_R$  equals '1', the mobile station shall perform the  
7           following:
- 8           +   The mobile station shall store the Dedicated Control Channel target Frame  
9           Error Rate ( $FPC\_DCCH\_FER_S = FPC\_DCCH\_FER_T$ ).
- 10          +   The mobile station shall store the minimum Dedicated Control Channel  
11          Outer Loop  $E_b/N_t$  setpoint ( $FPC\_DCCH\_MIN\_SETPT_S =$   
12           $FPC\_DCCH\_MIN\_SETPT_T$ ).
- 13          +   The mobile station shall store the maximum Dedicated Control Channel  
14          Outer Loop  $E_b/N_t$  setpoint ( $FPC\_DCCH\_MAX\_SETPT_S =$   
15           $FPC\_DCCH\_MAX\_SETPT_T$ ).
- 16          •   If  $GATING\_RATE\_INCL_R$  equals '1', the mobile station shall store the Reverse Pilot  
17          Channel gating rate ( $PILOT\_GATING\_RATE_S = PILOT\_GATING\_RATE_T$ ).
- 18          •   If  $FOR\_SCH\_INCL_R$  equals '1', the mobile station shall store the  $NUM\_FOR\_SCH_R$   
19          occurrences of the Forward Supplemental Channel information as follows:
- 20          -   The mobile station shall store the Forward Supplemental Channel Multiframe  
21          Offset ( $FOR\_SCH\_FRAME\_OFFSET[FOR\_SCH\_ID_R]_S =$   
22           $FOR\_SCH\_FRAME\_OFFSET_T$ ).
- 23          •   If  $REV\_SCH\_CC\_INCL_R$  equals '1', the mobile station shall store the  
24           $NUM\_REV\_SCH_R$  occurrences of the Reverse Supplemental Channel information as  
25          follows:
- 26          -   The mobile station shall store the Reverse Supplemental Channel Multiframe  
27          Offset ( $REV\_SCH\_FRAME\_OFFSET[REV\_SCH\_ID_R]_S =$   
28           $REV\_SCH\_FRAME\_OFFSET_T$ ).
- 29          •   The mobile station shall determine the Logical-to-Physical Mapping to be used as  
30          follows:
- 31          -   If  $LPM\_IND_R$  equals '00' and an F-PDCH is assigned, the mobile station shall  
32          reset the Logical-to-Physical Mapping to their default values as specified in  
33          Table 2.6.4.2-2 but with the following modification for requirement 1 stated in  
34          Table 2.6.4.2-2:
- 35          +   The mobile station shall set the  $SR\_ID$  field to the value specified in the  
36          Service Configuration information record.

- 1       - If LPM\_IND<sub>r</sub> equals '00' and P\_REV\_IN\_USE<sub>s</sub> is greater than six and an F-PDCH  
2       is not assigned, the mobile station shall reset the Logical-to-Physical Mapping  
3       to their default values as specified in Table 2.6.4.2-1 but with the following  
4       modification for requirement 1 stated in Table 2.6.4.2-1:
- 5       + The mobile station shall set the SR\_ID field to the value specified in the  
6       Service Configuration information record.
- 7       - If LPM\_IND<sub>r</sub> equals '00' and P\_REV\_IN\_USE<sub>s</sub> is equal to or less than six, the  
8       mobile station shall reset the Logical-to-Physical Mapping to their default  
9       values as follows:
- 10      + Default number of Logical-to-Physical Mapping entries  
11      (NUM\_LPM\_ENTRIES<sub>s</sub> = '0100').
- 12      + Default Table(0) Logical-to-Physical Mapping service reference identifier  
13      (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].SR\_ID<sub>s</sub> = '000').
- 14      + Default Table(0) Logical-to-Physical Mapping logical resource identifier  
15      (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].LOGICAL\_RESOURCE<sub>s</sub> =  
16      '0001').
- 17      + Default Table(0) Logical-to-Physical Mapping physical resource identifier:
- 18          o If CH\_IND<sub>s</sub> is equal to '01' or '11', the mobile station shall set  
19          LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].PHYSICAL\_RESOURCE<sub>s</sub>  
20          to '0000'.
- 21          o If CH\_IND<sub>s</sub> is equal to '10', the mobile station shall set  
22          LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].PHYSICAL\_RESOURCE<sub>s</sub>  
23          to '0001'.
- 24      + Default Table(0) Logical-to-Physical Mapping forward mapping indicator  
25      (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].FORWARD\_FLAG<sub>s</sub> = '1').
- 26      + Default Table(0) Logical-to-Physical Mapping reverse mapping indicator  
27      (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].REVERSE\_FLAG<sub>s</sub> = '1').
- 28      + Default Table(0) Logical-to-Physical Mapping priority  
29      (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].PRIORITY<sub>s</sub> = '0000').
- 30      + Default Table(1) Logical-to-Physical Mapping service reference identifier  
31      (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].SR\_ID<sub>s</sub> = '001').
- 32      + Default Table(1) Logical-to-Physical Mapping logical resource identifier  
33      (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].LOGICAL\_RESOURCE<sub>s</sub> =  
34      '0000').
- 35      + Default Table(1) Logical-to-Physical Mapping physical resource identifier:
- 36          o If CH\_IND<sub>s</sub> is equal to '01' or '11', the mobile station shall set  
37          LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].PHYSICAL\_RESOURCE<sub>s</sub>  
38          to '0000'.

- 1                   o If CH\_IND<sub>S</sub> is equal to '10', the mobile station shall set
- 2                   LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].PHYSICAL\_RESOURCE
- 3                   E<sub>S</sub> to '0001'.
- 4           + Default Table(1) Logical-to-Physical Mapping forward mapping indicator
- 5            (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].FORWARD\_FLAG<sub>S</sub> = '1').
- 6           + Default Table(1) Logical-to-Physical Mapping reverse mapping indicator
- 7            (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].REVERSE\_FLAG<sub>S</sub> = '1').
- 8           + Default Table(1) Logical-to-Physical Mapping priority
- 9            (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].PRIORITY<sub>S</sub> = '0000').
- 10          + Default Table(2) Logical-to-Physical Mapping service reference identifier
- 11          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].SR\_ID<sub>S</sub> = '001').
- 12          + Default Table(2) Logical-to-Physical Mapping logical resource identifier
- 13          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].LOGICAL\_RESOURCE<sub>S</sub> =
- 14          '0000').
- 15          + Default Table(2) Logical-to-Physical Mapping physical resource identifier
- 16          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].PHYSICAL\_RESOURCE<sub>S</sub> to
- 17          '0010').
- 18          + Default Table(2) Logical-to-Physical Mapping forward mapping indicator
- 19          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].FORWARD\_FLAG<sub>S</sub> = '1').
- 20          + Default Table(2) Logical-to-Physical Mapping reverse mapping indicator
- 21          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].REVERSE\_FLAG<sub>S</sub> = '1').
- 22          + Default Table(2) Logical-to-Physical Mapping priority
- 23          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].PRIORITY<sub>S</sub> = '0000').
- 24          + Default Table(3) Logical-to-Physical Mapping service reference identifier
- 25          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].SR\_ID<sub>S</sub> = '001').
- 26          + Default Table(3) Logical-to-Physical Mapping logical resource identifier
- 27          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].LOGICAL\_RESOURCE<sub>S</sub> =
- 28          '0000').
- 29          + Default Table(3) Logical-to-Physical Mapping physical resource identifier
- 30          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].PHYSICAL\_RESOURCE<sub>S</sub> to
- 31          '0011').
- 32          + Default Table(3) Logical-to-Physical Mapping forward mapping indicator
- 33          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].FORWARD\_FLAG<sub>S</sub> = '1').
- 34          + Default Table(3) Logical-to-Physical Mapping reverse mapping indicator
- 35          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].REVERSE\_FLAG<sub>S</sub> = '1').
- 36          + Default Table(3) Logical-to-Physical Mapping priority
- 37          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].PRIORITY<sub>S</sub> = '0000').

- 1       - If LPM\_IND<sub>r</sub> equals '01', the mobile station shall use the Logical-to-Physical  
2       Mapping included in this Non-Negotiable Service Configuration Record. The  
3       mobile station shall perform the following: The mobile station shall delete the  
4       Logical-to-Physical Mapping currently in use. The mobile station shall store  
5       the number of Logical-to-Physical Mapping entries (NUM\_LPM\_ENTRIES<sub>s</sub> =  
6       NUM\_LPM\_ENTRIES<sub>r</sub>). For each i<sup>th</sup> record of the NUM\_LPM\_ENTRIES<sub>r</sub> Logical-  
7       to-Physical Mapping records included in the received Non-Negotiable Service  
8       Configuration Record:
  - 9       + The mobile station shall store the Logical-to-Physical Mapping service  
10       reference identifier (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].SR\_ID<sub>s</sub> =  
11       SR\_ID<sub>r</sub>).
  - 12       + The mobile station shall store the Logical-to-Physical Mapping logical  
13       resource identifier  
14       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].LOGICAL\_RESOURCE<sub>s</sub> =  
15       LOGICAL\_RESOURCE<sub>r</sub>).
  - 16       + The mobile station shall store the Logical-to-Physical Mapping Physical  
17       Channel  
18       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].PHYSICAL\_RESOURCE<sub>s</sub> =  
19       PHYSICAL\_RESOURCE<sub>r</sub>).
  - 20       + The mobile station shall store the Logical-to-Physical Mapping forward  
21       mapping indicator  
22       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].FORWARD\_FLAG<sub>s</sub> =  
23       FORWARD\_FLAG<sub>r</sub>).
  - 24       + The mobile station shall store the Logical-to-Physical Mapping reverse  
25       mapping indicator  
26       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].REVERSE\_FLAG<sub>s</sub> =  
27       REVERSE\_FLAG<sub>r</sub>).
  - 28       + The mobile station shall store the Logical-to-Physical Mapping priority  
29       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].PRIORITY<sub>s</sub> = PRIORITY<sub>r</sub>).
- 30       - If LPM\_IND<sub>r</sub> equals '10', the mobile station shall use the Logical-to-Physical  
31       Mapping currently in use.
- 32       • For each of the NUM\_REC<sub>r</sub> occurrences of the service-specific records included in  
33       the Non-negotiable Service Configuration Record, the mobile station shall perform  
34       the following:
  - 35       - The mobile station shall store the Short Data Burst service option number  
36       omitted indicator (SDB\_SO\_OMIT<sub>s</sub> [SR\_ID<sub>r</sub>] = SDB\_SO\_OMIT<sub>r</sub> ).
- 37       • The mobile station shall store the following:
  - 38       - USE\_FLEX\_NUM\_BITS<sub>s</sub> = USE\_FLEX\_NUM\_BITS<sub>r</sub>
  - 39       - USE\_VAR\_RATE<sub>s</sub> = USE\_VAR\_RATE<sub>r</sub>

- 1        - If  $USE\_VAR\_RATE_R$  is equal to '1', then the mobile station shall store the  
2        following:  
3        +  $R\_INC\_RATE\_ALLOWED_S = R\_INC\_RATE\_ALLOWED_R$   
4        +  $F\_INC\_RATE\_ALLOWED_S = F\_INC\_RATE\_ALLOWED_R$   
5        - If  $USE\_FLEX\_NUM\_BITS_R$  or  $USE\_VAR\_RATE_R$  is equal to '1', then the mobile  
6        station shall store the following:  
7        +  $USE\_ERAM_S = USE\_ERAM_R$   
8        • If  $NUM\_BITS\_TABLES\_INCL_R$  is included and is equal to '1', the mobile station shall  
9        store  $NUM\_BITS\_TABLES\_COUNT+1$  instances of the Flexible Rate Table  
10        ( $NUM\_RECS$  triplets of ( $NUM\_BITS\_IDX$ ,  $NUM\_BITS$ ,  $CRC\_LEN\_IDX$ ) corresponding  
11        to each  $NUM\_BITS\_TABLE\_ID$ ) as follows:  
12        - For each of the  $NUM\_RECS$  occurrences of the three field record consisting of  
13         $NUM\_BITS\_IDX$ ,  $NUM\_BITS$ , and  $CRC\_LEN\_IDX$  the mobile station shall store  
14        the following  
15        +  $NUM\_BITS_S[NUM\_BITS\_TABLE\_ID_R][NUM\_BITS\_IDX_R] = NUM\_BITS_R$ ;  
16        +  $CRC\_LEN\_IDX_S[NUM\_BITS\_TABLE\_ID_R][NUM\_BITS\_IDX_R] = CRC\_LEN\_IDX_R$ ;  
17        • If  $USE\_OLD\_FLEX\_MAPPING_R$  is included and equal to '0', the mobile station shall  
18        store the following:  
19        -  $FFCH\_NBIT\_TABLE\_ID_S = FFCH\_NBIT\_TABLE\_ID_R$ .  
20        -  $RFCH\_NBIT\_TABLE\_ID_S = RFCH\_NBIT\_TABLE\_ID_R$ .  
21        -  $FSCH\_NBIT\_TABLE\_ID_S[1] = FSCH0\_NBIT\_TABLE\_ID_R$ .  
22        -  $FSCH\_NBIT\_TABLE\_ID_S[2] = FSCH1\_NBIT\_TABLE\_ID_R$ .  
23        -  $RSCH\_NBIT\_TABLE\_ID_S[1] = RSCH0\_NBIT\_TABLE\_ID_R$ .  
24        -  $RSCH\_NBIT\_TABLE\_ID_S[2] = RSCH1\_NBIT\_TABLE\_ID_R$ .  
25        -  $FDCCH\_NBIT\_TABLE\_ID_S = FDCCH\_NBIT\_TABLE\_ID_R$ .  
26        - If  $FDCCH\_NBIT\_TABLE\_ID_S$  is not equal to '0000', then the mobile station shall  
27        store  $FDCCH\_NBITS\_IDX_S = FDCCH\_NBITS\_IDX_R$ .  
28        -  $RDCCH\_NBIT\_TABLE\_ID_S = RDCCH\_NBIT\_TABLE\_ID_R$ .  
29        - If  $RDCCH\_NBIT\_TABLE\_ID_S$  is not equal to '0000', then the mobile station shall  
30        store  $RDCCH\_NBITS\_IDX_S = RDCCH\_NBITS\_IDX_R$ .  
31        • Otherwise, the mobile station shall use the previously stored values for the above  
32        variables.  
33        • If  $USE\_FLEX\_NUM\_BITS_R$  is equal to '0', the mobile station shall store the following:  
34        -  $FFCH\_NBIT\_TABLE\_ID_S = '0000'$ .  
35        -  $RFCH\_NBIT\_TABLE\_ID_S = '0000'$ .  
36        -  $FSCH\_NBIT\_TABLE\_ID_S[1] = '0000'$ .

- 1       - FSCH\_NBIT\_TABLE\_IDS[2] = '0000'.
- 2       - RSCH\_NBIT\_TABLE\_IDS[1] = '0000'.
- 3       - RSCH\_NBIT\_TABLE\_IDS[2] = '0000'.
- 4       - FDCCH\_NBIT\_TABLE\_IDS = '0000'.
- 5       - FDCCH\_NBITS\_IDX<sub>S</sub> = '0000'.
- 6       - RDCCH\_NBIT\_TABLE\_IDS = '0000'.
- 7       - FDCCH\_NBITS\_IDX<sub>S</sub> = '0000'.
- 8       • If VAR\_TABLES\_INCL<sub>r</sub> is included and is equal to '1', the mobile station shall store
  - 9       VAR\_RATE\_TABLES\_COUNT+1 instances of the Variable Rate Mask Table
  - 10       (NUM\_RECS pairs of (NUM\_BITS\_IDX, MASK) corresponding to each
  - 11       VAR\_RATE\_TABLE\_ID) as follows:
    - 12       - For each of the NUM\_RECS + 1 occurrences of the two-field record consisting of
    - 13       NUM\_BITS\_IDX and MASK the mobile station shall store the following:
      - 14       + MASK<sub>S</sub>[VAR\_RATE\_TABLE\_ID<sub>r</sub>][NUM\_BITS\_IDX<sub>r</sub>] = MASK<sub>r</sub>;
    - 15       - If FSCH\_VAR\_TABLE\_IDS[1] is not equal to '000', then the mobile station shall
    - 16       store the following:
      - 17       + For row=1, ..., 15
        - 18       o For i=1, ..., row,
          - 19       ◇ If the  $i^{\text{th}}$  bit position in MASK<sub>S</sub>[FSCH\_VAR\_TABLE\_IDS[1]][row] is
          - 20       equal to '1', then the mobile station shall set
          - 21       VAR\_FSCH\_RATE\_OFFSET<sub>S</sub>[1][row][i] to i,
          - 22       ◇ otherwise, the mobile shall set VAR\_FSCH\_RATE\_OFFSET<sub>S</sub>[1][row][i]
          - 23       to '0'.
    - 24       - If FSCH\_VAR\_TABLE\_IDS[2] is not equal to '000', then the mobile station shall
    - 25       store the following:
      - 26       + For row=1, ..., 15
        - 27       o For i=1, ..., row,
          - 28       ◇ If the  $i^{\text{th}}$  bit position in MASK<sub>S</sub>[FSCH\_VAR\_TABLE\_IDS[2]][row] is
          - 29       equal to '1', then the mobile station shall set
          - 30       VAR\_FSCH\_RATE\_OFFSET<sub>S</sub>[2][row][i] to i,
          - 31       ◇ otherwise, the mobile shall set VAR\_FSCH\_RATE\_OFFSET<sub>S</sub>[2][row][i]
          - 32       to '0'.
    - 33       - If RSCH\_VAR\_TABLE\_IDS[1] is not equal to '000', then the mobile station shall
    - 34       store the following:
      - 35       + For row=1, ..., 15
        - 36       o For i=1, ..., row,

- 1                   ◇ If the  $i^{\text{th}}$  bit position in  $\text{MASK}_S[\text{RSCH\_VAR\_TABLE\_ID}_S[1]][\text{row}]$  is  
2                   equal to '1', then the mobile station shall set  
3                    $\text{VAR\_RSCH\_RATE\_OFFSET}_S[1][\text{row}][i]$  to  $i$ ,  
4                   ◇ otherwise, the mobile shall set  $\text{VAR\_RSCH\_RATE\_OFFSET}_S[1][\text{row}][i]$   
5                   to '0'.  
6       - If  $\text{RSCH\_VAR\_TABLE\_ID}_S[2]$  is not equal to '000', then the mobile station shall  
7       store the following:  
8       + For  $\text{row}=1, \dots, 15$   
9       o For  $i=1, \dots, \text{row}$ ,  
10                   ◇ If the  $i^{\text{th}}$  bit position in  $\text{MASK}_S[\text{RSCH\_VAR\_TABLE\_ID}_S[2]][\text{row}]$  is  
11                   equal to '1', then the mobile station shall set  
12                    $\text{VAR\_RSCH\_RATE\_OFFSET}_S[2][\text{row}][i]$  to  $i$ ,  
13                   ◇ otherwise, the mobile shall set  $\text{VAR\_RSCH\_RATE\_OFFSET}_S[2][\text{row}][i]$   
14                   to '0'.  
15       • If  $\text{USE\_OLD\_VAR\_MAPPING}_R$  is included and equal to '0', the mobile station shall  
16       store the following:  
17       -  $\text{FSCH\_VAR\_TABLE\_ID}_S[1] = \text{FSCH0\_VAR\_TABLE\_ID}_R$ .  
18       -  $\text{FSCH\_VAR\_TABLE\_ID}_S[2] = \text{FSCH1\_VAR\_TABLE\_ID}_R$ .  
19       -  $\text{RSCH\_VAR\_TABLE\_ID}_S[1] = \text{RSCH0\_VAR\_TABLE\_ID}_R$ .  
20       -  $\text{RSCH\_VAR\_TABLE\_ID}_S[2] = \text{RSCH1\_VAR\_TABLE\_ID}_R$ .  
21       • Otherwise, use the previously stored values for the above four variables.  
22       • If  $\text{USE\_VAR\_RATE}_R$  is equal to '0', the mobile station shall store the following:  
23       -  $\text{FSCH\_VAR\_TABLE\_ID}_S[1] = \text{'000'}$ .  
24       -  $\text{FSCH\_VAR\_TABLE\_ID}_S[2] = \text{'000'}$ .  
25       -  $\text{RSCH\_VAR\_TABLE\_ID}_S[1] = \text{'000'}$ .  
26       -  $\text{RSCH\_VAR\_TABLE\_ID}_S[2] = \text{'000'}$ .  
27       • If  $\text{LTU\_TABLES\_INCL}_R$  is included and is equal to '1', then the mobile station shall  
28       store  $\text{NUM\_LTU\_TABLES} + 1$  instances of the LTU Table which determines the  
29       number of LTUs per frame for convolutionally encoded supplemental channels for  
30       each number of bits per frame. Each LTU Table is identified by its  $\text{LTU\_TABLE\_ID}$ .  
31       - For each of the  $\text{NUM\_ROWS} + 1$  rows of the LTU Table, the mobile station shall  
32       store the following:  
33       +  $\text{LTU\_TAB}_S[\text{LTU\_TABLE\_ID}_R][\text{NBITS\_IDX}_R] = \text{NUM\_LTUS}_R$   
34       • If  $\text{USE\_OLD\_LTU\_MAPPING}_R$  is included and is equal to '0', then the mobile station  
35       shall store the following:  
36       -  $\text{FSCH\_LTU\_TAB\_ID}_S[1] = \text{FSCH0\_LTU\_TAB\_ID}_R$



- 1       - FSCH\_LTU\_TAB\_IDS[2] = FSCH1\_LTU\_TAB\_ID<sub>r</sub>
- 2       - RSCH\_LTU\_TAB\_IDS[1] = RSCH0\_LTU\_TAB\_ID<sub>r</sub>
- 3       - RSCH\_LTU\_TAB\_IDS[2] = RSCH1\_LTU\_TAB\_ID<sub>r</sub>
- 4       • Else (if USE\_OLD\_LTU\_MAPPING<sub>r</sub> is included and is equal to '1'), the mobile station
- 5       shall use the previously stored values for the above four variables.
- 6       • If LTU\_INFO\_INCL<sub>r</sub> is equal to '0', then the mobile station shall store the following:
- 7       - FSCH\_LTU\_TAB\_IDS[1] = '000'
- 8       - FSCH\_LTU\_TAB\_IDS[2] = '000'
- 9       - RSCH\_LTU\_TAB\_IDS[1] = '000'
- 10       - RSCH\_LTU\_TAB\_IDS[2] = '000'
- 11       • If PARTITION\_TABLES\_INCL<sub>r</sub> is included and is equal to '1', then the mobile station
- 12       shall store NUM\_PARTITION\_TABLES + 1 instances of the Partition Table which
- 13       determines the number of bits allocated to each service per FCH or DCCH frame as
- 14       follows. Each Partition Table is identified by its PARTITION\_TABLE\_ID.
- 15       - For each of the NUM\_ROWS+1 rows of the Partition Table, the mobile station
- 16       shall store the following:
- 17       + PART\_TAB<sub>s</sub>[PARTITION\_TABLE\_ID<sub>r</sub>][CATEGORY<sub>r</sub>].MUX\_HEADER\_LEN =
- 18       MUX\_HEADER\_LEN<sub>r</sub>
- 19       + PART\_TAB<sub>s</sub>[PARTITION\_TABLE\_ID<sub>r</sub>][CATEGORY<sub>r</sub>].MUX\_HEADER =
- 20       MUX\_HEADER<sub>r</sub>
- 21       + PART\_TAB<sub>s</sub>[PARTITION\_TABLE\_ID<sub>r</sub>][CATEGORY<sub>r</sub>]. NUM\_PARTITIONS =
- 22       NUM\_PARTITIONS<sub>r</sub>
- 23       + For i=1, ..., NUM\_PARTITIONS+1; the mobile station shall store the
- 24       following:
- 25       o PART\_TAB<sub>s</sub>[PARTITION\_TABLE\_ID<sub>r</sub>][CATEGORY<sub>r</sub>]. PARTITION\_SR\_ID[i]
- 26       = SR\_ID<sub>r</sub>
- 27       o PART\_TAB<sub>s</sub>[PARTITION\_TABLE\_ID<sub>r</sub>][CATEGORY<sub>r</sub>]. PARTITION\_NBITS[i]
- 28       = SRV\_NUM\_BITS<sub>r</sub>
- 29       • Else (if PARTITION\_TABLES\_INCL<sub>r</sub> is included and is equal to '0'), the mobile
- 30       station shall use the previously stored values for the PART\_TAB<sub>s</sub>.
- 31       • If USE\_OLD\_PART\_MAPPING<sub>r</sub> is included and is equal to '0', then the mobile
- 32       station shall store the following:
- 33       - FFCH\_PART\_TAB\_ID<sub>s</sub> = FFCH\_PART\_TAB\_ID<sub>r</sub>
- 34       - RFCH\_PART\_TAB\_ID<sub>s</sub> = RFCH\_PART\_TAB\_ID<sub>r</sub>
- 35       - FDCCH\_PART\_TAB\_ID<sub>s</sub> = FDCCH\_PART\_TAB\_ID<sub>r</sub>
- 36       - RDCCH\_PART\_TAB\_ID<sub>s</sub> = RDCCH\_PART\_TAB\_ID<sub>r</sub>

- 1       • If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '0', then the mobile station shall store the  
2       following:
  - 3       - FFCH\_PART\_TAB\_ID<sub>S</sub> = '000'
  - 4       - RFCH\_PART\_TAB\_ID<sub>S</sub> = '000'
  - 5       - FDCCH\_PART\_TAB\_ID<sub>S</sub> = '000'
  - 6       - RDCCH\_PART\_TAB\_ID<sub>S</sub> = '000'
- 7       • If SWITCHING\_PARMS\_INCL<sub>R</sub> is included and equal to '1', set  
8       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to  
9       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1, and  
10       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>S</sub> to  
11       NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>R</sub> + 1.
- 12       • If RPC\_INCL<sub>R</sub> is equal to '1' and the mobile station supports any Radio  
13       Configuration greater than 2, the mobile station shall perform the following:
  - 14       - If RPC\_ADJ\_REC\_TYPE is equal to '0000', the mobile station shall update the  
15       Reverse Channel Adjustment Gain Table (see [2]) containing an offset relative to  
16       the Reverse Pilot Channel power for each reverse link code channel received in  
17       this message.
  - 18       - If RPC\_ADJ\_REC\_TYPE is equal to '0001' or '0010', the mobile station shall  
19       update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing  
20       an offset relative to the Reverse Pilot Channel power for each transmission rate,  
21       frame length, coding type received in this message.
  - 22       - If RPC\_ADJ\_REC\_TYPE is equal to '0011', at the action time of the message, the  
23       mobile station shall update the Reverse Link Attribute Adjustment Gain Table  
24       (see [2]) containing an offset relative to the Reverse Pilot Channel power for the  
25       R-CQICH.
  - 26       - If RPC\_ADJ\_REC\_TYPE is equal to '0100', the mobile station shall do the  
27       following:
    - 28       + At the first R-PDCH frame boundary at or after the action time of the  
29       message, the mobile station shall update the Reverse Link Attribute  
30       Adjustment Gain Table (see [2]) containing an offset relative to the Reverse  
31       Pilot Channel power for any combination of the following channels:
    - 32       o R-REQCH
    - 33       o R-SPICH
    - 34       o R-PDCCH possibly for each encoder packet size, or for the boosted  
35       and non boosted modes
    - 36       o R-PDCH possibly for each encoder packet size, or for the boosted and  
37       non boosted modes, or for each encoder packet size and  
38       transmission round

- 1           +   At the action time of the message, the mobile station shall update the
- 2           Reverse Link Attribute Adjustment Gain Table (see [2]) containing an
- 3           offset relative to the Reverse Pilot Channel power for the R-ACKCH.
  
- 4           +   If REV\_SPICH\_ADJ\_INCL<sub>r</sub> is equal to '1', the mobile station shall set
- 5           REV\_SPICH\_EP\_SIZE<sub>s</sub> to REV\_SPICH\_EP\_SIZE<sub>r</sub>+1.
  
- 6       •   The mobile station shall determine the BCMC Logical-to-Physical Mapping to be
- 7       used as follows:
- 8       -   If BCMC\_LPM\_INCL<sub>r</sub> equals '0', the mobile station shall delete the BCMC
- 9       Logical-to-Physical Mapping currently in use.
- 10       -   If BCMC\_LPM\_IND<sub>r</sub> is included and equals '01', the mobile station shall use the
- 11       BCMC Logical-to-Physical Mapping included in this Non-Negotiable Service
- 12       Configuration Record. The mobile station shall perform the following:
- 13       +   The mobile station shall delete the BCMC Logical-to-Physical Mapping
- 14       currently in use.
  
- 15       +   The mobile station shall store the BCMC Logical-to-Physical Mapping entry
- 16       for each BCMC\_FLOW\_ID (see 2.6.13.11) included in NNSCR.
  
- 17       For each i<sup>th</sup> record of the BCMC Logical-to-Physical Mapping records included in
- 18       the received Non-Negotiable Service Configuration Record:
  
- 19       +   The mobile station shall store the BCMC Logical-to-Physical Mapping
- 20       BCMC flow identifier
- 21       (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].BCMC\_FLOW\_ID<sub>s</sub> =
- 22       ith occurrence of BCMC\_FLOW\_ID (BCMC flow identifier). See section
- 23       2.6.13.11).
  
- 24       +   The mobile station shall store the BCMC Logical-to-Physical Mapping
- 25       Physical Channel
- 26       (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].PHYSICAL\_RESOURCE
- 27       E<sub>s</sub> = PHYSICAL\_RESOURCE<sub>r</sub>).
  
- 28       +   The mobile station shall store the BCMC Logical-to-Physical Mapping
- 29       forward mapping indicator
- 30       (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].FORWARD\_FLAG<sub>s</sub> =
- 31       FORWARD\_FLAG<sub>r</sub>).
  
- 32       +   The mobile station shall store the BCMC Logical-to-Physical Mapping
- 33       reverse mapping indicator
- 34       (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].REVERSE\_FLAG<sub>s</sub> =
- 35       REVERSE\_FLAG<sub>r</sub>).
  
- 36       +   The mobile station shall store the BCMC Logical-to-Physical Mapping
- 37       BSR\_ID included indicator
- 38       (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].BSR\_ID\_INCL<sub>s</sub> =
- 39       BSR\_ID\_INCL<sub>r</sub>).

- 1           + If the BSR\_ID\_INCL<sub>r</sub> is set to '1', the mobile station shall store the following:
  - 2           o BCMC Logical-to-Physical Mapping BSR\_ID
  - 3           (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].BSR\_ID<sub>s</sub> =
  - 4           BSR\_ID<sub>r</sub>).
- 5           + If the BSR\_ID\_INCL<sub>r</sub> is set to '0', the mobile station shall store the following:
  - 6           o BCMC Logical-to-Physical Mapping Forward Traffic Channel traffic type
  - 7           (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].FOR\_TRAFFIC<sub>s</sub> =
  - 8           FOR\_TRAFFIC<sub>r</sub>).
  - 9           o BCMC Logical-to-Physical Mapping Reverse Traffic Channel traffic type
  - 10          (BCMC\_LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[i].REV\_TRAFFIC<sub>s</sub> =
  - 11          REV\_TRAFFIC<sub>r</sub>).
- 12          - If BCMC\_LPM\_IND<sub>r</sub> is included and equals '10', the mobile station shall use the
- 13          BCMC Logical-to-Physical Mapping currently in use.
- 14          • If a BCMC\_FLOW\_ID (See 2.6.13.11) has been omitted from the BCMC Logical-to-
- 15          Physical Mapping, the mobile station shall perform the following:
  - 16          - Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE,*
  - 17          *cause= FLOW\_NOT\_AVAILABLE, reason\_ind)* to the BCMC Service Layer, where
  - 18          reason\_ind is set to CALL\_RELEASE.
  - 19          - Layer 3 shall terminate the call control instance identified by the
  - 20          BCMC\_FLOW\_ID corresponding to the omitted BCMC flow
- 21          • If a BCMC\_FLOW\_ID (See 2.6.13.11) has been added to the BCMC Logical-to-
- 22          Physical Mapping, the mobile station shall perform the following:
  - 23          - Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=SUCCESS)*
  - 24          to the BCMC Service Layer.
  - 25          - Layer 3 shall instantiate a call control instance and identify it by the
  - 26          BCMC\_FLOW\_ID corresponding to the this BCMC flow
- 27          • If REV\_PDCH\_PARMS\_INCL<sub>r</sub> is equal to '1', then the mobile station shall store the
- 28          following:
  - 29          - If REV\_PDCH\_PARMS\_1\_INCL<sub>r</sub> is equal to '1', the base station shall set:
    - 30          + REV\_PDCH\_MAX\_AUTO\_TPR<sub>s</sub> to REV\_PDCH\_MAX\_AUTO\_TPR<sub>r</sub>, and
    - 31          + REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>s</sub> to
    - 32          REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>r</sub>+1.
  - 33          - If REV\_PDCH\_OPER\_PARMS\_INCL<sub>r</sub> is equal to '1', the mobile station shall set:
    - 34          + REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>s</sub> =
    - 35          REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>r</sub>+1,
    - 36          + REV\_PDCH\_DEFAULT\_PERSISTENCE<sub>s</sub> =
    - 37          REV\_PDCH\_DEFAULT\_PERSISTENCE<sub>r</sub>,
    - 38          + REV\_PDCH\_RESET\_PERSISTENCE<sub>s</sub> = REV\_PDCH\_RESET\_PERSISTENCE<sub>r</sub>,

- 1           + REV\_PDCH\_GRANT\_PRECEDENCE<sub>S</sub> = REV\_PDCH\_GRANT\_PRECEDENCE<sub>T</sub>.
- 2           + REV\_PDCH\_ALWAYS\_ACK\_FINAL\_ROUND<sub>S</sub> =
- 3           REV\_PDCH\_ALWAYS\_ACK\_FINAL\_ROUND<sub>T</sub>.
- 4           + REV\_PDCH\_MSIB\_SUPPORTED<sub>S</sub> = REV\_PDCH\_MSIB\_SUPPORTED<sub>T</sub>, and
- 5           + REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND<sub>S</sub> =
- 6           REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND<sub>T</sub>.
- 7           - REV\_PDCH\_BOOST\_PARMES\_INCL<sub>S</sub> to REV\_PDCH\_BOOST\_PARMES\_INCL<sub>T</sub>.
- 8           - If REV\_PDCH\_BOOST\_PARMES\_INCL<sub>S</sub> is equal to '1', the base station shall set
- 9           REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST<sub>S</sub> to
- 10          REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST<sub>T</sub>+1, and
- 11          REV\_PDCH\_BOOST\_OVERSHOOT<sub>S</sub> to REV\_PDCH\_BOOST\_OVERSHOOT<sub>T</sub>.
- 12          - REV\_REQCH\_ENABLED<sub>S</sub> to REV\_REQCH\_ENABLED<sub>T</sub>.
- 13          - If REV\_REQCH\_ENABLED<sub>S</sub> is equal to '0', the mobile station shall set
- 14          REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub> to NULL.
- 15          - If REV\_REQCH\_ENABLED<sub>S</sub> is equal to '1', the mobile station shall set
- 16          REV\_REQCH\_PARMES\_INCL<sub>S</sub> to REV\_REQCH\_PARMES\_INCL<sub>T</sub>; otherwise, the
- 17          mobile station shall set REV\_REQCH\_PARMES\_INCL<sub>S</sub> to '0'.
- 18          - If REV\_REQCH\_PARMES\_INCL<sub>S</sub> is equal to '1', the mobile station shall store the
- 19          following:
- 20           + REV\_REQCH\_QUICK\_REPEAT\_ALLOWED<sub>S</sub> to
- 21           REV\_REQCH\_QUICK\_REPEAT\_ALLOWED<sub>T</sub>.
- 22           + REV\_REQCH\_POWER\_REPORTS\_PARMES\_INCL<sub>S</sub> to
- 23           REV\_REQCH\_POWER\_REPORTS\_PARMES\_INCL<sub>T</sub>.
- 24           + If REV\_REQCH\_POWER\_REPORTS\_PARMES\_INCL<sub>S</sub> is equal to '1', the mobile
- 25           station shall store the following:
- 26           o REV\_REQCH\_POWER\_HEADROOM\_INCREASE<sub>S</sub> to
- 27           REV\_REQCH\_POWER\_HEADROOM\_INCREASE<sub>T</sub>.
- 28           o REV\_REQCH\_POWER\_HEADROOM\_DECREASE<sub>S</sub> to
- 29           REV\_REQCH\_POWER\_HEADROOM\_DECREASE<sub>T</sub>.
- 30           o REV\_REQCH\_HEADROOM\_DURATION<sub>S</sub> to
- 31           REV\_REQCH\_HEADROOM\_DURATION<sub>T</sub>.
- 32           o REV\_REQCH\_MAX\_POWER\_UPDATE\_DURATION<sub>S</sub> to
- 33           REV\_REQCH\_MAX\_POWER\_UPDATE\_DURATION<sub>T</sub>.
- 34          - REV\_PDCH\_CRC\_PARMES\_INCL<sub>S</sub> to REV\_PDCH\_CRC\_PARMES\_INCL<sub>T</sub>.
- 35          - If REV\_PDCH\_CRC\_PARMES\_INCL<sub>S</sub> is equal to '1', the mobile station shall store
- 36          the following:
- 37          + REV\_PDCH\_INIT\_TARGET\_TPR<sub>S</sub> to REV\_PDCH\_INIT\_TARGET\_TPR<sub>T</sub>.

- 1           + REV\_PDCH\_MAX\_TARGET\_TPR<sub>S</sub> to REV\_PDCH\_MAX\_TARGET\_TPR<sub>R</sub>.
- 2           + REV\_PDCH\_QUICK\_START\_THRESH<sub>S</sub> to
- 3           REV\_PDCH\_QUICK\_START\_THRESH<sub>R</sub>.
- 4           + The mobile station shall set ( $k = 0$ ).
- 5           + For  $i = 1$  to  $(11 \times (\text{REV\_PDCH\_EP\_MAP\_LEN}_R + 1))$ , if
- 6           REV\_PDCH\_EP\_MAP<sub>R</sub>[ $i$ ]=1, the mobile station shall set:
- 7
  - o ( $k = k+1$ ),
  - 8           o REV\_PDCH\_STEP\_UP<sub>S</sub>[ $i$ ] to (the  $k^{\text{th}}$  occurrence of
  - 9           REV\_PDCH\_STEP\_UP<sub>R</sub>)/32, and
  - 10           o REV\_PDCH\_STEP\_DOWN<sub>S</sub>[ $i$ ] to (the  $k^{\text{th}}$  occurrence of
  - 11           REV\_PDCH\_STEP\_UP<sub>R</sub>)/32.
- 12          - The mobile station shall set ( $k = 0$ ).
- 13          - For  $i = 0$  to 6, the mobile station shall perform the following:
- 14           + If REV\_PDCH\_SR\_ID\_MAP<sub>R</sub>[ $i$ ]=0, the mobile station shall set
- 15
  - o REV\_PDCH\_BOOST\_ALLOWED<sub>S</sub>[ $i$ ] to NULL , and
  - 16           o REV\_PDCH\_AUTO\_ALLOWED<sub>S</sub>[ $i$ ] to NULL
- 17           + Otherwise, the mobile station shall perform the following:
- 18
  - o The mobile station shall set ( $k = k+1$ )
  - 19           o REV\_PDCH\_BOOST\_ALLOWED<sub>S</sub>[ $i$ ] to the  $k^{\text{th}}$  occurrence of
  - 20           REV\_PDCH\_BOOST\_ALLOWED<sub>R</sub>, and
  - 21           o REV\_PDCH\_AUTO\_ALLOWED<sub>S</sub>[ $i$ ] to the  $k^{\text{th}}$  occurrence of
  - 22           REV\_PDCH\_AUTO\_ALLOWED<sub>R</sub>
- 23          - If REV\_REQCH\_PARMS\_INCL<sub>S</sub> is equal to '1', for  $i = 0$  to 6, if
- 24          REV\_PDCH\_SR\_ID\_MAP<sub>R</sub>[ $i$ ]= '0', the mobile station shall set:
- 25           + REV\_REQCH\_USE\_DEFAULT\_TAB<sub>S</sub>[ $i$ ] to NULL,
- 26           + REV\_PDCH\_BUFFER\_SIZE<sub>S</sub>[ $i$ ] to NULL,
- 27           + REV\_REQCH\_BUF\_QUANT\_PARM\_1<sub>S</sub>[ $i$ ] to NULL,
- 28           + REV\_REQCH\_BUF\_QUANT\_PARM\_2<sub>S</sub>[ $i$ ] to NULL,
- 29           + REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[ $i$ ].REV\_REQCH\_MIN\_DURATION to NULL,
- 30           + REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[ $i$ ]. REV\_REQCH\_USE\_POWER\_REPORTS to
- 31           NULL,
- 32           + REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[ $i$ ].REV\_REQCH\_USE\_BUFFER\_REPORTS to
- 33           NULL,

- 1           + REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_USE\_WATERMARKS to
- 2           NULL,
- 3       - The mobile station shall set (k = 0).
- 4       - If REV\_REQCH\_PARMS\_INCL<sub>S</sub> is equal to '1', the mobile station shall perform
- 5       the following:
- 6           + For i = 0 to 7, if either of the following conditions is true:
- 7               o i < 7, and REV\_PDCH\_SR\_ID\_MAP[i]='1', or
- 8               o i=7,
- 9           the mobile station shall perform the following:
- 10           o The mobile station shall set (k = k+1).
- 11           o The mobile station shall set
- 12               REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_MIN\_DURATION to
- 13               REV\_REQCH\_MIN\_DURATION<sub>r</sub> × 16, using the k<sup>th</sup> occurrence of
- 14               REV\_REQCH\_MIN\_DURATION<sub>r</sub>;
- 15           o The mobile station shall set REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].
- 16               REV\_REQCH\_USE\_POWER\_REPORTS to the k<sup>th</sup> occurrence of
- 17               REV\_REQCH\_USE\_POWER\_REPORTS<sub>r</sub>;
- 18           o The mobile station shall set
- 19               REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_USE\_BUFFER\_REPORT
- 20               S to the k<sup>th</sup> occurrence of REV\_REQCH\_USE\_BUFFER\_REPORTS<sub>r</sub>;
- 21           o The mobile station shall set
- 22               REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_USE\_WATERMARKS to
- 23               the k<sup>th</sup> occurrence of REV\_REQCH\_USE\_WATERMARKS<sub>r</sub>;
- 24           o If any of the following conditions are true,
- 25               ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].
- 26               REV\_REQCH\_USE\_BUFFER\_REPORTS is equal to '1'.
- 27               ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].
- 28               REV\_REQCH\_USE\_POWER\_REPORTS is equal to '1'.
- 29               ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_USE\_WATERMARKS
- 30               is equal to '1'.
- 31               ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_USE\_WATERMARKS
- 32               is equal to '1'.
- 33           The mobile station shall perform the following:

- 1                   ◇ The mobile station shall set REV\_REQCH\_USE\_DEFAULT\_TAB<sub>S</sub>[i] to  
2                   the k<sup>th</sup> occurrence of REV\_REQCH\_USE\_DEFAULT\_TAB<sub>R</sub>.
- 3                   ◇ If REV\_REQCH\_USE\_DEFAULT\_TAB<sub>S</sub>[i] is equal to '000', then, for j =  
4                   1 to 13, the mobile station shall set REV\_PDCH\_BUFFER\_SIZE<sub>S</sub>[i][j]  
5                   to  
6                    $2 \times \text{REV\_REQCH\_BUF\_QUANT\_PARAM\_1}_R \times j^2 +$   
7                    $\text{REV\_REQCH\_BUF\_QUANT\_PARAM\_2}_R \times j$ ,  
8                   using the k<sup>th</sup> occurrences of REV\_REQCH\_BUF\_QUANT\_PARAM\_1<sub>R</sub>,  
9                   and REV\_REQCH\_BUF\_QUANT\_PARAM\_2<sub>R</sub>.
- 10                  ◇ If REV\_REQCH\_USE\_DEFAULT\_TAB<sub>S</sub>[i] is not equal to '000', then,  
11                  for j = 1 to 13, the mobile station shall set  
12                  REV\_PDCH\_BUFFER\_SIZE<sub>S</sub>[i][j] to the buffer size value specified in  
13                  the j<sup>th</sup> row of the buffer size table corresponding to  
14                  REV\_REQCH\_USE\_DEFAULT\_TAB<sub>S</sub>[i].
- 15                  ○ If REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_USE\_WATERMARKS  
16                  is equal to '1', the mobile station shall store the following:
- 17                  ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].  
18                  REV\_REQCH\_HIGH\_WATERMARK to  
19                  REV\_REQCH\_HIGH\_WATERMARK\_1<sub>R</sub> ×  
20                   $8^{\text{REV\_REQCH\_HIGH\_WATERMARK\_2}_R}$ , using the k<sup>th</sup> occurrences of  
21                  REV\_REQCH\_HIGH\_WATERMARK\_1<sub>R</sub> and  
22                  REV\_REQCH\_HIGH\_WATERMARK\_2<sub>R</sub>.
- 23                  ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_LOW\_WATERMARK  
24                  to REV\_REQCH\_LOW\_WATERMARK\_1<sub>R</sub> ×  
25                   $8^{\text{REV\_REQCH\_LOW\_WATERMARK\_2}_R}$ , using the k<sup>th</sup> occurrences of  
26                  REV\_REQCH\_LOW\_WATERMARK\_1<sub>R</sub> and  
27                  REV\_REQCH\_LOW\_WATERMARK\_2<sub>R</sub>.
- 28                  ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_CEILING to  
29                  REV\_REQCH\_CEILING\_1<sub>R</sub> ×  $8^{\text{REV\_REQCH\_CEILING\_2}_R}$ ,  
30                  using the k<sup>th</sup> occurrences of REV\_REQCH\_CEILING\_1<sub>R</sub> and  
31                  REV\_REQCH\_CEILING\_2<sub>R</sub>.
- 32                  ◇ REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub>[i].REV\_REQCH\_FLOOR<sub>S</sub>[i] to  
33                  REV\_REQCH\_FLOOR\_1<sub>R</sub> ×  $8^{\text{REV\_REQCH\_FLOOR\_2}_R}$ ,  
34                  using the k<sup>th</sup> occurrences of REV\_REQCH\_FLOOR\_1<sub>R</sub>, and  
35                  REV\_REQCH\_FLOOR\_2<sub>R</sub>.

#### 36 2.6.4.1.14 Processing the Security Mode Command Message

37 The mobile station shall process the received *Security Mode Command Message* as follows:

- 38                  • The mobile station shall set D\_SIG\_ENCRYPT\_MODE<sub>S</sub> to D\_SIG\_ENCRYPT\_MODE<sub>R</sub>.
- 39                  • If MSG\_INTEGRITY\_SUP is set to '0', the mobile station shall perform the following:



- 1       – If  $D\_SIG\_ENCRYPT\_MODE_r$  is not equal to '000', the mobile station shall
- 2       perform the following:
- 3       + Set  $ENCRYPT\_MODE_s$  to '11'
- 4       + Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself
- 5       (the CMEAKEY is associated with the AUTHR of the *Origination Message* or
- 6       *Page Response Message*, or the CMEAKEY associated with the AUTHU
- 7       generated during Unique Challenge-Response procedure as described in
- 8       2.3.12.1.4).
- 9       + Set  $ENC\_KEY[KEY\_ID]$  to the 128-bit pattern.
- 10      + Set  $TX\_EXT\_SSEQ[0][KEY\_ID]$ ,  $TX\_EXT\_SSEQ[1][KEY\_ID]$ ,
- 11       $RX\_EXT\_SSEQ[0][KEY\_ID]$ , and  $RX\_EXT\_SSEQ[1][KEY\_ID]$  to  $1 + 256 \times$
- 12       $NEW\_SSEQ\_H$  if either of the following conditions is true:
  - 13       o The  $NEW\_SSEQ\_H$  field is included in the last *Origination Message* or
  - 14       *Page Response Message* and  $TX\_EXT\_SSEQ[0][KEY\_ID]$  and
  - 15        $TX\_EXT\_SSEQ[1][KEY\_ID]$  have not been initialized by the last *Channel*
  - 16       *Assignment Message*, *Extended Channel Assignment Message*, or an
  - 17       earlier f-dsch *Security Mode Command Message* (see 2.3.12.4.1.3).
  - 18       o This message is a response to a *Security Mode Request Message* (see
  - 19       2.3.12.4.1.3) that includes an  $NEW\_SSEQ\_H$  field.
- 20      • If  $MSG\_INTEGRITY\_SUP$  is set to '1' and  $CHANGE\_KEYS_r$  is set to '1', the mobile
- 21      station shall perform the following:
  - 22       – Set  $KEY\_ID$  to  $SDU\_KEY\_ID$  provided by the LAC Layer (see [4]).
  - 23       – Set  $ENCRYPT\_MODE_s$  to '11'.
  - 24       – If  $KEY\_ID$  is equal to '00' or '01', the mobile station shall perform the following:
    - 25           + Set  $TX\_EXT\_SSEQ[0][KEY\_ID]$ ,  $TX\_EXT\_SSEQ[1][KEY\_ID]$ ,
    - 26            $RX\_EXT\_SSEQ[0][KEY\_ID]$ , and  $RX\_EXT\_SSEQ[1][KEY\_ID]$  to  $1 + 256 \times$
    - 27            $NEW\_SSEQ\_H$  included in the *Origination Message*, *Page Response*
    - 28           *Message*, or *Security Mode Request Message*).
    - 29           + Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself
    - 30           (the CMEAKEY is associated with the AUTHR of the *Origination Message* or
    - 31           *Page Response Message*, or the CMEAKEY associated with the AUTHU
    - 32           generated during the Unique Challenge-Response procedure as described in
    - 33           2.3.12.1.4).
    - 34           + Set  $ENC\_KEY[KEY\_ID]$  to the 128-bit pattern.
    - 35           + Set  $INT\_KEY[KEY\_ID]$  to the 128-bit pattern.
    - 36           + Set  $LAST\_2G\_KEY\_ID_s$  to  $KEY\_ID$ .
    - 37       – If  $KEY\_ID$  is equal to '10' or '11', the mobile station shall perform the following:

- 1           + Set TX\_EXT\_SSEQ[0][KEY\_ID][0], TX\_EXT\_SSEQ[1][KEY\_ID],  
2           RX\_EXT\_SSEQ[0][KEY\_ID][0], and RX\_EXT\_SSEQ[1][KEY\_ID] to  $1 + 256 \times$   
3           NEW\_SSEQ\_H included in the *Authentication Response Message* or *Security*  
4           *Mode Request Message*.
- 5           + Set ENC\_KEY[KEY\_ID] to the latest CK generated by AKA.
- 6           + Set INT\_KEY[KEY\_ID] to the latest IK generated by AKA.
- 7           + Set LAST\_3G\_KEY\_IDS to KEY\_ID.
- 8           + If the mobile station supports R-UIM, then the mobile shall set USE\_UAK<sub>S</sub>  
9           to USE\_UAK<sub>R</sub>; otherwise, the mobile station shall perform the following:
  - 10           o Set USE\_UAK<sub>S</sub> to '0'.
  - 11           o If USE\_UAK<sub>R</sub> is equal to '1', then the mobile station shall send a *Mobile*  
12           *Station Reject Order* with ORDQ equal to '00010100' (UAK not  
13           supported).
- 14          – Send a *Security Mode Completion Order*.
- 15          • For each of the service option connections specified by the CON\_REF field included  
16          in this message, the mobile station shall set the user information encryption mode  
17          in the corresponding service option connection record (SO\_CON\_REC<sub>S</sub>[i]) to  
18          UI\_ENCRYPT\_MODE<sub>R</sub> (i.e., set SO\_CON\_REC<sub>S</sub>[i].UI\_ENCRYPT\_MODE to  
19          UI\_ENCRYPT\_MODE<sub>R</sub> where SO\_CON\_REC<sub>S</sub>[i].CON\_REF = CON\_REF<sub>R</sub>).
- 20          • For each of the service option connections specified by the CON\_REF field included  
21          in this message, at the action time of the message the mobile station shall start  
22          encrypting user information (e.g., voice and data) using the encryption algorithm  
23          specified by SO\_CON\_REC<sub>S</sub>[i].UI\_ENCRYPT\_MODE where  
24          SO\_CON\_REC<sub>S</sub>[i].CON\_REF = CON\_REF<sub>R</sub> (see Table 3.7.4.5-1).
- 25          • If ENC\_KEY\_SIZE<sub>R</sub> is included, the mobile station shall set ENC\_KEY\_SIZE<sub>S</sub> to  
26          ENC\_KEY\_SIZE<sub>R</sub>.
- 27          • If ENC\_KEY\_SIZE<sub>R</sub> is included and not set to reserved value and if current key  
28          strength is greater than the desired key strength specified by ENC\_KEY\_SIZE<sub>R</sub>  
29          according to table 3.7.4.5-2, mobile station shall perform the key strength  
30          reduction algorithm procedures to reduce the key strength of ENC\_KEY[KEY\_ID]  
31          according to ENC\_KEY\_SIZE<sub>R</sub> as described in 2.3.12.5.4. The current key strength  
32          is 64 bit if KEY\_ID is equal to '00' or '01' and is 128 bit if KEY\_ID is equal to '10' or  
33          '11'.
- 34          • If C\_SIG\_ENCRYPT\_MODE is included, the mobile station shall set  
35          C\_SIG\_ENCRYPT\_MODE<sub>S</sub> to C\_SIG\_ENCRYPT\_MODE<sub>R</sub>.

#### 36 2.6.4.1.15 Processing the Handoff Supplementary Information Solicit Message

37 If the mobile station receives a *Handoff Supplementary Information Solicit Message* from the  
38 base station, it shall transmit a *Handoff Supplementary Information Notification Message* to  
39 the base station. If the supplementary information for a pilot requested in the *Handoff*  
40 *Supplementary Information Solicit Message* is available, then the mobile station should

1 include the supplementary information for this pilot.

## 2 2.6.4.2 Traffic Channel Initialization Substate

3 In this substate, the mobile station verifies that it can receive the Forward Traffic Channel  
4 and begins transmitting on the Reverse Traffic Channel.

5 If this substate is entered from the *Traffic Channel Substate* of the *Mobile Station Control* on  
6 the *Traffic Channel State* with an Initialization Failure indication, the mobile station shall  
7 perform the procedures as specified in 2.6.4.2.1, and shall not perform any of the  
8 remaining procedures in this section.

9 Otherwise, upon entering the *Traffic Channel Initialization Substate*, the mobile station  
10 shall perform the following:

- 11 • The mobile station shall perform registration initialization as specified in  
12 2.6.5.5.4.1.
- 13 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to reset the  
14 acknowledgment procedures as specified in [4].
- 15 • The mobile station shall initialize Forward Traffic Channel power control as  
16 specified in 2.6.4.1.1.1.
- 17 • The mobile station shall initialize the list TAG\_OUTSTANDING\_LIST to be empty.
- 18 • If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall set CS\_SUPPORTED<sub>S</sub>  
19 to '0'.
- 20 • If P\_REV\_IN\_USE<sub>S</sub> is less than nine, the mobile station shall set  
21 FOR\_PDCH\_SUPPORTED<sub>S</sub> to '0'.
- 22 • The mobile station shall set USE\_ERAM<sub>S</sub> to '0'.
- 23 • The mobile station shall set the following variables to their initial default values  
24 given below:
  - 25 – If the mobile station had included the FOR\_PDCH Capability Type-specific fields  
26 in the *Origination Message* or *Page Response Message*, the mobile station shall  
27 store one plus the value included in the ACK\_DELAY field of the message as  
28 ACK\_DELAY and the value included in the NUM\_ARQ\_CHAN field of the  
29 message as NUM\_ARQ\_CHAN.
  - 30 – Default power control step size  
31 (PWR\_CNTL\_STEP<sub>S</sub> = '000')
  - 32 – Default Reverse Supplemental Channel power offset adjustment relative to  
33 Reverse Pilot Channel power
    - 34 + RL\_GAIN\_SCH\_PILOT<sub>S</sub> [0] = '000000'
    - 35 + RL\_GAIN\_SCH\_PILOT<sub>S</sub> [1] = '000000'
  - 36 – Default Reverse Discontinuous Transmission Duration on Reverse  
37 Supplemental Code Channel (REV\_DTX\_DURATION<sub>S</sub> = '0000')

- 1       – Default Reverse Discontinuous Transmission Duration on Reverse  
2       Supplemental Channel (REV\_SCH\_DTX\_DURATION<sub>S</sub> = '0000')
- 3       – Default channel on which the mobile station is to perform the primary inner  
4       loop estimation and the base station is to multiplex the Power Control  
5       Subchannel:
  - 6       + If CH\_IND<sub>S</sub> is equal to '01' or if EXT\_CH\_IND<sub>S</sub> indicates that F-FCH is  
7       assigned and F-DCCH is not assigned, the mobile station shall set  
8       FPC\_PRI\_CHAN<sub>S</sub> to '0'.
  - 9       + If CH\_IND<sub>S</sub> is equal to '10' or if EXT\_CH\_IND<sub>S</sub> indicates that F-DCCH is  
10      assigned and F-FCH is not assigned, the mobile station shall set  
11      FPC\_PRI\_CHAN<sub>S</sub> to '1'.
  - 12     + If EXT\_CH\_IND<sub>S</sub> indicates that neither F-FCH nor F-DCCH is assigned, the  
13     mobile station shall set FPC\_PRI\_CHAN<sub>S</sub> to NULL.
- 14      – Default forward power control operation mode used except during the forward  
15      Supplemental Channel interval  
16      (FPC\_MODE\_NO\_SCH<sub>S</sub> = '000')
- 17      – Default forward power control operation mode used during the forward  
18      Supplemental Channel interval  
19      (FPC\_MODE\_SCH<sub>S</sub> = '000')
- 20      – Default forward power control operation mode  
21      (FPC\_MODE<sub>S</sub> = '000')
- 22      – Slotted timer (T\_SLOTTED<sub>S</sub> = T<sub>74m</sub>)
- 23      – Reduced slot cycle mode enabled indicator (RSC\_MODE\_ENABLED = NO).
- 24      – Radio environment reporting mode enabled indicator (RER\_MODE\_ENABLED =  
25      NO).
- 26      – Tracking zone mode enabled indicator (TKZ\_MODE\_ENABLED = NO).
- 27      – Tracking zone mode pending indicator (TKZ\_MODE\_PENDING = NO).
- 28      – Default Reverse Pilot Channel gating (PILOT\_GATING\_USE\_RATE='0')
- 29      – Default begin preamble for Reverse Supplemental Code Channels  
30      (BEGIN\_PREAMBLE<sub>S</sub> = '000')
- 31      – Default resume preamble for Reverse Supplemental Code Channels  
32      (RESUME\_PREAMBLE<sub>S</sub> = '000')
- 33      – Default start time for Reverse Supplemental Code Channel assignment  
34      (REV\_START\_TIME<sub>S</sub> = NULL)
- 35      – Default retry delays:
  - 36      + RETRY\_DELAY<sub>S</sub>[010] = 0
  - 37      + RETRY\_DELAY<sub>S</sub>[011] = 0

- 1        – Default neighbor pilot strength measurement threshold offset  
2        ( $T\_MULCHAN_S = '000'$ )
- 3        – Default start time for forward Supplemental Code Channel Assignment  
4        ( $FOR\_START\_TIME_S = NULL$ )
- 5        – Default number of Reverse Supplemental Code Channels  
6        ( $NUM\_REV\_CODES_S = '000'$ )
- 7        – Default reverse use  $T\_ADD$  abort indicator  
8        ( $USE\_T\_ADD\_ABORT_S = '0'$ )
- 9        – Default *Supplemental Channel Request Message* sequence number  
10       ( $SCRM\_SEQ\_NUM_S = NULL$ )
- 11       – Default indicator to ignore reverse Supplemental Code Channel assignment  
12       ( $IGNORE\_SCAM_S = '0'$ )
- 13       – Default indicator to ignore reverse Supplemental Channel assignment  
14       ( $IGNORE\_ESCAM_S = '0'$ )
- 15       – Default search period for the candidate search  
16       ( $SEARCH\_PERIOD_S = '1111'$ )
- 17       – Default search window size for the Candidate Frequency Search Set  
18       ( $CF\_SRCH\_WIN\_N_S = SRCH\_WIN\_N_S$ )
- 19       – Default search window size for the Remaining Set on the CDMA Candidate  
20       Frequency ( $CF\_SRCH\_WIN\_R_S = SRCH\_WIN\_R_S$ )
- 21       – Default pilot PN sequence offset increment for the CDMA Candidate Frequency  
22       ( $CF\_PILOT\_INC_S = PILOT\_INC_S$ )
- 23       – Default Candidate Frequency search priorities included indicator  
24       ( $CF\_SEARCH\_PRIORITY\_INCL_S = '0'$ )
- 25       – Default Candidate Frequency search window size included indicator  
26       ( $CF\_SRCH\_WIN\_NGHBR\_INCL_S = '0'$ )
- 27       – Default Candidate Frequency search window offset included indicator  
28       ( $CF\_SRCH\_OFFSET\_INCL_S = '0'$ )
- 29       – Default periodic search indicator  
30       ( $PERIODIC\_SEARCH_S = '0'$ )
- 31       – Default return-if-handoff-fail indicator  
32       ( $RETURN\_IF\_HANDOFF\_FAIL_S = '0'$ )
- 33       – Default total pilot  $E_c/I_0$  threshold  
34       ( $MIN\_TOTAL\_PILOT\_EC\_IO_S = '00000'$ )
- 35       – Default total pilot  $E_c$  threshold  
36       ( $SF\_TOTAL\_EC\_THRESH_S = '11111'$ )
- 37       – Default total pilot  $E_c/I_0$  threshold  
38       ( $SF\_TOTAL\_EC\_IO\_THRESH_S = '11111'$ )

- 1           – Default received power difference threshold
- 2           (DIFF\_RX\_PWR\_THRESH<sub>S</sub> = '00000')
- 3           – Default maximum wait time on the CDMA Target Frequency
- 4           (TF\_WAIT\_TIME<sub>S</sub> = '1111')
- 5           – Default Candidate Frequency Search Set
- 6           (Candidate Frequency Search Set is empty)
- 7           – Default Candidate Frequency CDMA band
- 8           (CF\_CDMABAND<sub>S</sub> = NULL)
- 9           – Default Candidate Frequency CDMA channel
- 10          (CF\_CDMACH<sub>S</sub> = NULL)
- 11          – Default indicator for 5ms frames on Fundamental Channel
- 12          (FCH\_5MS\_FRAMES<sub>S</sub> = '0')
- 13          – Default indicator for 5ms frames on Dedicated Control Channel
- 14          (DCCH\_5MS\_FRAMES<sub>S</sub> = '0')
- 15          – Default start time unit for Supplemental Channel
- 16          (START\_TIME\_UNIT<sub>S</sub> = '000')
- 17          – Default Forward Supplemental Channel FER report indicator
- 18          (FOR\_SCH\_FER\_REP<sub>S</sub> = '0')
- 19          – Default Forward Supplemental Channel Configuration parameters:
- 20           + Set the Forward Supplemental Channel frame length
- 21           FOR\_SCH\_FRAME\_LENGTH<sub>S</sub>[0] to NULL.
- 22           + Set the Forward Supplemental Channel Multiplex Option
- 23           FOR\_SCH\_MUX<sub>S</sub>[0] to NULL.
- 24           + Set the Forward Supplemental Channel Radio Configuration
- 25           FOR\_SCH\_RC<sub>S</sub>[0] to NULL.
- 26           + Set the Forward Supplemental Channel Coding Type FOR\_SCH\_CODING<sub>S</sub>[0]
- 27           to NULL.
- 28           + Set QOF\_IDS[0][SCCL\_INDEX<sub>S</sub>][i] to NULL, for all integer values of i from 0
- 29           to 15.
- 30           + Set FOR\_SCH\_CC\_INDEX<sub>S</sub> [0][SCCL\_INDEX<sub>S</sub>][i] to NULL, for all integer
- 31           values of i from 0 to 15.
- 32           + Set the Forward Supplemental Channel frame length
- 33           FOR\_SCH\_FRAME\_LENGTH<sub>S</sub>[1] to NULL.
- 34           + Set the Forward Supplemental Channel Multiplex Option
- 35           FOR\_SCH\_MUX<sub>S</sub>[1] to NULL.
- 36           + Set the Forward Supplemental Channel Radio Configuration
- 37           FOR\_SCH\_RC<sub>S</sub>[1] to NULL.

- 1           + Set the Forward Supplemental Channel Coding Type FOR\_SCH\_CODING<sub>S</sub>[1]
- 2           to NULL.
- 3           + Set QOF\_IDS[1][SCCL\_INDEX<sub>S</sub>][i] to NULL, for all integer values of i from 0
- 4           to 15.
- 5           + Set FOR\_SCH\_CC\_INDEX<sub>S</sub> [1][SCCL\_INDEX<sub>S</sub>][i] to NULL, for all integer
- 6           values of i from 0 to 15.
- 7        - Call Origination Transaction Identifier
- 8        (TAG<sub>S</sub> = '0000').
- 9        - Default Reverse Supplemental Channel Configuration parameters:
- 10       + REV\_WALSH\_IDS[0][0000] = 1
- 11       + REV\_WALSH\_IDS[0][0001] = 1
- 12       + REV\_WALSH\_IDS[0][0010] = 1
- 13       + REV\_WALSH\_IDS[0][0011] = 1
- 14       + REV\_WALSH\_IDS[0][0100] = 0
- 15       + REV\_WALSH\_IDS[0][0101] = 0
- 16       + REV\_WALSH\_IDS[0][0110] = 0
- 17       + REV\_WALSH\_IDS[1][0000] = 1
- 18       + REV\_WALSH\_IDS[1][0001] = 1
- 19       + REV\_WALSH\_IDS[1][0010] = 1
- 20       + REV\_WALSH\_IDS[1][0011] = 0
- 21       + REV\_WALSH\_IDS[1][0100] = 0
- 22       + REV\_WALSH\_IDS[1][0101] = 0
- 23       + REV\_WALSH\_IDS[1][0110] = 0
- 24       + Set the Reverse Supplemental Channel frame length
- 25       REV\_SCH\_FRAME\_LENGTH<sub>S</sub>[0] to NULL.
- 26       + Set the Reverse Supplemental Channel Multiplex Option REV\_SCH\_MUX<sub>S</sub>[0]
- 27       to NULL.
- 28       + Set the Reverse Supplemental Channel Radio Configuration
- 29       REV\_SCH\_RC<sub>S</sub>[0] to NULL.
- 30       + Set the Reverse Supplemental Channel Coding Type REV\_SCH\_CODING<sub>S</sub>[0]
- 31       to NULL.
- 32       + Set the Reverse Supplemental Channel frame length
- 33       REV\_SCH\_FRAME\_LENGTH<sub>S</sub>[1] to NULL.
- 34       + Set the Reverse Supplemental Channel Multiplex Option REV\_SCH\_MUX<sub>S</sub>[1]
- 35       to NULL.

- 1           + Set the Reverse Supplemental Channel Radio Configuration  
2           REV\_SCH\_RC<sub>S</sub>[1] to NULL.
- 3           + Set the Reverse Supplemental Channel Coding Type REV\_SCH\_CODING<sub>S</sub>[1]  
4           to NULL.
- 5           • If P\_REV\_IN\_USE<sub>S</sub> is greater than six and the ASSIGN\_MODE<sub>R</sub> field of the *Channel*  
6           *Assignment Message* or *Extended Channel Assignment Message* is equal to '000' or  
7           '100', then the mobile station shall initialize the logical to physical mapping table  
8           (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE) according to the requirements in Table  
9           2.6.4.2-1:

**Table 2.6.4.2-1. Default Logical to Physical Mapping Table, ASSIGN\_MODE<sub>R</sub> equal to '000' or '100'**

SR_ID	LOGICAL_ RESOURCE	PHYSICAL_ RESOURCE	FORWARD_ FLAG	REVERSE_ FLAG	PRIORITY
000	0001	(shall be set according to requirement 2)	1	1	0000
(shall be set according to requirement 1)	0000	(shall be set according to requirement 3)	1	1	0000

Where requirement 1 is as follows:

- + The SR\_ID field shall be set to NULL.

Requirement 2 is as follows:

- + If CH\_IND<sub>S</sub> is equal to '01', the PHYSICAL\_RESOURCE field shall be set to '0000'.
- + If CH\_IND<sub>S</sub> is equal to '10', the PHYSICAL\_RESOURCE field shall be set to '0001'.
- + If CH\_IND<sub>S</sub> is equal to '11', there shall be two entries in the default LPM table where the PHYSICAL\_RESOURCE field shall be set to '0000' and '0001' respectively.

Requirement 3 is as follows:



- 1           + If CH\_IND<sub>S</sub> is equal to '01':
- 2           o If the Radio Configuration in use is less than three, the
- 3           PHYSICAL\_RESOURCE field shall be set to '0000'; otherwise, there shall
- 4           be three entries in the default LPM table where the
- 5           PHYSICAL\_RESOURCE field shall be set to '0000', '0010', and '0011'
- 6           respectively.
- 7           + If CH\_IND<sub>S</sub> is equal to '10':
- 8           o There shall be three entries in the default LPM table where the
- 9           PHYSICAL\_RESOURCE field shall be set to '0001', '0010', and '0011'
- 10          respectively.
- 11          + If CH\_IND<sub>S</sub> is equal to '11':
- 12          o There shall be four entries in the default LPM table where the
- 13          PHYSICAL\_RESOURCE field shall be set to '0000', '0001', '0010', and
- 14          '0011' respectively.
- 15          • If the ASSIGN\_MODE<sub>r</sub> field of the *Extended Channel Assignment Message* is equal
- 16          to '101', then the mobile station shall initialize the logical to physical mapping table
- 17          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE) according to the requirements in Table
- 18          2.6.4.2-2:

19          **Table 2.6.4.2-2. Default Logical to Physical Mapping Table, ASSIGN\_MODE<sub>r</sub> equal to**  
 20          **'101'**

SR_ID	LOGICAL_ RESOURCE	PHYSICAL_ RESOURCE	FORWARD_ FLAG	REVERSE_ FLAG	PRIORIT Y
000	0001	(shall be set according to requirement 2)	(shall be set according to requirement 2)	(shall be set according to requirement 2)	0000
(shall be set according to requirement 1)	0000	(shall be set according to requirement 3)	(shall be set according to requirement 3)	(shall be set according to requirement 3)	0000

21          Where requirement 1 is as follows:

- 22          + The SR\_ID field shall be set to NULL.

23          Requirement 2 is as follows:

- 24          + If EXT\_CH\_IND<sub>S</sub> is equal to '00001', then there shall be two entries in the
- 25          default LPM table where the mobile station shall set:

- 1           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 2           REVERSE\_FLAG to '0' for the first entry, and
- 3           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '0', and
- 4           REVERSE\_FLAG to '1' for the second entry.
- 5       + If EXT\_CH\_IND<sub>S</sub> is equal to '00010', then there shall be two entries in the
- 6       default LPM table where the mobile station shall set:
- 7           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 8           REVERSE\_FLAG to '0' for the first entry, and
- 9           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
- 10          REVERSE\_FLAG to '1' for the second entry.
- 11       + If EXT\_CH\_IND<sub>S</sub> is equal to '00011', then the mobile station shall set
- 12       PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 13       REVERSE\_FLAG to '1'.
- 14       + If EXT\_CH\_IND<sub>S</sub> is equal to '00100', then the mobile station shall set
- 15       PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
- 16       REVERSE\_FLAG to '1'.
- 17       + If EXT\_CH\_IND<sub>S</sub> is equal to '00101', then there shall be two entries in the
- 18       default LPM table where the mobile station shall set:
- 19           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 20           REVERSE\_FLAG to '1' for the first entry, and
- 21           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
- 22           REVERSE\_FLAG to '1' for the second entry.
- 23       + If EXT\_CH\_IND<sub>S</sub> is equal to '00110', then there shall be two entries in the
- 24       default LPM table where the mobile station shall set:
- 25           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 26           REVERSE\_FLAG to '1' for the first entry, and
- 27           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
- 28           REVERSE\_FLAG to '1' for the second entry.
- 29       + If EXT\_CH\_IND<sub>S</sub> is equal to '01000', then the mobile station shall set
- 30       PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 31       REVERSE\_FLAG to '1'.
- 32       + If EXT\_CH\_IND<sub>S</sub> is equal to '01001', then there shall be two entries in the
- 33       default LPM table where the mobile station shall set:
- 34           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 35           REVERSE\_FLAG to '1' for the first entry, and
- 36           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '0', and
- 37           REVERSE\_FLAG to '1' for the second entry.
- 38       + If EXT\_CH\_IND<sub>S</sub> is equal to '01010', then there shall be two entries in the
- 39       default LPM table where the mobile station shall set:

- 1           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 2           REVERSE\_FLAG to '1' for the first entry, and
- 3           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
- 4           REVERSE\_FLAG to '1' for the second entry.
- 5       + If EXT\_CH\_IND<sub>S</sub> is equal to '01011', then there shall be two entries in the
- 6       default LPM table where the mobile station shall set:
- 7           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '0', and
- 8           REVERSE\_FLAG to '1' for the first entry, and
- 9           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 10          REVERSE\_FLAG to '1' for the second entry.
- 11       + If EXT\_CH\_IND<sub>S</sub> is equal to '01100', then there shall be two entries in the
- 12       default LPM table where the mobile station shall set:
- 13           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '0', and
- 14           REVERSE\_FLAG to '1' for the first entry, and
- 15           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
- 16           REVERSE\_FLAG to '1' for the second entry.
- 17       + If EXT\_CH\_IND<sub>S</sub> is equal to '01101', then there shall be three entries in the
- 18       default LPM table where the mobile station shall set:
- 19           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '0', and
- 20           REVERSE\_FLAG to '1' for the first entry, and
- 21           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 22           REVERSE\_FLAG to '1' for the second entry, and
- 23           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
- 24           REVERSE\_FLAG to '1' for the third entry.
- 25       + If EXT\_CH\_IND<sub>S</sub> is equal to '01110', then there shall be three entries in the
- 26       default LPM table where the mobile station shall set:
- 27           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '0', and
- 28           REVERSE\_FLAG to '1' for the first entry, and
- 29           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 30           REVERSE\_FLAG to '1' for the second entry, and
- 31           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
- 32           REVERSE\_FLAG to '1' for the third entry.

33 Requirement 3 is as follows:

- 34       + If EXT\_CH\_IND<sub>S</sub> is equal to '00001', then there shall be four entries in the
- 35       default LPM table where the mobile station shall set:
- 36           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '0', and
- 37           REVERSE\_FLAG to '1' for the first entry,

- 1           o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '0', and
- 2           REVERSE\_FLAG to '1' for the second entry,
- 3           o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '0', and
- 4           REVERSE\_FLAG to '1' for the third entry, and
- 5           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 6           REVERSE\_FLAG to '0' for the fourth entry.
- 7       + If EXT\_CH\_IND<sub>S</sub> is equal to '00010', then there shall be four entries in the
- 8       default LPM table where the mobile station shall set:
  - 9           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
  - 10          REVERSE\_FLAG to '1' for the first entry,
  - 11          o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '0', and
  - 12          REVERSE\_FLAG to '1' for the second entry,
  - 13          o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '0', and
  - 14          REVERSE\_FLAG to '1' for the third entry, and
  - 15          o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
  - 16          REVERSE\_FLAG to '0' for the fourth entry.
- 17       + If EXT\_CH\_IND<sub>S</sub> is equal to '00011', then there shall be four entries in the
- 18       default LPM table where the mobile station shall set:
  - 19           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
  - 20           REVERSE\_FLAG to '1' for the first entry,
  - 21           o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
  - 22           REVERSE\_FLAG to '1' for the second entry,
  - 23           o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
  - 24           REVERSE\_FLAG to '1' for the third entry, and
  - 25           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
  - 26           REVERSE\_FLAG to '0' for the fourth entry.
- 27       + If EXT\_CH\_IND<sub>S</sub> is equal to '00100', then there shall be four entries in the
- 28       default LPM table where the mobile station shall set:
  - 29           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
  - 30           REVERSE\_FLAG to '1' for the first entry,
  - 31           o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
  - 32           REVERSE\_FLAG to '1' for the second entry,
  - 33           o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
  - 34           REVERSE\_FLAG to '1' for the third entry, and
  - 35           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
  - 36           REVERSE\_FLAG to '0' for the fourth entry.
- 37       + If EXT\_CH\_IND<sub>S</sub> is equal to '00101', then there shall be five entries in the
- 38       default LPM table where the mobile station shall set:

- 1           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 2           REVERSE\_FLAG to '1' for the first entry,
- 3           o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
- 4           REVERSE\_FLAG to '1' for the second entry,
- 5           o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
- 6           REVERSE\_FLAG to '1' for the third entry,
- 7           o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
- 8           REVERSE\_FLAG to '1' for the fourth entry, and
- 9           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 10          REVERSE\_FLAG to '0' for the fifth entry.
- 11       + If EXT\_CH\_IND<sub>S</sub> is equal to '00110', then there shall be five entries in the
- 12       default LPM table where the mobile station shall set:
- 13          o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 14          REVERSE\_FLAG to '1' for the first entry,
- 15          o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
- 16          REVERSE\_FLAG to '1' for the second entry,
- 17          o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
- 18          REVERSE\_FLAG to '1' for the third entry,
- 19          o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
- 20          REVERSE\_FLAG to '1' for the fourth entry, and
- 21          o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 22          REVERSE\_FLAG to '0' for the fifth entry.
- 23       + If EXT\_CH\_IND<sub>S</sub> is equal to '01000', then there shall be one entry in the
- 24       default LPM table where the mobile station shall set:
- 25          o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 26          REVERSE\_FLAG to '1' for the third entry:
- 27       + If EXT\_CH\_IND<sub>S</sub> is equal to '01001', then there shall be two entries in the
- 28       default LPM table where the mobile station shall set:
- 29          o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '0', and
- 30          REVERSE\_FLAG to '1' for the first entry,
- 31          o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 32          REVERSE\_FLAG to '1' for the fourth entry.
- 33       + If EXT\_CH\_IND<sub>S</sub> is equal to '01010', then there shall be four entries in the
- 34       default LPM table where the mobile station shall set:
- 35          o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
- 36          REVERSE\_FLAG to '1' for the first entry,
- 37          o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 38          REVERSE\_FLAG to '1' for the fourth entry.

- 1           + If EXT\_CH\_IND<sub>S</sub> is equal to '01011', then there shall be four entries in the
- 2           default LPM table where the mobile station shall set:
- 3           o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 4           REVERSE\_FLAG to '1' for the first entry,
- 5           o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
- 6           REVERSE\_FLAG to '0' for the second entry,
- 7           o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
- 8           REVERSE\_FLAG to '0' for the third entry, and
- 9           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 10          REVERSE\_FLAG to '1' for the fourth entry.
- 11          + If EXT\_CH\_IND<sub>S</sub> is equal to '01100', then there shall be four entries in the
- 12          default LPM table where the mobile station shall set:
- 13          o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
- 14          REVERSE\_FLAG to '1' for the first entry,
- 15          o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
- 16          REVERSE\_FLAG to '0' for the second entry,
- 17          o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
- 18          REVERSE\_FLAG to '0' for the third entry, and
- 19          o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 20          REVERSE\_FLAG to '1' for the fourth entry.
- 21          + If EXT\_CH\_IND<sub>S</sub> is equal to '01101', then there shall be five entries in the
- 22          default LPM table where the mobile station shall set:
- 23          o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 24          REVERSE\_FLAG to '1' for the first entry,
- 25          o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and
- 26          REVERSE\_FLAG to '1' for the second entry,
- 27          o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
- 28          REVERSE\_FLAG to '0' for the third entry,
- 29          o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
- 30          REVERSE\_FLAG to '0' for the fourth entry, and
- 31          o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 32          REVERSE\_FLAG to '1' for the fifth entry.
- 33          + If EXT\_CH\_IND<sub>S</sub> is equal to '01110', then there shall be five entries in the
- 34          default LPM table where the mobile station shall set:
- 35          o PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and
- 36          REVERSE\_FLAG to '1' for the first entry,
- 37          o PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and
- 38          REVERSE\_FLAG to '1' for the second entry,

- 1           o PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and
- 2           REVERSE\_FLAG to '0' for the third entry,
- 3           o PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and
- 4           REVERSE\_FLAG to '0' for the fourth entry, and
- 5           o PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and
- 6           REVERSE\_FLAG to '1' for the fifth entry.
- 7       • If P\_REV\_IN\_USE<sub>S</sub> is equal to or less than six, the mobile station shall initialize the
- 8       logical to physical mapping table (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE) as
- 9       follows:
- 10       – Default number of Logical-to-Physical Mapping entries
- 11       (NUM\_LPM\_ENTRIES<sub>S</sub> = '0100')
- 12       – Default Table(0) Logical-to-Physical Mapping service reference identifier
- 13       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].SR\_ID<sub>S</sub> = '000')
- 14       – Default Table(0) Logical-to-Physical Mapping logical resource identifier
- 15       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].LOGICAL\_RESOURCE<sub>S</sub> = '0001')
- 16       – Default Table(0) Logical-to-Physical Mapping physical resource identifier:
- 17       + If CH\_IND<sub>S</sub> is equal to '01' or '11', the mobile station shall set
- 18       LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].PHYSICAL\_RESOURCE<sub>S</sub> to
- 19       '0000'.
- 20       + If CH\_IND<sub>S</sub> is equal to '10', the mobile station shall set
- 21       LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].PHYSICAL\_RESOURCE<sub>S</sub> to
- 22       '0001'.
- 23       – Default Table(0) Logical-to-Physical Mapping forward mapping indicator
- 24       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].FORWARD\_FLAG<sub>S</sub> = '1')
- 25       – Default Table(0) Logical-to-Physical Mapping reverse mapping indicator
- 26       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].REVERSE\_FLAG<sub>S</sub> = '1')
- 27       – Default Table(0) Logical-to-Physical Mapping priority
- 28       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[0].PRIORITY<sub>S</sub> = '0000')
- 29       – Default Table(1) Logical-to-Physical Mapping service reference identifier
- 30       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].SR\_ID<sub>S</sub> = '001')
- 31       – Default Table(1) Logical-to-Physical Mapping logical resource identifier
- 32       (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].LOGICAL\_RESOURCE<sub>S</sub> = '0000')
- 33       – Default Table(1) Logical-to-Physical Mapping physical resource identifier:
- 34       + If CH\_IND<sub>S</sub> is equal to '01' or '11', the mobile station shall set
- 35       LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].PHYSICAL\_RESOURCE<sub>S</sub> to
- 36       '0000'.

- 1           + If CH\_IND<sub>S</sub> is equal to '10', the mobile station shall set
- 2           LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].PHYSICAL\_RESOURCE<sub>S</sub> to
- 3           '0001'.
- 4           – Default Table(1) Logical-to-Physical Mapping forward mapping indicator
- 5           (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].FORWARD\_FLAG<sub>S</sub> = '1')
- 6           – Default Table(1) Logical-to-Physical Mapping reverse mapping indicator
- 7           (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].REVERSE\_FLAG<sub>S</sub> = '1')
- 8           – Default Table(1) Logical-to-Physical Mapping priority
- 9           (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[1].PRIORITY<sub>S</sub> = '0000')
- 10          – Default Table(2) Logical-to-Physical Mapping service reference identifier
- 11          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].SR\_ID<sub>S</sub> = '001')
- 12          – Default Table(2) Logical-to-Physical Mapping logical resource identifier
- 13          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].LOGICAL\_RESOURCE<sub>S</sub> = '0000')
- 14          – Default Table(2) Logical-to-Physical Mapping physical resource identifier
- 15          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].PHYSICAL\_RESOURCE<sub>S</sub> to
- 16          '0010').
- 17          – Default Table(2) Logical-to-Physical Mapping forward mapping indicator
- 18          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].FORWARD\_FLAG<sub>S</sub> = '1')
- 19          – Default Table(2) Logical-to-Physical Mapping reverse mapping indicator
- 20          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].REVERSE\_FLAG<sub>S</sub> = '1')
- 21          – Default Table(2) Logical-to-Physical Mapping priority
- 22          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].PRIORITY<sub>S</sub> = '0000')
- 23          – Default Table(3) Logical-to-Physical Mapping service reference identifier
- 24          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].SR\_ID<sub>S</sub> = '001')
- 25          – Default Table(3) Logical-to-Physical Mapping logical resource identifier
- 26          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].LOGICAL\_RESOURCE<sub>S</sub> = '0000')
- 27          – Default Table(3) Logical-to-Physical Mapping physical resource identifier
- 28          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[2].PHYSICAL\_RESOURCE<sub>S</sub> to
- 29          '0011').
- 30          – Default Table(3) Logical-to-Physical Mapping forward mapping indicator
- 31          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].FORWARD\_FLAG<sub>S</sub> = '1')
- 32          – Default Table(3) Logical-to-Physical Mapping reverse mapping indicator
- 33          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].REVERSE\_FLAG<sub>S</sub> = '1')
- 34          – Default Table(3) Logical-to-Physical Mapping priority
- 35          (LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE[3].PRIORITY<sub>S</sub> = '0000')
- 36          • If BCMC\_ON\_TRAFFIC\_SUP<sub>S</sub> is set to '1', the mobile station shall set
- 37          AUTO\_REQ\_TRAF\_ALLOWED\_IND<sub>S</sub> to '1'.
- 38          • The mobile station shall disable the T<sub>MS\_Slotted</sub> timer, and set SLOTTED<sub>S</sub> to YES.



- 1     • The mobile station shall set REV\_SPICH\_EP\_SIZE<sub>S</sub> to 5.
- 2     • If FOR\_PDCH\_PARMS\_INCL<sub>S</sub> is equal to '0', the mobile station shall perform the
- 3       following:
- 4       - The mobile station shall set RLGAIN\_ACKCH\_PILOT<sub>S</sub> to 0.
- 5       - The mobile station shall set RLGAIN\_CQICH\_PILOT<sub>S</sub> to 0.
- 6     • If REV\_PDCH\_PARMS\_INCL<sub>S</sub> is equal to '0', the mobile station shall perform the
- 7       following:
- 8       - The mobile station shall set RLGAIN\_SPICH\_PILOT<sub>S</sub> to 0.
- 9       - The mobile station shall set RLGAIN\_REQCH\_PILOT<sub>S</sub> to 0.
- 10      - The mobile station shall set RLGAIN\_PDCCH\_PILOT<sub>S</sub> to 0.
- 11      - The mobile station shall set REV\_PDCH\_MAX\_AUTO\_TPR<sub>S</sub> to 8 (1dB).
- 12      - The mobile station shall set
- 13       REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET<sub>S</sub> to 9.
- 14      - The mobile station shall set REV\_PDCH\_DEFAULT\_PERSISTENCE<sub>S</sub> to '0'.
- 15      - The mobile station shall set REV\_PDCH\_RESET\_PERSISTENCE<sub>S</sub> to '0'.
- 16      - The mobile station shall set REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL<sub>S</sub> to 3.
- 17      - The mobile station shall set REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST<sub>S</sub> to 3.
- 18      - The mobile station shall set REV\_PDCH\_MSIB\_SUPPORTED<sub>S</sub> to '0'.
- 19      - The mobile station shall set REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND<sub>S</sub> to '0'.
- 20      - The mobile station shall set REV\_PDCH\_TABLE\_SEL<sub>S</sub> to '0'.
- 21     • The mobile station shall set REV\_PDCH\_BUFFER\_SIZE<sub>S</sub> to NULL.
- 22     • For i = 0 to 7, the mobile station shall set<sub>S</sub> to
- 23       REV\_REQCH\_BUF\_QUANT\_PARM\_1<sub>S</sub>[i] to NULL and
- 24       REV\_REQCH\_BUF\_QUANT\_PARM\_2<sub>S</sub>[i] to NULL.
- 25     • The mobile station shall set REV\_REQCH\_POWER\_HEADROOM\_INCREASE<sub>S</sub> to
- 26       NULL.
- 27     • The mobile station shall set REV\_REQCH\_USE\_POWER\_REPORTS<sub>S</sub> to NULL.
- 28     • The mobile station shall set REV\_REQCH\_POWER\_HEADROOM\_DECREASE<sub>S</sub> to
- 29       NULL.
- 30     • The mobile station shall set REV\_REQCH\_HEADROOM\_DURATION<sub>S</sub> to NULL.
- 31     • The mobile station shall set REV\_REQCH\_MAX\_POWER\_UPDATE\_DURATION<sub>S</sub> to
- 32       NULL.
- 33     • The mobile station shall set REV\_PDCH\_INIT\_TARGET\_TPR<sub>S</sub> to 0 (0dB).
- 34     • The mobile station shall set REV\_PDCH\_MAX\_TARGET\_TPR<sub>S</sub> to 0 (0dB).
- 35     • The mobile station shall set REV\_PDCH\_QUICK\_START\_THRESH<sub>S</sub> to 72 (9dB).

- The mobile station shall set REV\_REQCH\_QUICK\_REPEAT\_ALLOWED<sub>S</sub> to NULL.
- The mobile station shall set REV\_PDCH\_GRANT\_PRECEDENCE<sub>S</sub> to '1'.
- The mobile station shall set REV\_PDCH\_ALWAYS\_ACK\_FINAL\_ROUND<sub>S</sub> to '0'.
- For  $i = 1$  to  $(11 \times (\text{REV\_PDCH\_EP\_MAP\_LEN}_T + 1))$ , the mobile station shall perform the following:
  - If  $i \leq 11$ , the mobile station shall perform the following:
    - + The mobile station shall set REV\_PDCH\_STEP\_UP<sub>S</sub>[ $i$ ] and REV\_PDCH\_STEP\_DOWN<sub>S</sub>[ $i$ ] as specified on the  $i^{\text{th}}$  row of Table 2.6.4.2-3.
  - Otherwise, the mobile station shall set REV\_PDCH\_STEP\_UP<sub>S</sub>[ $i$ ] to 0, and it shall set REV\_PDCH\_STEP\_DOWN<sub>S</sub>[ $i$ ] to 0.
- For  $i = 0$  to 6, the mobile station shall perform the following:
  - REV\_PDCH\_BOOST\_ALLOWED<sub>S</sub>[ $i$ ] to '0'.
  - REV\_PDCH\_AUTO\_ALLOWED<sub>S</sub>[ $i$ ] to '1'.
- The mobile station shall set REV\_REQCH\_ENABLED<sub>S</sub> to '0'.
- The mobile station shall set REV\_PDCH\_REQCH\_TRIGGER<sub>S</sub> to NULL.
- The mobile station shall set REV\_PDCH\_BOOST\_OVERSHOOT<sub>S</sub> to 0.

**Table 2.6.4.2-3. Default REV\_PDCH\_STEP\_UP and REV\_PDCH\_STEP\_DOWN tables**

EP_SIZE	REV_PDCH_STEP_UP	REV_PDCH_STEP_DOWN
192	3	0
408	1.75	0.0625
792	0.9375	0.09375
1560	0.5	0.125
3096	0.28125	0.15625
4632	0.15625	0.1875
6168	0.125	0.21875
9240	0.0625	0.28125
12312	0.03125	0.375
15384	0.03125	0.59375
18456	0	0.875

- The mobile station shall set USE\_CH\_CFG\_RRM<sub>S</sub> to '0'.
- If the ASSIGN\_MODE<sub>T</sub> field from the *Channel Assignment Message* equals '000', the mobile station shall set SERV\_NEG<sub>S</sub> to disabled.
- If the ASSIGN\_MODE<sub>T</sub> field from the *Channel Assignment Message* equals '100', the mobile station shall set SERV\_NEG<sub>S</sub> to enabled.

- 1       • The mobile station shall initialize RC parameters as described in section 2.6.16.
- 2       • The mobile station shall determine the service configuration as follows:
  - 3           – If SERV\_NEG<sub>S</sub> equals disabled, the initial service configuration shall include
  - 4           Multiplex Option 1 and Radio Configuration 1 for both the Forward and Reverse
  - 5           Traffic Channels, and shall include no service option connections.
  - 6           – If SERV\_NEG<sub>S</sub> equals enabled, and if GRANTED\_MODE<sub>S</sub> equals '00', the initial
  - 7           service configuration shall include the multiplex option and radio configuration
  - 8           for the Forward and Reverse Traffic Channels as specified by
  - 9           DEFAULT\_CONFIG<sub>S</sub>, and shall include no service option connections.
  - 10          – If SERV\_NEG<sub>S</sub> equals enabled and GRANTED\_MODE<sub>S</sub> equals '01' or '10':
    - 11           + If the mobile station enters the *Traffic Channel Initialization Substate*
    - 12           because of receiving the *Channel Assignment Message*, the initial service
    - 13           configuration shall include the default Forward and Reverse Traffic Channel
    - 14           multiplex options and transmission rates corresponding to the service
    - 15           option requested by the mobile station in the *Origination Message*, in the
    - 16           case of a mobile station originated call, or the *Page Response Message*, in
    - 17           the case of a mobile station terminated, and shall include no service option
    - 18           connections.
    - 19           + If the mobile station enters the *Traffic Channel Initialization Substate*
    - 20           because of receiving the *Extended Channel Assignment Message*, the initial
    - 21           service configuration shall include the default Forward and Reverse Traffic
    - 22           Channel multiplex options that are derived from the radio configurations
    - 23           corresponding to the Table 3.7.2.3.2.21-7, and shall include no service
    - 24           option connections.
    - 25          – If SERV\_NEG<sub>S</sub> equals enabled and GRANTED\_MODE<sub>S</sub> equals '11', the mobile
    - 26          station shall begin to use the stored service configuration corresponding to
    - 27          SYNC\_ID<sub>S</sub> as the current service configuration and shall begin to process
    - 28          Forward and Reverse Traffic Channel frames accordingly. The set of service
    - 29          option connections to be restored are determined as follows:
      - 30           + If SR\_ID\_RESTORE<sub>S</sub> equals '111', the mobile station shall restore all the
      - 31           service option connections from the stored service configuration.
      - 32           + If SR\_ID\_RESTORE<sub>S</sub> equals '000', the mobile station shall restore the service
      - 33           option connections indicated by SR\_ID\_RESTORE\_BITMAP<sub>S</sub> from the stored
      - 34           service configuration.
      - 35           + Otherwise, the mobile station shall restore the service option connection
      - 36           corresponding to SR\_ID\_RESTORE<sub>S</sub> from the stored service configuration.
      - 37          – If SERV\_NEG<sub>S</sub> equals disabled, the mobile station shall perform the following:
        - 38           + If the call is mobile station originated and the *Origination Message* requests
        - 39           a special service option, the mobile station shall set SO\_REQ<sub>S</sub> to the special
        - 40           service option number.

- 1           + If the call is mobile station originated and the *Origination Message* does not  
2           request a special service option, the mobile station shall set SO\_REQ<sub>S</sub> to 1  
3           (the default service option number).
- 4           + If the call is mobile station terminated, the mobile station shall set  
5           SO\_REQ<sub>S</sub> to the service option number requested in the *Page Response*  
6           *Message*.
- 7 While in the *Traffic Channel Initialization Substate*, the mobile station shall perform the  
8 following:
- 9       • The mobile station shall monitor Forward Traffic Channels associated with one or  
10       more pilots in the Active Set.
  - 11       • The mobile station shall perform pilot strength measurements as specified in  
12       2.6.6.2.2, but shall not send *Pilot Strength Measurement Messages* or *Extended*  
13       *Pilot Strength Measurement Messages*.
  - 14       • The mobile station shall perform registration timer maintenance as specified in  
15       2.6.5.5.4.2.
  - 16       • If the bits of TMSI\_CODE<sub>S-p</sub> are not all equal to '1' and if System Time (in 80 ms  
17       units) exceeds TMSI\_EXP\_TIME<sub>S-p</sub> × 2<sup>12</sup>, the mobile station shall set all the bits of  
18       TMSI\_CODE<sub>S-p</sub> to '1' within T<sub>66m</sub> seconds.
  - 19       • If the full-TMSI timer expires or has expired, the mobile station shall set all the bits  
20       of TMSI\_CODE<sub>S-p</sub> to '1'. The mobile station shall update the registration variables  
21       as described in 2.6.5.5.2.5.
  - 22       • If the Forward Packet Data Channel is assigned, whenever the mobile station  
23       transmitter is disabled, the MS shall set FPDCH\_DTX\_INDICATOR<sub>S</sub> to '1'.
  - 24       • If the Forward Packet Data Channel is assigned, whenever the mobile station  
25       transmitter is enabled, the mobile station shall perform the following procedures:  
26       - The MS shall set FPDCH\_DTX\_INDICATOR<sub>S</sub> to '0'.
  - 27       - If the mobile station transmitter has been disabled for at least  
28       TX\_DISABLED\_TIMER<sub>S</sub>, the mobile station shall send SIG-  
29       HandoffPDCH.Indication (handoff\_type = ASSIGN) primitive to the MAC layer.
- 30 If the mobile station does not support the assigned CDMA Channel (see [2]) or all of the  
31 assigned Forward Traffic code channels (see [2]), the mobile station shall enter the *System*  
32 *Determination Substate* of the *Mobile Station Initialization State* with an error indication  
33 (see 2.6.1.1).
- 34 If the mobile station supports the assigned CDMA Channel and the assigned Forward  
35 Traffic code channels, the mobile station shall perform the following:
- 36       • The mobile station shall tune to the assigned CDMA Channel.
  - 37       • The mobile station shall set its code channel for the assigned Forward Traffic code  
38       channel.

1       • The mobile station shall set its Forward and Reverse Traffic Channel frame offsets  
2       to the assigned frame offset as determined by FRAME\_OFFSET<sub>S</sub>.

3       • The mobile station shall set its Forward and Reverse Traffic Channel long code  
4       masks to the public long code mask (see [2]).

5       If all of the following conditions are true:

- 6       • F-CPCCH is assigned, and
- 7       • EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> equals '1',

8       the mobile station shall perform the following:

9       • The mobile station shall adjust its transmit power as specified in [2].

10       • The mobile station shall transmit the Traffic Channel preamble as specified in [2]  
11       and Layer 3 shall send an *acquiring dedicated channel* indication to Layer 2 (see  
12       [4]).

13       • If CH\_IND<sub>S</sub> equals '00', the mobile station shall commence R-CQICH reporting as  
14       specified in [2].

15       • If the mobile station receives a period of ( $N_{18m} \times 1.25$ ) ms with sufficient signal  
16       quality on the Forward Common Power Control Subchannel assigned to this mobile  
17       station within  $T_{79m}$  seconds after entering this substate, the mobile station shall  
18       perform the following additional functions while it remains in the *Traffic Channel*  
19       *Initialization Substate*:

20       - The mobile station shall perform Forward Traffic Channel supervision as  
21       specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the  
22       mobile station shall enter the *System Determination Substate* of the *Mobile*  
23       *Station Initialization State* with a system lost indication (see 2.6.1.1).

24       - The mobile station shall process Forward Traffic Channel signaling traffic and  
25       shall discard other types of Forward Traffic Channel traffic.

26       • If the mobile station does not receive a period of ( $N_{18m} \times 1.25$ ) ms with sufficient  
27       signal quality on the Forward Common Power Control Subchannel assigned to this  
28       mobile station within  $T_{79m}$  seconds after entering this substate, the mobile station  
29       shall perform the following:

30       - The mobile station shall disable its transmitter.

31       - The mobile station shall discard any messages queued for transmission, and  
32       those messages received and pending processing.

33       - The mobile station shall remain in this substate and perform the procedures  
34       below.

35       If all of the following conditions are true:

- 1 • F-CPCCH is assigned, and
- 2 • EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> equals '0', or EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> equals '1'
- 3 and the T<sub>79m</sub> timer has expired,.

4 the mobile station shall perform the following:

- 5 • If the mobile station receives a period of (N<sub>18m</sub> × 1.25) ms with sufficient signal
- 6 quality on the Forward Common Power Control Subchannel assigned to this mobile
- 7 station within T<sub>50m</sub> seconds after entering this substate, the mobile station shall
- 8 perform the following additional functions while it remains in the *Traffic Channel*
- 9 *Initialization Substate*:

- 10 - The mobile station shall perform Forward Traffic Channel supervision as
- 11 specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the
- 12 mobile station shall enter the *System Determination Substate* of the *Mobile*
- 13 *Station Initialization State* with a system lost indication (see 2.6.1.1).
- 14 - The mobile station shall adjust its transmit power as specified in [2].
- 15 - The mobile station shall transmit the Traffic Channel preamble as specified in
- 16 [2], and Layer 3 shall send an *acquiring dedicated channel* indication to Layer 2
- 17 (see [4]).
- 18 - If CH\_IND<sub>S</sub> equals '00', the mobile station shall commence R-CQICH reporting
- 19 as specified in [2].
- 20 - The mobile station shall process Forward Traffic Channel signaling traffic and
- 21 shall discard other types of Forward Traffic Channel traffic.
- 22 - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating
- 23 an acknowledgment failure, the mobile station shall perform the following:
- 24 + If the Direct Channel Assignment call setup procedure was used and
- 25 DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>S</sub> is set to '1', the mobile station shall
- 26 perform the following:
- 27 o If any of the following conditions is met:
- 28 ◇ The mobile station is able to select the last pilot mobile station was
- 29 monitoring before entering *Mobile Station Control on the Traffic*
- 30 *Channel State* and the pilot has sufficient signal strength, or
- 31 ◇ The mobile station is able to select a pilot with sufficient signal
- 32 strength that is listed in NGHBR\_REC\_LIST, the
- 33 ACCESS\_ENTRY\_HO field of the NGHBR\_REC corresponding to the
- 34 selected pilot is equal to '1' and the mobile station has sufficient
- 35 information to monitor BCCH or PCH from base station
- 36 corresponding to the selected pilot.

- 1                   Then the mobile station shall enter the *Update Overhead Information*  
2                   *Substate* of the *System Access State* with a direct channel assignment  
3                   failure indication on the selected pilot.
- 4                   o Otherwise, the mobile station shall enter the *System Determination*  
5                   *Substate* of the *Mobile Station Initialization State* with a system lost  
6                   indication (see 2.6.1.1).
- 7                   + Otherwise, the mobile station shall disable its transmitter and enter the  
8                   *System Determination Substate* of the *Mobile Station Initialization State* with  
9                   a system lost indication (see 2.6.1.1).
- 10                  • If the mobile station does not receive a period of  $(N_{18m} \times 1.25)$  ms with sufficient  
11                  signal quality on the Forward Common Power Control Subchannel assigned to this  
12                  mobile station within  $T_{50m}$  seconds after entering this substate, the mobile station  
13                  shall perform the following:
- 14                  - If the Direct Channel Assignment call setup procedure was used and  
15                  DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>s</sub> is set to '1', the mobile station shall  
16                  perform the following:
- 17                  + If any of the following conditions is met:
- 18                          o The mobile station is able to select the last pilot mobile station was  
19                          monitoring before entering *Mobile Station Control on the Traffic Channel*  
20                          *State* and the pilot has sufficient signal strength, or
- 21                          o The mobile station is able to select a pilot with sufficient signal strength  
22                          that is listed in NGHBR\_REC\_LIST, and the ACCESS\_ENTRY\_HO field of  
23                          the NGHBR\_REC corresponding to the selected pilot is equal to '1' and  
24                          the mobile station has sufficient information to monitor BCCH or PCH  
25                          from base station corresponding to the selected pilot.
- 26                          Then the mobile station shall enter the *Update Overhead Information*  
27                          *Substate* of the *System Access State* with a direct channel assignment  
28                          failure indication on the selected pilot.
- 29                          + Otherwise, the mobile station shall enter the *System Determination Substate*  
30                          of the *Mobile Station Initialization State* with a system lost indication (see  
31                          2.6.1.1).
- 32                  - Otherwise, the mobile station shall enter the *System Determination Substate* of  
33                  the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).
- 34                  If all of the following conditions are true:
- 35                          • F-CPCCH is not assigned, and
- 36                          • EARLY\_RL\_TRANSMIT\_IND<sub>s</sub> equals '1',
- 37                  the mobile station shall perform the following:

- 1       • The mobile station shall adjust its transmit power as specified in [2].
- 2       • The mobile station shall transmit the Traffic Channel preamble as specified in [2],  
3       and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see  
4       [4]).
- 5       • If CH\_INDs equals '00', the mobile station shall commence R-CQICH reporting as  
6       specified in [2].
- 7       • If the mobile station receives a period of ( $N_{5m} \times 20$ ) ms with sufficient signal quality  
8       on the physical channel corresponding to FPC\_PRI\_CHAN<sub>S</sub> within T<sub>79m</sub> seconds  
9       after entering this substate, the mobile station shall perform the following  
10      additional functions while it remains in the *Traffic Channel Initialization Substate*:
  - 11      - The mobile station shall perform Forward Traffic Channel supervision as  
12      specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the  
13      mobile station shall enter the *System Determination Substate* of the *Mobile*  
14      *Station Initialization State* with a system lost indication (see 2.6.1.1).
  - 15      - The mobile station shall process Forward Traffic Channel signaling traffic and  
16      shall discard other types of Forward Traffic Channel traffic.
  - 17      • If the mobile station does not receive a period of ( $N_{5m} \times 20$ ) ms with sufficient  
18      signal quality on the physical channel corresponding to FPC\_PRI\_CHAN<sub>S</sub> within  
19      T<sub>79m</sub> seconds after entering this substate, the mobile station shall perform the  
20      following:
    - 21      - The mobile station shall disable its transmitter.
    - 22      - The mobile station shall discard any messages queued for transmission, and  
23      those messages received and pending processing.
    - 24      - The mobile station shall remain in this substate and perform the procedures  
25      below.
- 26   If all of the following conditions are true:
  - 27      • F-CPCCH is not assigned, and
  - 28      • EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> equals '0', or EARLY\_RL\_TRANSMIT\_IND<sub>S</sub> equals '1'  
29      and the T<sub>79m</sub> timer has expired,
- 30   the mobile station shall perform the following:
  - 31      • If the mobile station receives a period of ( $N_{5m} \times 20$ ) ms with sufficient signal  
32      quality on the physical channel corresponding to FPC\_PRI\_CHAN<sub>S</sub> within T<sub>50m</sub>  
33      seconds after entering this substate, the mobile station shall perform the following  
34      additional functions while it remains in the *Traffic Channel Initialization Substate*:



- 1        - The mobile station shall perform Forward Traffic Channel supervision as  
2        specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the  
3        mobile station shall enter the *System Determination Substate* of the *Mobile*  
4        *Station Initialization State* with a system lost indication (see 2.6.1.1).
- 5        - The mobile station shall adjust its transmit power as specified in [2].
- 6        - The mobile station shall transmit the Traffic Channel preamble as specified in  
7        [2], and Layer 3 shall send an *acquiring dedicated channel* indication to Layer 2  
8        (see [4]).
- 9        - If CH\_IND<sub>s</sub> equals '00', the mobile station shall commence R-CQICH reporting  
10       as specified in [2].
- 11       - The mobile station shall process Forward Traffic Channel signaling traffic and  
12       shall discard other types of Forward Traffic Channel traffic.
- 13       - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating  
14       an acknowledgment failure, the mobile station shall perform the following:
  - 15       + If the Direct Channel Assignment call setup procedure was used and  
16       DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>s</sub> is set to '1', the mobile station shall  
17       perform the following:
    - 18       o If any of the following conditions is met:
      - 19       ◇ The mobile station is able to select the last pilot mobile station was  
20       monitoring before entering *Mobile Station Control on the Traffic*  
21       *Channel State* and the pilot has sufficient signal strength, or
      - 22       ◇ The mobile station is able to select a pilot with sufficient signal  
23       strength that is listed in NGHBR\_REC\_LIST, and the  
24       ACCESS\_ENTRY\_HO field of the NGHBR\_REC corresponding to the  
25       selected pilot is equal to '1' and the mobile station has sufficient  
26       information to monitor BCCH or PCH from base station  
27       corresponding to the selected pilot.
    - 28       Then the mobile station shall enter the *Update Overhead Information*  
29       *Substate* of the *System Access State* with a direct channel assignment  
30       failure indication on the selected pilot.
    - 31       o Otherwise, the mobile station shall enter the *System Determination*  
32       *Substate* of the *Mobile Station Initialization State* with a system lost  
33       indication (see 2.6.1.1).
  - 34       + Otherwise, the mobile station shall disable its transmitter and enter the  
35       *System Determination Substate* of the *Mobile Station Initialization State* with  
36       a system lost indication (see 2.6.1.1).
- 37       • If the mobile station does not receive a period of ( $N_{5m} \times 20$ ) ms with sufficient  
38       signal quality on the physical channel corresponding to FPC\_PRI\_CHAN<sub>s</sub> within  
39       T<sub>50m</sub> seconds after entering this substate, the mobile station shall perform the  
40       following:

- 1       - If the Direct Channel Assignment call setup procedure was used and  
2       DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>s</sub> is set to '1', the mobile station shall  
3       perform the following:
- 4       + If all of the following conditions are met:
  - 5           ○ The mobile station is able to select the last pilot mobile station was  
6           monitoring before entering *Mobile Station Control on the Traffic Channel*  
7           *State* and the pilot has sufficient signal strength, or
  - 8           ○ The mobile station is able to select a pilot with sufficient signal strength  
9           that is listed in NGHBR\_REC\_LIST, and the ACCESS\_ENTRY\_HO field of  
10          the NGHBR\_REC corresponding to the selected pilot is equal to '1' and  
11          the mobile station has sufficient information to monitor BCCH or PCH  
12          from base station corresponding to the selected pilot.
- 13       Then the mobile station shall enter the *Update Overhead Information*  
14       *Substate* of the *System Access State* with a direct channel assignment  
15       failure indication on the selected pilot.
- 16       + Otherwise, the mobile station shall enter the *System Determination Substate*  
17       of the *Mobile Station Initialization State* with a system lost indication (see  
18       2.6.1.1).
- 19       - Otherwise, the mobile station shall enter the *System Determination Substate* of  
20       the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

21   The mobile station shall then perform the procedures specified in 2.6.4.2.2.

#### 22   2.6.4.2.1 Return to Traffic Channel Initialization Substate with Initialization Failure 23   Indication

24   If F-CPCCH is assigned, the mobile station shall perform the following:

- 25       • The mobile station shall perform the following functions while it remains in the  
26       *Traffic Channel Initialization Substate*:
- 27       - The mobile station shall perform Forward Traffic Channel supervision as  
28       specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the  
29       mobile station shall enter the *System Determination Substate* of the *Mobile*  
30       *Station Initialization State* with a system lost indication (see 2.6.1.1).
- 31       - The mobile station shall continue transmitting the Traffic Channel preamble as  
32       specified in [2], the mobile station shall continue R-CQICH reporting as  
33       specified in [2], and Layer 3 shall send an *acquiring dedicated channel*  
34       indication to Layer 2 (see [4]).
- 35       - The mobile station shall process Forward Traffic Channel signaling traffic and  
36       shall discard other types of Forward Traffic Channel traffic.

- 1       - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating  
2       an acknowledgment failure, the mobile station shall perform the following:
- 3       + If the Direct Channel Assignment call setup procedure was used and  
4       DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>s</sub> is set to '1', the mobile station shall  
5       perform the following:
- 6       o If any of the following conditions is met:
- 7           ◇ The mobile station is able to select the last pilot mobile station was  
8           monitoring before entering *Mobile Station Control on the Traffic*  
9           *Channel State* and the pilot has sufficient signal strength, or
- 10          ◇ The mobile station is able to select a pilot with sufficient signal  
11          strength that is listed in NGHBR\_REC\_LIST, and the  
12          ACCESS\_ENTRY\_HO field of the NGHBR\_REC corresponding to the  
13          selected pilot is equal to '1' and the mobile station has sufficient  
14          information to monitor BCCH or PCH from base station  
15          corresponding to the selected pilot.
- 16               Then the mobile station shall enter the *Update Overhead Information*  
17               *Substate* of the *System Access State* with a direct channel assignment  
18               failure indication on the selected pilot.
- 19       o Otherwise, the mobile station shall enter the *System Determination*  
20       *Substate* of the *Mobile Station Initialization State* with a system lost  
21       indication (see 2.6.1.1).
- 22       + Otherwise, the mobile station shall disable its transmitter and enter the  
23       *System Determination Substate* of the *Mobile Station Initialization State* with  
24       a system lost indication (see 2.6.1.1).

25   If F-CPCCH is not assigned, the mobile station shall perform the following:

- 26       • The mobile station shall perform the following functions while it remains in the  
27       *Traffic Channel Initialization Substate*:
- 28       - The mobile station shall perform Forward Traffic Channel supervision as  
29       specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the  
30       mobile station shall enter the *System Determination Substate* of the *Mobile*  
31       *Station Initialization State* with a system lost indication (see 2.6.1.1).
- 32       - The mobile station shall continue transmitting the Traffic Channel preamble as  
33       specified in [2], and Layer 3 shall send an *acquiring dedicated channel*  
34       indication to Layer 2 (see [4]). Furthermore, if CH\_IND<sub>s</sub> equals '00', the mobile  
35       station shall continue R-CQICH reporting as specified in [2].
- 36       - The mobile station shall process Forward Traffic Channel signaling traffic and  
37       shall discard other types of Forward Traffic Channel traffic.
- 38       - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating  
39       an acknowledgment failure, the mobile station shall perform the following:

- + If the Direct Channel Assignment call setup procedure was used and DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>s</sub> is set to '1', the mobile station shall perform the following:

- o If any of the following conditions is met:

- ◇ The mobile station is able to select the last pilot mobile station was monitoring before entering *Mobile Station Control on the Traffic Channel State* and the pilot has sufficient signal strength, or
- ◇ The mobile station is able to select a pilot with sufficient signal strength that is listed in NGHBR\_REC\_LIST, and the ACCESS\_ENTRY\_HO field of the NGHBR\_REC corresponding to the selected pilot is equal to '1' and the mobile station has sufficient information to monitor BCCH or PCH from base station corresponding to the selected pilot.

Then the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with a direct channel assignment failure indication on the selected pilot.

- o Otherwise, the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

- + Otherwise, the mobile station shall disable its transmitter and enter the *System Determination Substate* of the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

The mobile station shall then perform the procedures specified in 2.6.4.2.2.

#### 2.6.4.2.2 Exiting the Traffic Channel Initialization Substate

The mobile station should provide diversity combining of the Forward Fundicated Channels associated with pilots in the Active Set if the mobile station receives multiple pilots in the *Extended Channel Assignment Message*.

If Layer 3 does not receive a *forward dedicated channel acquired* indication from Layer 2 (see [4]) within T<sub>51m</sub> seconds after the transmitter was last enabled, the mobile station shall perform the following:

- If the Direct Channel Assignment call setup procedure was used and DIRECT\_CH\_ASSIGN\_RECOVER\_IND<sub>s</sub> is set to '1', the mobile station shall perform the following:
  - If any of the following conditions is met:
    - + The mobile station is able to select the last pilot mobile station was monitoring before entering *Mobile Station Control on the Traffic Channel State* and the pilot has sufficient signal strength, or

- 1           + The mobile station is able to select a pilot with sufficient signal strength  
2           that is listed in NGHBR\_REC\_LIST, and the ACCESS\_ENTRY\_HO field of the  
3           NGHBR\_REC corresponding to the selected pilot is equal to '1' and the  
4           mobile station has sufficient information to monitor BCCH or PCH from  
5           base station corresponding to the selected pilot.
- 6           Then the mobile station shall enter the *Update Overhead Information Substate*  
7           of the *System Access State* with a direct channel assignment failure indication  
8           on the selected pilot.
- 9           - Otherwise, the mobile station shall enter the *System Determination Substate* of  
10          the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).
- 11          • Otherwise, the mobile station shall disable its transmitter and enter the *System*  
12          *Determination Substate* of the *Mobile Station Initialization State* with a system lost  
13          indication (see 2.6.1.1).
- 14          After the first occurrence of receiving a period of  $(N_{5m} \times 20)$  ms with sufficient signal  
15          quality on the physical channel corresponding to FPC\_PRI\_CHAN<sub>S</sub> or a period of  $(N_{18m} \times$   
16          1.25) ms with sufficient signal quality on the Forward Common Power Control Subchannel  
17          assigned to this mobile station, if one of the following conditions is met:
- 18          • Layer 3 has received a *forward dedicated channel acquired* indication from Layer 2  
19          within T<sub>51m</sub> seconds after the transmitter was last enabled, or
- 20          • The mobile station supports transmission of fixed Traffic Channel preamble, and  
21          FIXED\_PREAMBLE\_TRANSMIT\_IND<sub>S</sub> equals '1', and the mobile station has  
22          transmitted the Traffic Channel preamble for the duration corresponding to  
23          FIXED\_NUM\_PREAMBLE<sub>S</sub> as specified by the Table 3.7.2.3.2.21-13
- 24          the mobile station shall perform the following:
- 25          • If CH\_IND<sub>S</sub> is equal to '01', the mobile station shall begin transmitting on the  
26          Reverse Fundamental Channel.
- 27          • If CH\_IND<sub>S</sub> is equal to '11' and FUNDICATED\_BCMC\_IND<sub>S</sub> equals '0', or if CH\_IND<sub>S</sub>  
28          is equal to '11' and FUNDICATED\_BCMC\_IND<sub>S</sub> equals '1' and  
29          REV\_FCH\_ASSIGNED<sub>S</sub> is equal to '1', the mobile station shall begin transmitting on  
30          the Reverse Fundamental Channel.
- 31          • If CH\_IND<sub>S</sub> is equal to '10' or '11', the mobile station shall begin transmitting on the  
32          Reverse Dedicated Control Channel when the mobile station has user data or  
33          signaling traffic to send on the Reverse Dedicated Control Channel.
- 34          • If CH\_IND<sub>S</sub> equals '00', the mobile station shall perform the following:
- 35          - If EXT\_CH\_IND<sub>S</sub> signals the allocation of a R-FCH, the mobile station shall  
36          begin transmitting on the Reverse Fundamental Channel.

- 1        - If EXT\_CH\_IND<sub>S</sub> signals the allocation of a R-DCCH, the mobile station shall
- 2        begin transmitting on the Reverse Dedicated Control Channel when the mobile
- 3        station has user data or signaling traffic to send on the Reverse Dedicated
- 4        Control Channel.
  
- 5        - If EXT\_CH\_IND<sub>S</sub> signals the allocation of a R-PDCH, the mobile station shall
- 6        begin transmitting on the Reverse Packet Data Channel when the mobile
- 7        station has user data or signaling traffic to send on the Reverse Packet Data
- 8        Channel.
  
- 9        • If SERV\_NEG<sub>S</sub> equals disabled, the mobile station shall activate the *SO Negotiation*
- 10       Subfunction.
- 11       • If SERV\_NEG<sub>S</sub> equals enabled and the GRANTED\_MODE<sub>S</sub> is '00', '01', or '11', the
- 12       mobile station shall activate the *Normal Service Subfunction*.
- 13       • If SERV\_NEG<sub>S</sub> equals enabled and the GRANTED\_MODE<sub>S</sub> is '10', the mobile station
- 14       shall activate the *Waiting for Service Connect Message Subfunction*.
- 15       • The mobile station shall perform the following:
- 16           - If SERV\_NEG<sub>S</sub> equals enabled and GRANTED\_MODE<sub>S</sub> is equal to '11', the
- 17           mobile station shall perform the following:
- 18              + The mobile station shall restore the stored service configuration as specified
- 19              in 2.6.4.1.2.2.5.2.
- 20              + For the first service option connection (with corresponding connection
- 21              reference CON\_REF<sub>i</sub>) listed in this stored Service Configuration information
- 22              record, Layer 3 shall instantiate a Call Control instance (as specified in
- 23              2.6.10) with the received BYPASS\_ALERT\_ANSWER<sub>S</sub>. The mobile station
- 24              shall identify this Call Control instances by the corresponding CON\_REF<sub>i</sub>
- 25              and also identify this Call Control instance by the NULL identifier.
- 26              + For each of the remaining service option connection (with corresponding
- 27              connection reference CON\_REF<sub>i</sub>) that will be restored from the stored service
- 28              configuration record, Layer 3 shall instantiate a Call Control instance (as
- 29              specified in 2.6.10) with a 'restore indication'. The mobile station shall
- 30              identify each of these Call Control instances by the corresponding
- 31              CON\_REF<sub>i</sub>.
- 32              + The mobile station shall store the synchronization identifier corresponding
- 33              to the restored service configuration as SYNC\_ID<sub>S</sub>.
- 34           - Otherwise, the mobile station shall perform the following:

- 1           + If the BCMC\_ORIG\_ONLY\_IND field is not included or is included and set to  
2           '0' in the *Origination Message*, *Page Response Message*, or *Reconnect*  
3           *Message*, the Layer 3 shall instantiate a Call Control instance (as specified  
4           in 2.6.10) for each service instance being initiated.
- 5           + The Layer 3 shall assign a default identifier of NULL to the Call Control  
6           instance corresponding to the SR\_ID field of the *Origination Message*, *Page*  
7           *Response Message*, or *Reconnect Message*.
- 8           + If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to 11, the mobile station shall set  
9           a call control timer to a value of T<sub>42m</sub> seconds.

- 10       • The Layer 3 shall enter the *Traffic Channel Substate*.

#### 11   2.6.4.3 Traffic Channel Substate

12   In this substate, the mobile station may exchange Traffic Channel frames with the base  
13   station in accordance with the current service configuration. The mobile station may  
14   perform the gating operation of Reverse Pilot Channel.

15   The mobile station can be in the *Active Mode* or *Control Hold Mode* while in this substate.

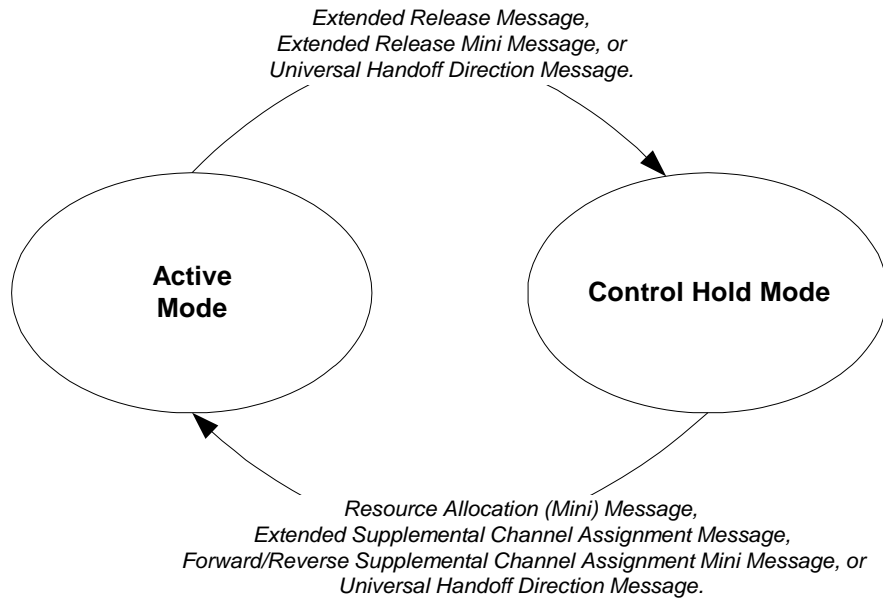
16   The following are the attributes when the mobile station is in the *Active Mode* of *Traffic*  
17   *Channel Substate*:

- 18       • PILOT\_GATING\_USE\_RATE is set to '0' (i.e., the reverse pilot (r-pich) is not gated).
- 19       • Flow of data traffic is permitted by the Multiplex Sublayer.

20   The following are the attributes when the mobile station is in the *Control Hold Mode* of  
21   *Traffic Channel Substate*:

- 22       • PILOT\_GATING\_USE\_RATE is set to '1'.
- 23       • The reverse pilot (r-pich) may be gated (if PILOT\_GATING\_RATE<sub>S</sub> is not equal to  
24       '00').
- 25       • If a Forward Packet Data Channel is not assigned, then the flow of data traffic is  
26       blocked by the Multiplex Sublayer.
- 27       • If a Forward Packet Data Channel is assigned, then the flow of both data traffic and  
28       signaling traffic is blocked by the Multiplex Sublayer.

29   Figure 2.6.4.3-1 shows the valid transitions between the modes of a *Traffic Channel*  
30   *Substate* when a F-PDCH is not assigned in Control Hold Mode and the over-the-air Upper  
31   Layer Signaling Messages that trigger transitions between these modes.

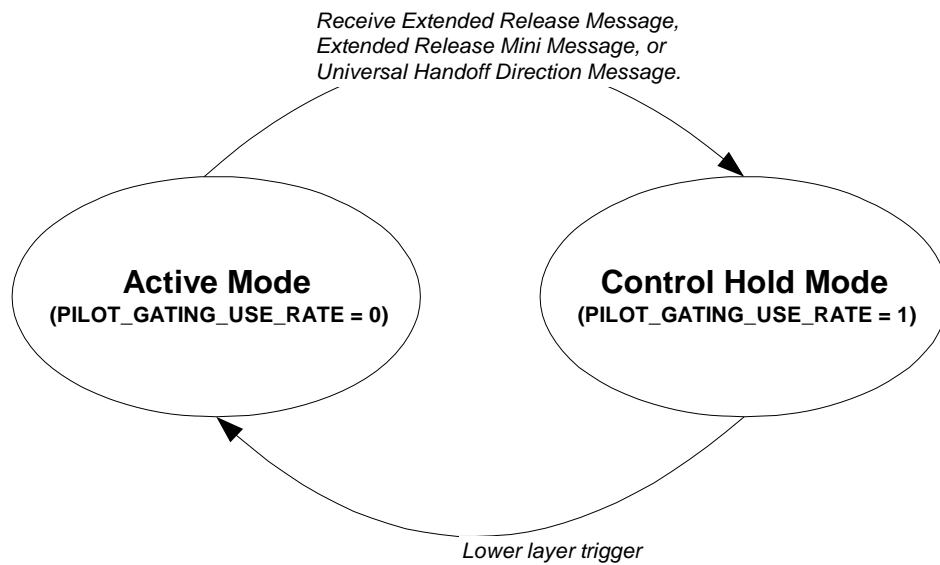


Note: The mode transition occurs when the fields are set appropriately

**Figure 2.6.4.3-1. Mobile Station Modes When a F-PDCH is not Assigned in Control Hold Mode**

Figures 2.6.4.3-2 and 2.6.4.3-3 show the valid transitions between the modes of a *Traffic Channel Substate* when a F-PDCH is assigned in Control Hold Mode and the triggers that cause transitions between these modes.

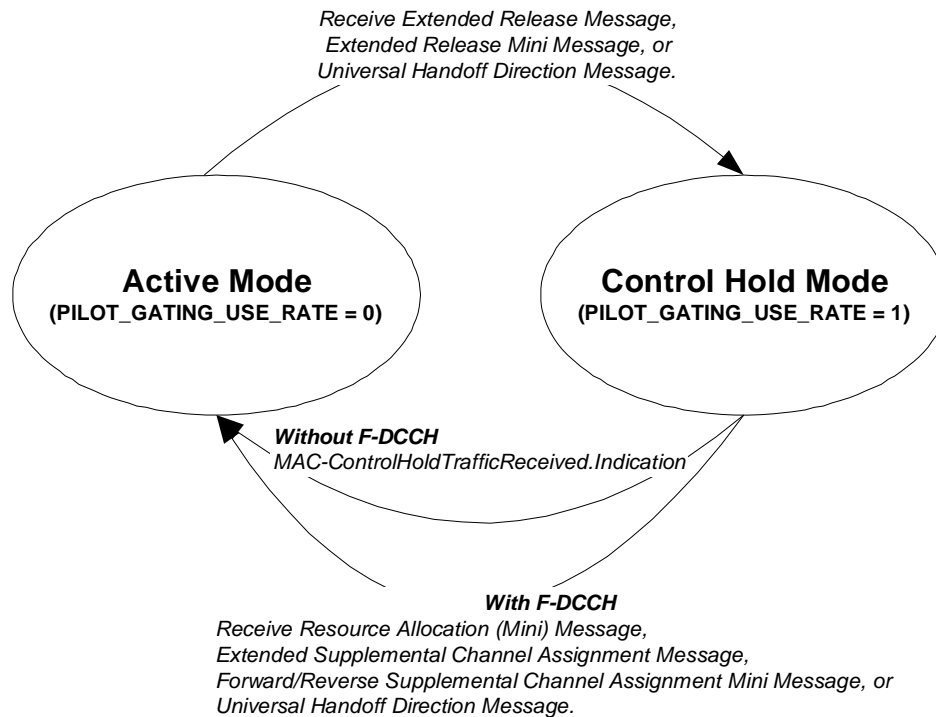




Note: The mode transition occurs  
when the fields are set appropriately

1  
2  
3  
4  
5

**Figure 2.6.4.3-2. Mobile Station Modes When a F-PDCH is Assigned in Control Hold Mode: Mobile Station Initiated Exit from Control Hold.**



Note: The mode transition occurs  
when the fields are set  
appropriately

**Figure 2.6.4.3-3. Mobile Station Modes when a F-PDCH is Assigned in Control Hold:  
Base Station Initiated Exit from Control Hold.**

Upon entering the *Traffic Channel Substate*, the mobile station shall perform the following:

- If  $SERV\_NEG_S$  equals enabled, the call is mobile station originated, and  $GRANTED\_MODE_S$  is equal to '00' or '01', the mobile station should initiate service negotiation to request a service configuration in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

While in the *Traffic Channel Substate*, the mobile station shall perform the following:

- If  $FIXED\_PREAMBLE\_TRANSMIT\_IND_S$  equals '1' and Layer 3 does not receive a *forward dedicated channel acquired* indication from Layer 2 (see [4]) within  $T_{80m}$  seconds after entering the *Traffic Channel Substate* of the *Mobile Station Control on the Traffic Channel State*, the mobile station shall set  $FIXED\_PREAMBLE\_TRANSMIT\_IND_S$  to '0' and re-enter the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the Traffic Channel State* with an Initialization Failure indication.
- If the call control timer expires, the mobile station shall perform the following for each call control instance without associated  $CON\_REF$ :
  - The mobile station shall terminate the call control instance.
  - The mobile station shall send an indication to the affected service instance indicating that the call control instance has been terminated.

- 1       • The mobile station shall perform Forward Traffic Channel supervision as specified  
2       in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the Layer 3 shall  
3       terminate all Call Control instances, and shall enter the *System Determination*  
4       *Substate* of the *Mobile Station Initialization State* with a system lost indication (see  
5       2.6.1.1).
- 6       • The mobile station may send a *Pilot Strength Measurement Mini Message* to report  
7       pilot strength order change information, periodic pilot strength information, or  
8       threshold based pilot strength information, as specified in the *Mobile Assisted Burst*  
9       *Operation Parameters Message* (see 2.6.6.2.5.2).
- 10      • The mobile station shall adjust its transmit power as specified in [2].
- 11      • The mobile station shall perform Forward Traffic Channel power control as specified  
12      in 2.6.4.1.1.
- 13      • The mobile station shall perform handoff processing as specified in 2.6.6.
- 14      • The mobile station shall process Forward and Reverse Traffic Channel frames in  
15      accordance with requirements for the active service subfunction (see 2.6.4.1.2.2).
- 16      • The mobile station shall perform registration timer maintenance as specified in  
17      2.6.5.5.4.2.
- 18      • If the mobile station is directed to send a *Data Burst Message*, the mobile station  
19      shall send a *Data Burst Message*. If PILOT\_GATING\_USE\_RATE is set to '1', the  
20      mobile station may request to transition to the *Active Mode*  
21      (PILOT\_GATING\_USE\_RATE set to '0') prior to sending the *Data Burst Message*.
- 22      • If a Forward Packet Data Channel is not assigned and the mobile station has user  
23      data to send and PILOT\_GATING\_USE\_RATE is equal to '1', then the mobile station  
24      may send a *Resource Request Message*, *Resource Request Mini Message*,  
25      *Supplemental Channel Request Message*, or *Supplemental Channel Request Mini*  
26      *Message* to request for continuous reverse pilot transmission and user traffic  
27      transmission.
- 28      • When a Forward Packet Data Channel is assigned, PILOT\_GATING\_USE\_RATE is  
29      equal to '1', and the mobile station has data or signaling messages to send, the  
30      mobile station shall set PILOT\_GATING\_USE\_RATE to '0'.
- 31      • When a Forward Packet Data Channel is assigned, PILOT\_GATING\_USE\_RATE is  
32      equal to '1', and the mobile station receives MAC-  
33      ControlHoldTrafficReceived.Indication, the mobile station shall set  
34      PILOT\_GATING\_USE\_RATE to '0' at the *transition\_time* indicated in MAC-  
35      ControlHoldTrafficReceived.Indication.

- 1     • If the mobile station receives SIG-RemoveFPDCHLeg.Request(*index*), then, at the  
2       first 20 ms boundary (relative to System Time plus  $\text{FRAME\_OFFSET}_S \times 1.25 \text{ ms}$ )  
3       occurring at least 20 ms after the reception of this indication, for the specified  
4       member of the F-PDCH reduced active set indicated by *index*, where *index* is the  
5       index of the member in the F-PDCH reduced active set, the mobile station shall  
6       perform the following procedures:
  - 7       – the mobile station shall set  $\text{FOR\_PDCH\_INCL}_S$  to '0', and remove this pilot from  
8         the F-PDCH reduced active set, and
  - 9       – if this is the last pilot in the F-PDCH reduced active set, Layer 3 shall send SIG-  
10        HandoffPDCH.Indication (handoff\_type = ASSIGN) to the MAC layer.
- 11    • If the mobile station is directed by the user to request a new service configuration,  
12      the mobile station shall initiate service negotiation or service option negotiation in  
13      accordance with the requirements for the active service subfunction (see  
14      2.6.4.1.2.2).
- 15    • The mobile station may send a *Service Option Control Message* or *Service Option*  
16      *Control Order* to invoke a service option specific function in accordance with the  
17      requirements for the active service subfunction (see 2.6.4.1.2.2).
- 18    • If the mobile station is directed by the user to request a private long code transition  
19      and has the long code mask (see 2.3.12.3), the mobile station shall send a *Long*  
20      *Code Transition Request Order* (ORDQ = '00000001') in assured mode.
- 21    • If the mobile station is directed by the user to request a public long code transition,  
22      the mobile station shall send a *Long Code Transition Request Order* (ORDQ =  
23      '00000000') in assured mode.
- 24    • If the mobile station supports BCMC operation, it shall perform the procedures as  
25      specified in 2.6.13.
- 26    • If the mobile station is directed by the user to originate a call or if the mobile  
27      station is to monitor BCMC on traffic channel, the mobile station shall perform the  
28      following:
  - 29      – If this is an emergency call origination, the mobile station shall perform the  
30        following:
    - 31           + If it can be indicated to the base station within an existing Call Control  
32            instance, the mobile station shall send an indication to this Call Control  
33            instance that the user has originated an emergency call.
    - 34           + Otherwise, the mobile station shall perform the following:
      - 35               o For each service instance being initiated in the *Enhanced Origination*  
36                *Message*, the mobile station shall perform the following:
        - 37                   ◇ increment the stored value of  $\text{TAG}_S$  to the next unused integer value,
        - 38                   ◇ add  $\text{TAG}_S$  to the list  $\text{TAG\_OUTSTANDING\_LIST}$ ,
        - 39                   ◇ associate the  $\text{TAG}_S$  value to the corresponding service instance. and

- ◇ set an enhanced origination timer associated with TAG<sub>s</sub> to a value of T<sub>42m</sub> seconds.
  - o The mobile station shall send an *Enhanced Origination Message* to the base station, with the TAG or ADD\_TAG field of each call included in the message set to its associated TAG<sub>s</sub>.
  - o Upon sending the *Enhanced Origination Message* and prior to receiving a Layer 3 response from the base station, if the mobile station is directed by the user to cancel this call, the mobile station shall perform the following:
    - ◇ The mobile station shall send a *Call Cancel Message* to the base station, with each TAG or ADD\_TAG field included in the message set to the TAG value in the list TAG\_OUTSTANDING\_LIST corresponding to the call(s) being cancelled.
    - ◇ The mobile station shall remove the TAG field corresponding to each call being cancelled from the list TAG\_OUTSTANDING\_LIST.
  - + If the enhanced origination timer expires, the mobile station shall remove the associated TAG field corresponding to this call from TAG\_OUTSTANDING\_LIST.
  - Otherwise, the mobile station shall perform the following:
    - + If this is a packet data call origination<sup>31</sup>, the mobile station shall first determine the following conditions:
      - o If RETRY\_DELAY<sub>s</sub>[001] is not 0, the mobile station shall not send the *Enhanced Origination Message* until after the system time stored in RETRY\_DELAY<sub>s</sub>[001].
      - o If RETRY\_DELAY<sub>s</sub>[101] is not 0, the mobile station shall not send the *Enhanced Origination Message* until after the system time stored in RETRY\_DELAY<sub>s</sub>[101].
    - + If this contains BCMC origination, the mobile station shall determine the following conditions:
      - o If BCMC\_RETRY\_DELAY\_LISTs[i].RETRY\_DELAY is not zero for the BCMC flow corresponding to BCMC\_RETRY\_DELAY\_LISTs[i].BCMC\_FLOW\_ID, the mobile station shall not include the BCMC flow (See section 2.6.13.11) in the *Enhanced Origination Message* until after the system time stored in BCMC\_RETRY\_DELAY\_LISTs[i].RETRY\_DELAY.

<sup>31</sup> Packet data origination refers to origination with SO 60, SO 61 or any service option in Service Option Group 4 and 5 in [30]

- 1           + If the above conditions do not prohibit the mobile station from sending an
- 2           *Enhanced Origination Message* at this time, the mobile station shall perform
- 3           the following:
- 4           o If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to 11 and the *Enhanced*
- 5           *Origination Message* is being sent to perform packet data dormant
- 6           handoff, the mobile station shall include all dormant packet data service
- 7           instances (see [42]) up to the limit specified by
- 8           MAX\_ADD\_SERV\_INSTANCE<sub>S</sub>.
- 9           o For each service instance being initiated in the *Enhanced Origination*
- 10          *Message*, the mobile station shall perform the following:
- 11          ◇ increment the stored value of TAG<sub>S</sub> to the next unused integer value,
- 12          ◇ add TAG<sub>S</sub> to the list TAG\_OUTSTANDING\_LIST,
- 13          ◇ associate the TAG<sub>S</sub> value to the corresponding service instance, and
- 14          ◇ set an enhanced origination timer associated with TAG<sub>S</sub> to a value of
- 15          T42m seconds.
- 16          o The mobile station shall send an *Enhanced Origination Message* to the
- 17          base station, with the TAG or ADD\_TAG field of each call included in the
- 18          message set to its associated TAG<sub>S</sub>.
- 19       + Upon sending the *Enhanced Origination Message* and prior to receiving a
- 20       Layer 3 response from the base station, if the mobile station is directed by
- 21       the user to cancel this call, the mobile station shall perform the following:
- 22       o The mobile station shall send a *Call Cancel Message* to the base station,
- 23       with each TAG or ADD\_TAG field included in the message set to the TAG
- 24       value in the list TAG\_OUTSTANDING\_LIST corresponding to the call(s)
- 25       being cancelled.
- 26       o The mobile station shall disable the enhanced origination timer and
- 27       shall remove the TAG field corresponding to each call being cancelled
- 28       from the list TAG\_OUTSTANDING\_LIST.
- 29       + If the enhanced origination timer expires, the mobile station shall remove
- 30       the associated TAG field from TAG\_OUTSTANDING\_LIST.
- 31       • If the Layer 3 receives a “call release request” from a Call Control instance, Layer 3
- 32       shall perform the following:
- 33       - If there are no other active or pending calls, the Layer 3 shall enter the *Release*
- 34       *Substate* with a mobile station release indication (see 2.6.4.4).
- 35       – Otherwise, the mobile station shall perform the following:
- 36       + The mobile station shall send a Service Request Message, Resource Release
- 37       *Request Message*, or a *Resource Release Request Mini Message* to the base
- 38       station requesting to release the service option connection.

- 1           + If the mobile station sends a Resource Release Request Message or a  
2           *Resource Release Request Mini Message*, it shall set the purge service indicator  
3           field to '0'.
- 4       • If the Layer 3 receives a request to release a BCMC call [*BCMC-Stop-*  
5       *Monitor.Request(BCMC\_FLOW\_ID)*] from Upper Layer, Layer 3 shall perform the  
6       following:
  - 7           - If there are no other active or pending calls, the Layer 3 shall enter the *Release*  
8           *Substate* with a mobile station release indication (see 2.6.4.4).
  - 9           - Otherwise, the mobile station shall send a *Resource Release Request Message*  
10           to the base station requesting to release the BCMC flow (See section 2.6.13.11).
- 11       • If the Layer 3 receives a "call inactive indication" from a Call Control instance,  
12       Layer 3 shall perform the following:
  - 13           - If there are no other active or pending calls, the Layer 3 shall enter the *Release*  
14           *Substate* with a service inactive indication (see 2.6.4.4).
  - 15           - Otherwise, the mobile station shall perform the following:
    - 16               + The mobile station shall send a Service Request Message, Resource Release  
17               Request Message, or a Resource Release Request Mini Message to the base  
18               station requesting to release the service option connection and purge the  
19               service.
    - 20               + If the mobile station sends a Resource Release Request Message or a  
21               Resource Release Request Mini Message, it shall set the purge service indicator  
22               field to '1'.
- 23       • If the mobile station is directed by the user to power down, the Layer 3 shall send a  
24       "release indication" to all Call Control instances, and shall enter the *Release*  
25       *Substate* with a power-down indication (see 2.6.4.4).
- 26       • If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an  
27       acknowledgment failure, then:
  - 28           - If RESQ\_ENABLED<sub>S</sub> is equal to '1' and FPC\_PRI\_CHAN<sub>S</sub> is equal to '0', the  
29           mobile station shall perform the following:
    - 30               + disable its transmitter, and
    - 31               + enable the rescue delay timer with an initial value of (RESQ\_DELAY\_TIME<sub>S</sub>  
32               × 80) ms.
  - 33           - Otherwise, the layer 3 shall terminate all Call Control instances, and the mobile  
34           station shall disable its transmitter and shall enter the *System Determination*  
35           *Substate* of the *Mobile Station Initialization State* with a system lost indication  
36           (see 2.6.1.1).
- 37       • The mobile station shall perform the following:

- 1       – The mobile station may send the *Resource Request Message* or *Resource*  
2       *Request Mini Message* in accordance with requirements for the currently  
3       connected service option whenever  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is equal to 0,  
4       where,  $\text{RETRY\_TYPE}$  is equal to '010'.
- 5       – The mobile station shall not send the *Resource Request Message* or *Resource*  
6       *Request Mini Message* whenever  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is set to *infinity*,  
7       where,  $\text{RETRY\_TYPE}$  is equal to '010'.
- 8       – If  $\text{USE\_CH\_CFG\_RRM}_S$  is equal to '0', the mobile station shall set  $\text{CH\_IND\_INCL}$   
9       to '0' in the *Resource Request Message* and *Resource Request Mini Message*;  
10      otherwise, the mobile station may request a channel configuration in the  
11      *Resource Request Message* or *Resource Request Mini Message*.
- 12      – If  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is not 0 or *infinity*, the mobile station shall not  
13      send the *Resource Request Message* or *Resource Request Mini Message* until  
14      after the system time stored in  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$ , where,  
15       $\text{RETRY\_TYPE}$  is equal to '010'.
- 16      – The mobile station may send the *Supplemental Channel Request Message* or  
17      *Supplemental Channel Request Mini Message* whenever  
18       $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is set to '0', where,  $\text{RETRY\_TYPE}$  is equal to  
19      '011'.
- 20      – The mobile station shall not send the *Supplemental Channel Request Message*  
21      or *Supplemental Channel Request Mini Message* whenever  
22       $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is set to *infinity*, where,  $\text{RETRY\_TYPE}$  is equal to  
23      '011'.
- 24      – If  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is not 0 or *infinity*, the mobile station shall not  
25      send the *Supplemental Channel Request Message* or *Supplemental Channel*  
26      *Request Mini Message* until after the system time stored in  
27       $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$ , where,  $\text{RETRY\_TYPE}$  is equal to '011'.
- 28      – The mobile station shall not send a Short Data Burst (see [30], [42]) whenever  
29       $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is set to *infinity*, where,  $\text{RETRY\_TYPE}$  is equal to  
30      '100' or '101'.
- 31      – If  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  is not 0 or *infinity*, where,  $\text{RETRY\_TYPE}$  is  
32      equal to '100' or '101', the mobile station shall not send a Short Data Burst (see  
33      [30], [42]) until the maximum of the system time stored in  $\text{RETRY\_DELAY}_S[100]$   
34      and  $\text{RETRY\_DELAY}_S[101]$ .
- 35      – At the system time stored in  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$ , the mobile station  
36      shall reset  $\text{RETRY\_DELAY}_S[\text{RETRY\_TYPE}]$  to 0, where  $\text{RETRY\_TYPE}$  is equal to  
37      '001', '010', '011', '100' or '101'.
- 38      • The mobile station may send a *Resource Release Request Message* or a *Resource*  
39      *Release Request Mini Message* to request for reverse pilot gating operation to be  
40      performed or to request a service option connection to be disconnected. The mobile  
41      station may send a *Resource Release Request Message* to request one or more  
42      BCMC flows to be disconnected.



- 1     • The mobile station may send a *Shared Channel Configuration Order* (ORDQ =  
2     '00000000') to request for R-FCH assignment. The mobile station may send a  
3     *Shared Channel Configuration Order* (ORDQ = '00000001') to request release of the  
4     R-FCH.
- 5     • When the Reverse Packet Data Channel is assigned, the mobile station shall not  
6     send a *Supplemental Channel Request Message* or *Supplemental Channel Request*  
7     *Mini Message* containing a request for Reverse Supplemental Channel assignment.
- 8     • The mobile station may enter the *Release Substate* with a service inactive  
9     indication (see 2.6.4.4) if the service corresponding to the packet data service  
10    option instance is inactive at the mobile station.
- 11    • If Layer 3 receives a "substate timer expired indication" from a Call Control  
12    instance, the Layer 3 shall perform the following:
  - 13      - If there are no other active or pending calls, the Layer 3 shall terminate this Call  
14        Control instance; and the mobile station shall disable its transmitter and enter  
15        the *System Determination Substate* of the *Mobile Station Initialization State* with  
16        a system lost indication (see 2.6.1.1).
  - 17      - Otherwise, the mobile station shall send a *Service Request Message*, *Resource*  
18        *Release Request Message*, or a *Resource Release Request Mini Message*.
- 19    • If there are no active or pending calls, the Layer 3 shall enter the *Release Substate*  
20    with a mobile station release indication.
- 21    • If Layer 3 receives a 'message rejected indication' from a Call Control instance,  
22    mobile station shall send a *Mobile Station Reject Order* (ORDQ set to the applicable  
23    reason code as determined from Table 2.7.3-1) within T<sub>56m</sub> seconds as follows:
  - 24      - If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, the mobile station shall  
25        include the CON\_REF\_INCL field with this message and shall perform the  
26        following: if the corresponding Call Control instance is identified by NULL, the  
27        mobile station shall either set the CON\_REF\_INCL field of the message to '0' or  
28        set the CON\_REF\_INCL field to '1' and set the CON\_REF field to the connection  
29        reference of the service option connection corresponding to this Call Control  
30        instance; otherwise, the mobile station shall set the CON\_REF\_INCL field of the  
31        message to '1' and the CON\_REF field of the message to the connection  
32        reference of the service option connection corresponding to this Call Control  
33        instance.
- 34    • If Layer 3 is requested by the upper layers to query base station identification  
35    number, SID, NID, and LAT/LONG related information for one or more pilots, and  
36    PILOT\_INFO\_REQ\_SUPPORTED<sub>s</sub> equals '1', mobile station shall send a *Base*  
37    *Station Status Request Message* with a "Pilot Information" record type to the base  
38    station.

- 1       • If the mobile station needs to suspend its CDMA Traffic Channel processing for  
2       applications other than a PUF probe, hard handoff, or periodic search, then, prior  
3       to suspending its CDMA Traffic Channel processing, the mobile station shall  
4       perform the following:  
5       - If CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>s</sub> is equal to '1' and the total time it needs to  
6       suspend processing the CDMA Traffic Channel is longer than  
7       CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>s</sub>, the mobile station shall send a *CDMA*  
8       *Off Time Report Message*. Otherwise, the mobile shall not send a *CDMA Off Time*  
9       *Report Message*.
- 10       • The mobile station may send a *CDMA Off Time Report Message* with  
11       CDMA\_OFF\_TIME\_ENABLE set to '0' to cancel a previously reported CDMA Traffic  
12       Channel processing suspension.
- 13       • The mobile station shall update RC\_PARAMS\_RECORD<sub>s</sub> as described in section  
14       2.6.17.
- 15       • If the mobile station performs a hard handoff, it shall initialize RC parameters as  
16       described in section 2.6.16.
- 17       • If the mobile station receives R-SCH burst assignment with RC08, then the mobile  
18       station shall perform the following:  
19       - Set REV\_FCH\_BLANKING\_DUTYCYCLE\_IN\_USE to '000' at the start time of the  
20       burst assignment.  
21       - Set REV\_FCH\_BLANKING\_DUTYCYCLE\_IN\_USE to  
22       REV\_FCH\_BLANKING\_DUTYCYCLE<sub>s</sub> at the end of the burst assignment.
- 23       • If the mobile station receives a message which is included in the following list and  
24       every message field value is within its permissible range, the mobile station shall  
25       process the message as described below and in accordance with the message's  
26       action time (see 2.6.4.1.5).  
27       1. *Alert With Information Message*: If P\_REV\_IN\_USE<sub>s</sub> is less than seven, the Layer  
28       3 shall deliver this message to the Call Control instance; otherwise, the Layer 3  
29       shall deliver this message to the Call Control instance identified by NULL.  
30       2. *Reserved*  
31       3. *Audit Order*  
32       4. *Authentication Challenge Message*: The Layer 3 shall send a "reset waiting for  
33       order substate timer indication" to all Call Control instances. The mobile  
34       station shall process the message and shall respond as specified in 2.3.12.1.4  
35       within T<sub>32m</sub> seconds, regardless of the value of AUTH<sub>s</sub>.  
36       5. *Authentication Request Message*: The mobile station shall process the message  
37       and shall respond as specified in 2.3.12.5.2.

- 1       6. *Base Station Challenge Confirmation Order*: The Layer 3 shall send a “reset  
2       waiting for order substate timer indication” to all Call Control instances. The  
3       mobile station shall process the message and shall respond with an *SSD*  
4       *Update Confirmation Order* or *SSD Update Rejection Order* as specified in  
5       2.3.12.1.5 within  $T_{32m}$  seconds.
- 6       7. *Base Station Status Response Message*: The Layer 3 shall deliver the  
7       information contained in this message to the Upper Layer entity that requested  
8       for this information.
- 9       8. *Call Assignment Message*: The mobile station shall process this message as  
10      follows:
- 11      - If  $RESPONSE\_IND_r$  equals ‘1’, then for each of the  $TAG_r$  or  $ADD\_TAG_r$  fields  
12      that matches any of the TAG values contained in the list  
13       $TAG\_OUTSTANDING\_LIST$ , the mobile station shall perform the following:
- 14      + If  $ACCEPT\_IND_r$  or  $ADD\_ACCEPT\_IND_r$  associated with the  $TAG_r$  or  
15       $ADD\_TAG_r$  equals ‘0’, the mobile station shall disable the enhanced  
16      origination timer associated with  $TAG_r$  and shall remove the TAG value  
17      specified by  $TAG_r$  from the list  $TAG\_OUTSTANDING\_LIST$ .
- 18      + If  $ACCEPT\_IND_r$  or  $ADD\_ACCEPT\_IND_r$  associated with the  $TAG_r$  or  
19       $ADD\_TAG_r$  equals ‘1’ and  $USE\_OLD\_SERV\_CONFIG_r$  field associated  
20      with this TAG is not set to ‘1’, the mobile station shall perform the  
21      following:
- 22      o If there already exists or currently pending instantiation a Call  
23      Control instance identified by  $CON\_REF_r$  or  $ADD\_CON\_REF_r$   
24      associated with the  $TAG_r$  or  $ADD\_TAG_r$ , the mobile station shall  
25      send a *Mobile Station Reject Order* with  $ORDQ$  field set to ‘00010010’  
26      (a call control instance is already present with the specified  
27      identifier), with the  $CON\_REF$  field of the order set to the  $CON\_REF_r$   
28      or  $ADD\_CON\_REF_r$ .
- 29      o Otherwise, Layer 3 shall instantiate a Call Control instance (as  
30      specified in 2.6.10) at the action time of the message. The mobile  
31      station shall identify this Call Control instance by  $CON\_REF_r$  or  
32       $ADD\_CON\_REF_r$  associated with the  $TAG_r$  or  $ADD\_TAG_r$ . If a service  
33      option connection corresponding to this call has not been  
34      established, the mobile station should wait for the base station to  
35      initiate service negotiation to establish the service option connection.
- 36      o The mobile station shall disable the enhanced origination timer  
37      corresponding to this TAG and shall remove the TAG value from the  
38      list  $TAG\_OUTSTANDING\_LIST$ .
- 39      + If  $ACCEPT\_IND_r$  equals ‘1’ and  $USE\_OLD\_SERV\_CONFIG_r$  field is  
40      included and is set to ‘1’, the mobile station shall perform the following:

- 1                   ○ At the action time of this message, the mobile station shall restore  
2                   the indicated service option connection record(s) from the stored  
3                   service configuration, where the service option connection records to  
4                   be restored are determined as follows:
- 5                   ○ If SR\_ID<sub>r</sub> equals '111', the mobile station shall restore all remaining  
6                   service option connection records from the stored service  
7                   configuration; otherwise, the mobile station shall restore the service  
8                   option connection record corresponding to the SR\_ID<sub>r</sub> received in  
9                   this message.
- 10                  ○ Layer 3 shall instantiate a Call Control instance (as specified in  
11                  2.6.10) for each of the restored service option connections with a  
12                  'restore indication' and Layer 3 shall identify each of these Call  
13                  Control instances by the value of the CON\_REF field corresponding  
14                  to the restored service option connection.
- 15                  ○ The mobile station shall disable the enhanced origination timer  
16                  corresponding to TAG<sub>r</sub> and shall remove the TAG value specified by  
17                  TAG<sub>r</sub> from the list TAG\_OUTSTANDING\_LIST.
- 18                  – If RESPONSE\_IND<sub>r</sub> equals '1', then for each of the TAG<sub>r</sub> or ADD\_TAG<sub>r</sub>  
19                  fields that does not match with any of the TAG values contained in the list  
20                  TAG\_OUTSTANDING\_LIST, the mobile station shall send a *Mobile Station*  
21                  *Reject Order* with ORDQ field set to '00010011' (TAG received does not  
22                  match TAG stored), with the TAG field of the order set to the TAG<sub>r</sub> or  
23                  ADD\_TAG<sub>r</sub>, and the CON\_REF field of the order set to CON\_REF<sub>r</sub> or  
24                  ADD\_CON\_REF<sub>r</sub>.
- 25                  – If RESPONSE\_IND<sub>r</sub> equals '0' and USE\_OLD\_SERV\_CONFIG<sub>r</sub> field is not  
26                  included or is included and is set to '0', the mobile station shall perform the  
27                  following for each of the CON\_REF<sub>r</sub> or ADD\_CON\_REF<sub>r</sub>:
  - 28                  + If there already exists or currently pending instantiation a Call Control  
29                  instance identified by CON\_REF<sub>r</sub> or ADD\_CON\_REF<sub>r</sub>, the mobile station  
30                  shall send a *Mobile Station Reject Order* with ORDQ field set to  
31                  '00010010' (a call control instance is already present with the specified  
32                  identifier), with the CON\_REF field of the order set to the CON\_REF<sub>r</sub> or  
33                  ADD\_CON\_REF<sub>r</sub>.
  - 34                  + Otherwise, if the mobile station does not accept this call assignment, the  
35                  mobile station shall send a *Mobile Station Reject Order* with ORDQ field  
36                  set to '00010000' (call assignment not accepted), with the CON\_REF  
37                  field of the order set to the CON\_REF<sub>r</sub> or ADD\_CON\_REF<sub>r</sub>.
  - 38                  + Otherwise, at the action time of the message, the mobile station shall  
39                  store the bypass indicator (BYPASS\_ALERT\_ANSWER<sub>s</sub> =  
40                  BYPASS\_ALERT\_ANSWER<sub>r</sub>) and the Layer 3 shall instantiate a Call

- 1 Control instance (as specified in 2.6.10). The mobile station shall  
 2 identify this Call Control instance by the CON\_REF<sub>r</sub> or ADD\_CON\_REF<sub>r</sub>.  
 3 If a service option connection corresponding to this call has not been  
 4 established, the mobile station should wait for the base station to  
 5 initiate service negotiation to establish the service option connection.
- 6 - If RESPONSE\_IND<sub>r</sub> equals '0' and USE\_OLD\_SERV\_CONFIG<sub>r</sub> field is  
 7 included and is set to '1', the mobile station shall perform the following:
    - 8 + At the action time of this message, the mobile station shall restore the  
 9 indicated service option connection record(s) from the stored service  
 10 configuration, where the service option connection records to be  
 11 restored are determined as follows:
      - 12 o If SR\_ID<sub>r</sub> equals '111', the mobile station shall restore all remaining  
 13 service option connection records from the stored service  
 14 configuration; otherwise, the mobile station shall restore the service  
 15 option connection record corresponding to the SR\_ID<sub>r</sub> received in  
 16 this message.
      - 17 + If SR\_ID<sub>r</sub> equals '111', the mobile station shall perform the following:
        - 18 o For the first remaining service option connection (with  
 19 corresponding connection reference CON\_REF<sub>i</sub>) listed in this stored  
 20 Service Configuration information record, Layer 3 shall instantiate a  
 21 Call Control instance (as specified in 2.6.10) with the received  
 22 BYPASS\_ALERT\_ANSWER<sub>s</sub>. The mobile station shall identify this  
 23 Call Control instances by the corresponding CON\_REF<sub>i</sub>.
        - 24 o For each of the remaining service option connections, Layer 3 shall  
 25 instantiate a Call Control instance (as specified in 2.6.10) for each of  
 26 the restored service option connections with a 'restore indication'  
 27 and Layer 3 shall identify each of these Call Control instances by the  
 28 value of the CON\_REF field corresponding to the restored service  
 29 option connection.
      - 30 + If SR\_ID<sub>r</sub> is not equal to '111', Layer 3 shall instantiate a Call Control  
 31 instance (as specified in 2.6.10) with the received  
 32 BYPASS\_ALERT\_ANSWER<sub>s</sub> for the service option connection record  
 33 corresponding to the SR\_ID<sub>r</sub> received in this message.
  - 34 9. *Candidate Frequency Search Control Message:* The mobile station shall  
 35 process the message as specified in 2.6.6.2.5.1.
  - 36 10. *Candidate Frequency Search Request Message:* The mobile station shall  
 37 process the message as specified in 2.6.6.2.5.1.
  - 38 11. *Continuous DTMF Tone Order:* Support of this order by the mobile station is

optional. If  $P\_REV\_IN\_USE_s$  is less than seven, the Layer 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3 shall perform the following: if  $CON\_REF\_INCL_r$  equals '0', the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by  $CON\_REF_r$ .

## 12. *Data Burst Message*

13. *Extended Alert With Information Message*: The mobile station shall perform the following: If  $CON\_REF\_INCL_r$  equals '0', the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by  $CON\_REF_r$ .

14. *Extended Flash With Information Message*: The mobile station shall perform the following: If  $CON\_REF\_INCL_r$  equals '0', the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by  $CON\_REF_r$ .

15. *Extended Handoff Direction Message*: The Layer 3 shall send a "reset waiting for order substate timer indication" to all Call Control instances. The mobile station shall process the message as specified in 2.6.6.2.5.1.

16. *Extended Neighbor List Update Message*: The mobile station shall process the message as specified in 2.6.6.2.5.1.

17. *Extended Release Message*: The mobile station shall process the message as specified in 2.6.4.1.9.

18. *Extended Release Mini Message*: The mobile station shall process the message as specified in 2.6.4.1.9.

19. *Forward Supplemental Channel Assignment Mini Message*: The mobile station shall process the message as specified in 2.6.6.2.5.1.

20. *Flash With Information Message*: If  $P\_REV\_IN\_USE_s$  is less than seven, the Layer 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by NULL.

21. *Extended Supplemental Channel Assignment Message*: The mobile station shall process the message as specified in 2.6.6.2.5.1.

22. *General Handoff Direction Message*: The Layer 3 shall send a "reset waiting for order substate timer indication" to all Call Control instances. The mobile station shall process the message as specified in 2.6.6.2.5.1.

23. *In-Traffic System Parameters Message*: The mobile station shall process the message as specified in 2.6.4.1.4.

## 24. *Local Control Order*

25. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and record the reason for the *Lock Until Power-Cycled Order* in the mobile station's semi-permanent memory ( $LCKRSN\_P_{s-p}$  equals the least-significant

- 1 four bits of  $ORDQ_r$ ). The mobile station should notify the user of the locked  
 2 condition. The Layer 3 shall terminate all Call Control instances, and shall  
 3 enter the *System Determination Substate* of the *Mobile Station Initialization*  
 4 *State* with a lock indication (see 2.6.1.1), and shall not enter the *System Access*  
 5 *State* again until after the next mobile station power-up or until it has received  
 6 an *Unlock Order*. This requirement shall take precedence over any other  
 7 mobile station requirement specifying entry to the *System Access State*.
- 8 26. *Long Code Transition Request Order*: The mobile station shall process the  
 9 message as specified in 2.6.4.1.6.
- 10 27. *Maintenance Order*: If  $P\_REV\_IN\_USE_s$  is less than seven, the Layer 3 shall  
 11 deliver this message to the Call Control instance; otherwise, the Layer 3 shall  
 12 perform the following: if  $CON\_REF\_INCL_r$  equals '0', the Layer 3 shall deliver  
 13 this message to the Call Control instance identified by NULL; otherwise, the  
 14 Layer 3 shall deliver this message to the Call Control instance identified by  
 15  $CON\_REF_r$ .
- 16 28. *Maintenance Required Order*: The mobile station shall record the reason for the  
 17 *Maintenance Required Order* in the mobile station's semi-permanent memory  
 18 ( $MAINTRSN_{s-p}$  equals the least-significant four bits of  $ORDQ_r$ ). The mobile  
 19 station shall remain in the unlocked condition. The mobile station should  
 20 notify the user of the maintenance required condition.
- 21 29. *Message Encryption Mode Order*: The mobile station shall process the message  
 22 as specified in 2.3.12.2.
- 23 30. *Mobile Station Registered Message*: The mobile station shall process the  
 24 message as specified in 2.6.5.5.4.3.
- 25 31. *Mobile Assisted Burst Operation Parameters Message*: The mobile station shall  
 26 process the message as specified in 2.6.6.2.5.1.
- 27 32. *Neighbor List Update Message*: The mobile station shall process the message  
 28 as specified in 2.6.6.2.5.1.
- 29 33. *Outer Loop Report Request Order*: The mobile station shall send the *Outer Loop*  
 30 *Report Message* in assured mode to the base station.
- 31 34. *Parameter Update Order*: The Layer 3 shall send a "reset waiting for order  
 32 substate timer indication" to all Call Control instances. The mobile station  
 33 shall increment  $COUNT_{s-p}$  (see 2.3.12.1.3). The mobile station shall send a  
 34 *Parameter Update Confirmation Order* within  $T_{56m}$  seconds. The mobile station  
 35 shall set the  $ORDQ$  field of the *Parameter Update Confirmation Order* to the  
 36 same value as the  $ORDQ$  field of the *Parameter Update Order*.
- 37 35. *Periodic Pilot Measurement Request Order*: The mobile station shall process the  
 38 order as specified in 2.6.6.2.5.1.
- 39 36. *Pilot Measurement Request Order*: The mobile station shall process the order  
 40 as specified in 2.6.6.2.5.1.
- 41 37. *Power Control Message*: The mobile station shall process the message as

specified in 2.6.4.1.1.3.

38. *Power Control Parameters Message*: The mobile station shall process the message as specified in 2.6.4.1.1.2.
39. *Power Up Function Message*: The mobile station shall process the message as specified in 2.6.4.1.7.1.
40. *Power Up Function Completion Message*: The mobile station shall process the message as specified in 2.6.4.1.7.3.
41. *Rate Change Message*: The mobile station shall process the message as specified in 2.6.4.1.1.4.
42. *Release Order*: The Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the *Release Substate* with a base station release indication (see 2.6.4.4).
43. *Resource Allocation Message*: The mobile station shall process the message as specified in 2.6.4.1.10.
44. *Resource Allocation Mini Message*: The mobile station shall process the message as specified in 2.6.4.1.10.
45. *Retrieve Parameters Message*: The mobile station shall send, within T<sub>56m</sub> seconds, a *Parameters Response Message*.
46. *Retry Order*: The mobile station shall process the order as follows:
  - If RETRY\_TYPE<sub>R</sub> is equal to ‘000’, the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to ‘001’, ‘010’, ‘011’, ‘100’, or ‘101’.
  - If RETRY\_TYPE<sub>R</sub> is equal to ‘001’, ‘100’, or ‘101’, then the mobile station shall perform the following:
    - If RETRY\_DELAY<sub>R</sub> is equal to ‘00000000’, then the mobile station shall set RETRY\_DELAY<sub>S</sub> [RETRY\_TYPE<sub>R</sub>] to 0.
    - If RETRY\_DELAY<sub>R</sub> is not equal to ‘00000000’, the mobile station shall set RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>] as follows:
      - + If the most significant bit of the RETRY\_DELAY<sub>R</sub> is 0, set RETRY\_DELAY\_UNIT<sub>S</sub> to 1000ms. If the most significant bit of the RETRY\_DELAY<sub>R</sub> is ‘1’, set RETRY\_DELAY\_UNIT<sub>S</sub> to 60000ms.
      - + The mobile station shall set RETRY\_DELAY\_VALUE<sub>S</sub> to the seven least significant bits of RETRY\_DELAY<sub>R</sub>.
      - + The mobile station shall store the next system time 80 ms boundary + RETRY\_DELAY\_VALUE<sub>S</sub> × RETRY\_DELAY\_UNIT<sub>S</sub> ms as RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE<sub>R</sub>].
  - If RETRY\_TYPE<sub>R</sub> is equal to ‘010’ or ‘011’, the mobile station shall perform the following:



- 1                   - If  $\text{RETRY\_DELAY}_r[\text{RETRY\_TYPE}_r]$  is '00000000', then the mobile station
- 2                   shall set  $\text{RETRY\_DELAY}_s[\text{RETRY\_TYPE}_r]$  to 0.
- 3                   - If  $\text{RETRY\_DELAY}_r[\text{RETRY\_TYPE}_r]$  is '11111111', then the mobile station
- 4                   shall set  $\text{RETRY\_DELAY}_s[\text{RETRY\_TYPE}_r]$  to *infinity*.
- 5                   - If  $\text{RETRY\_DELAY}_r[\text{RETRY\_TYPE}_r]$  is not equal to '00000000' or
- 6                   '11111111', the mobile station shall store the next system time 80 ms
- 7                   boundary +  $\text{RETRY\_DELAY}_r[\text{RETRY\_TYPE}_r] \times 320$  ms as
- 8                    $\text{RETRY\_DELAY}_s[\text{RETRY\_TYPE}_r]$ .
- 9                   47. *Reverse Supplemental Channel Assignment Mini Message*: The mobile station
- 10                  shall process the message as specified in 2.6.6.2.5.1.
- 11                  48. *Security Mode Command Message*: The mobile station shall process the
- 12                  message as specified in 2.6.4.1.14.
- 13                  49. *Send Burst DTMF Message*: Support of this message by the mobile station is
- 14                  optional. If  $\text{P\_REV\_IN\_USE}_s$  is less than seven, the Layer 3 shall deliver this
- 15                  message to the Call Control instance; otherwise, the Layer 3 shall perform the
- 16                  following: if  $\text{CON\_REF\_INCL}_r$  equals '0', the Layer 3 shall deliver this message
- 17                  to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
- 18                  deliver this message to the Call Control instance identified by  $\text{CON\_REF}_r$ .
- 19                  50. *Service Connect Message*: The mobile station shall process the message in
- 20                  accordance with the requirements for the active service subfunction (see
- 21                  2.6.4.1.2.2) if the message is not rejected due to the following conditions:
- 22                  - If the  $\text{CC\_INFO\_INCL}$  field is included in this message and is set to '1', the
- 23                  mobile station shall perform the following for each of the
- 24                   $\text{NUM\_CALLS\_ASSIGN}$  call assignments included in this message:
- 25                  + If there already exists or currently pending instantiation a Call Control
- 26                  instance identified by  $\text{CON\_REF}_r$ , the mobile station shall send a *Mobile*
- 27                  *Station Reject Order* with  $\text{ORDQ}$  field set to '00010010' (a call control
- 28                  instance is already present with the specified identifier), with the
- 29                   $\text{CON\_REF}$  field of the order set to  $\text{CON\_REF}_r$ .
- 30                  + If  $\text{RESPONSE\_IND}_r$  equals '1' and  $\text{TAG}_r$  does not match any of the TAG
- 31                  values contained in the list  $\text{TAG\_OUTSTANDING\_LIST}$ , the mobile
- 32                  station shall send a *Mobile Station Reject Order* with  $\text{ORDQ}$  field set to
- 33                  '00010011' (TAG received does not match TAG stored), with the TAG
- 34                  field of the order set to  $\text{TAG}_r$ , and the  $\text{CON\_REF}$  field of the order set to
- 35                   $\text{CON\_REF}_r$ .
- 36                  + If the mobile station does not accept this call assignment, the mobile
- 37                  station shall send a *Mobile Station Reject Order* with  $\text{ORDQ}$  field set to
- 38                  '00010000' (call assignment not accepted), with the  $\text{CON\_REF}$  field of
- 39                  the order set to  $\text{CON\_REF}_r$ .
- 40                  51. *Service Option Control Message*: The mobile station shall process the message

- 1 in accordance with the requirements for the active service subfunction (see  
2 2.6.4.1.2.2).
- 3 52. *Service Option Control Order*: The mobile station shall process the message in  
4 accordance with the requirements for the active service subfunction (see  
5 2.6.4.1.2.2).
- 6 53. *Service Option Request Order*: The mobile station shall process the message in  
7 accordance with the requirements for the active service subfunction (see  
8 2.6.4.1.2.2).
- 9 54. *Service Option Response Order*: The mobile station shall process the message  
10 in accordance with the requirements for the active service subfunction (see  
11 2.6.4.1.2.2).
- 12 55. *Service Redirection Message*: The mobile station shall process the message as  
13 follows:
- 14 If RECORD\_TYPE<sub>r</sub> is equal to '00000000', the mobile station shall perform the  
15 following:
- 16 – The mobile station shall set RETURN\_IF\_FAIL<sub>s</sub> = RETURN\_IF\_FAIL<sub>r</sub>.
  - 17 – If DELETE\_TMSI<sub>r</sub> is equal to '1', the mobile station shall set all the bits  
18 of TMSI\_CODE<sub>s-p</sub> to '1'.
  - 19 – The mobile station shall disable the full-TMSI timer.
  - 20 – The Layer 3 shall send a "release indication" to all Call Control  
21 instances, and shall enter the Release Substate with an NDSS off  
22 indication (see 2.6.4.4).
- 23 If RECORD\_TYPE<sub>r</sub> is not equal to '00000000', REDIRECT\_TYPE<sub>r</sub> is '1', and the  
24 mobile station supports the band class and operating mode specified in the  
25 message, the mobile station shall perform the following:
- 26 – The mobile station shall store the redirection record received in the  
27 message as REDIRECT\_REC<sub>s</sub>.
  - 28 – The mobile station shall enable NDSS\_ORIG<sub>s</sub> and shall record the dialed  
29 digits (if any) corresponding to the last MS originated call.
  - 30 – The mobile station shall set RETURN\_IF\_FAIL<sub>s</sub> = RETURN\_IF\_FAIL<sub>r</sub>.
  - 31 – If DELETE\_TMSI<sub>r</sub> is equal to '1', the mobile station shall set all the bits  
32 of TMSI\_CODE<sub>s-p</sub> to '1'.
  - 33 – The mobile station shall disable the full-TMSI timer.
  - 34 – The Layer 3 shall send a "release indication" to all Call Control instances,  
35 and shall enter the *Release Substate* with a redirection indication (see  
36 2.6.4.4). Otherwise, the mobile station shall discard the message and send a  
37 *Mobile Station Reject Order* (ORDQ set to the applicable reason code as  
38 determined from Table 2.7.3-1) within T<sub>56m</sub> seconds.
- 39 56. *Service Request Message*: The mobile station shall process the message in

- 1 accordance with the requirements for the active service subfunction (see  
2 2.6.4.1.2.2).
- 3 57. *Service Response Message*: The mobile station shall process the message in  
4 accordance with the requirements for the active service subfunction (see  
5 2.6.4.1.2.2).
- 6 58. *Set Parameters Message*: If the mobile station can set all of the parameters  
7 specified by the `PARAMETER_ID` fields in the message, the mobile station shall  
8 set them; otherwise, the mobile station shall send, within  $T_{56m}$  seconds, a  
9 *Mobile Station Reject Order*.
- 10 59. *SSD Update Message*: The Layer 3 shall send a “reset waiting for order substate  
11 timer indication” to all Call Control instances. The mobile station shall process  
12 the message and respond with a *Base Station Challenge Order* as specified in  
13 2.3.12.1.5 within  $T_{32m}$  seconds.
- 14 60. *Status Request Message*: The mobile station shall send, within  $T_{56m}$  seconds,  
15 a *Status Response Message*. If the message does not specify any qualification  
16 information (`QUAL_INFO_TYPEr` is equal to ‘00000000’), the mobile station  
17 shall include the requested information records in the *Status Response*  
18 *Message*. If the message specifies a band class (`QUAL_INFO_TYPEr` is equal to  
19 ‘00000001’), the mobile station shall only include the requested information  
20 records for the specified band class (`BAND_CLASSr`) in the *Status Response*  
21 *Message*. If the message specifies a band class and an operating mode  
22 (`QUAL_INFO_TYPEr` is equal to ‘00000010’), the mobile station shall only  
23 include the requested information records for the specified band class  
24 (`BAND_CLASSr`) and operating mode (`OP_MODEr`) in the *Status Response*  
25 *Message*.
- 26 If the message specifies a band class or a band class and an operating mode  
27 which is not supported by the mobile station, the mobile station shall send a  
28 *Mobile Station Reject Order* with `ORDQ` set to ‘00000110’ (message requires a  
29 capability that is not supported by the mobile station).
- 30 If the response to this message exceeds the allowable length, the mobile  
31 station shall send a *Mobile Station Reject Order* with `ORDQ` set to ‘00001000’  
32 (response message would exceed the allowable length).
- 33 If the message specifies an information record which is not supported by the  
34 mobile station for the specified band class and operating mode, the mobile  
35 station shall send a *Mobile Station Reject Order* with `ORDQ` set to ‘00001001’  
36 (information record is not supported for the specified band class and operating  
37 mode).
- 38 61. *Status Request Order*: If `CDMABANDs` is equal to ‘00000’, the mobile station  
39 shall send a *Status Message* within  $T_{56m}$  seconds. The mobile station shall  
40 respond with information corresponding to the current band class and  
41 operating mode.
- 42 62. *Supplemental Channel Assignment Message*: The mobile station shall process

the message as specified in 2.6.6.2.5.1.

63. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code as follows:

- The mobile station shall store the length of the TMSI zone field by setting ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> to TMSI\_ZONE\_LEN<sub>r</sub>.
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> least significant octets of ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> to TMSI\_ZONE<sub>r</sub>, and
- The mobile station shall store the TMSI code by setting TMSI\_CODE<sub>s-p</sub> to TMSI\_CODE<sub>r</sub>.

The mobile station shall set the TMSI expiration time by setting TMSI\_EXP\_TIME<sub>s-p</sub> to TMSI\_EXP\_TIME<sub>r</sub>. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within T<sub>56m</sub> seconds.

64. *Universal Handoff Direction Message*: The Layer 3 shall send a “reset waiting for order substate timer indication” to all Call Control instances. The mobile station shall process the message as specified in 2.6.6.2.5.1.

65. *User Zone Reject Message*: The mobile station shall process this message as specified in 2.6.9.2.2.

66. *User Zone Update Message*: The mobile station shall process this message as specified in 2.6.9.2.2.

67. *BCMC Order*: The mobile station shall process this message as follows:

- If ORDQ<sub>r</sub> is set to ‘00000000’, the mobile station shall perform the following for each of the BCMC flows that the base station is responding to:
  - If CLEAR\_ALL\_RETRY\_DELAY<sub>r</sub> equals ‘1’, the mobile station shall delete the currently stored BCMC Retry Delay List.
  - If CLEAR\_RETRY\_DELAY<sub>r</sub> equals ‘1’, the mobile station shall delete the entry in the BCMC\_RETRY\_DELAY\_LIST<sub>s[i]</sub> corresponding to BCMC\_FLOW\_ID (See section 2.6.13.11) in this message.
  - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals ‘0000’, Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE, cause= FLOW\_NOT\_AVAILABLE, reason\_ind=CURRENT\_SYS)* for each of the corresponding BCMC\_FLOW\_ID to the BCMC Service Layer.
  - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals ‘0001’, Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE, cause= FLOW\_NOT\_TRANSMITTED, reason\_ind=CURRENT\_SYS)* for each of the corresponding BCMC\_FLOW\_ID to the BCMC Service Layer.
  - If ALL\_BCMC\_REASON<sub>r</sub> or BCMC\_REASON<sub>r</sub> equals ‘0010’, Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE,*

1                    *cause*= *FLOW\_TRANSMITTED\_IN\_IDLE*, *reason\_ind*=*CURRENT\_SYS*) for  
 2 each of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service Layer.

- 3                    – If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON<sub>r</sub>* equals '0011', Layer 3 shall  
 4 send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = SUCCESS,*  
 5 *cause = REGISTRATION\_ACCEPTED, reason\_ind = CURRENT\_SYS)* for  
 6 each of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service Layer.
- 7                    – If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON<sub>r</sub>* equals '0100', Layer 3 shall  
 8 send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE,*  
 9 *cause= AUTHORIZATION\_FAILURE, reason\_ind=CURRENT\_SYS)* for each  
 10 of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service Layer.
- 11                    – If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON<sub>r</sub>* equals '0101', the mobile  
 12 station shall perform the following:
  - 13                    + Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID,*  
 14 *result=FAILURE, cause= RETRY\_LATER, reason\_ind=CURRENT\_SYS)*  
 15 for each of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service  
 16 Layer.
  - 17                    + For each of the corresponding *BCMC\_FLOW\_ID*, if there is a  
 18 *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].BCMC\_FLOW\_ID* which is same as  
 19 *BCMC\_FLOW\_ID* (See section 2.6.13.11), the mobile station shall set  
 20 *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].RETRY\_DELAY* to current system  
 21 time plus *ALL\_BCMC\_RETRY\_DELAY<sub>r</sub>/BCMC\_RETRY\_DELAY*;  
 22 otherwise, the mobile station shall add new  
 23 *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i]* to the BCMC Retry Delay List and  
 24 shall set *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].BCMC\_FLOW\_ID* to the  
 25 *BCMC\_FLOW\_ID*, *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].RETRY\_DELAY* to  
 26 current system time plus  
 27 *ALL\_BCMC\_RETRY\_DELAY<sub>r</sub>/BCMC\_RETRY\_DELAY<sub>r</sub>*.

28                    68. *In-Traffic BCMC Service Parameters Message*: The mobile station shall process  
 29 this message as follows:

30                    The mobile station shall store the following parameters:

- 31                    • Autonomous BCMC request on traffic channel allowed indicator  
 32 (*AUTO\_REQ\_TRAF\_ALLOWED\_IND<sub>s</sub> = AUTO\_REQ\_TRAF\_ALLOWED\_IND*  
 33 *r*).
- 34                    • BCMC in idle state supported indicator  
 35 (*BCMC\_ON\_IDLE\_SUP\_IND<sub>s</sub> = BCMC\_ON\_IDLE\_SUP\_IND<sub>r</sub>*).
- 36                    • Only traffic state BCMC flows included indicator  
 37 (*BCMC\_FLOWS\_ON\_TRAFFIC\_ONLY\_IND<sub>s</sub> = BCMC\_FLOWS\_ON\_TRAFFI*  
 38 *C\_ONLY\_IND<sub>r</sub>*) if *BCMC\_FLOWS\_ON\_TRAFFIC\_ONLY\_IND<sub>r</sub>* is included;  
 39 otherwise, *BCMC\_FLOWS\_ON\_TRAFFIC\_ONLY\_IND<sub>s</sub> = '1'*.

- 1           • Length of time stamp for use on r-csch  
2 (ACH\_TIME\_STAMP\_SHORT\_LENGTH<sub>S</sub> = ACH\_TIME\_STAMP\_SHORT\_LENGTH<sub>R</sub>) if NON\_DEFAULT\_VALUE\_INCLUDED<sub>R</sub> equals '1'; otherwise,  
3 ACH\_TIME\_STAMP\_SHORT\_LENGTH<sub>S</sub> shall be set to 10.  
4
  
- 5           • Length of time stamp  
6 (TIME\_STAMP\_LONG\_LENGTH<sub>S</sub> = TIME\_STAMP\_LONG\_LENGTH<sub>R</sub>) if  
7 NON\_DEFAULT\_VALUE\_INCLUDED<sub>R</sub> equals '1'; otherwise,  
8 TIME\_STAMP\_LONG\_LENGTH<sub>S</sub> shall be set to 52.
  
- 9           • Unit for time stamp length (TIME\_STAMP\_UNIT<sub>S</sub> = TIME\_STAMP\_UNIT<sub>R</sub>)  
10 if NON\_DEFAULT\_VALUE\_INCLUDED<sub>R</sub> equals '1'; otherwise,  
11 TIME\_STAMP\_UNIT<sub>S</sub> shall be set to 6.
  
- 12          • For i=1 to the number of flows included in this message, store the  
13 following:
  - 14          - BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ID = ith occurrence of  
15 BCMC\_FLOW\_ID (BCMC flow identifier) . See section 2.6.13.11.
  
  - 16          - If AUTH\_SIGNATURE\_REQUIRED<sub>R</sub> equals '1',  
17 BCMC\_FLOW\_LIST<sub>S</sub>[i].AUTH\_SIGNATURE\_REQ\_IND = ith  
18 occurrence of AUTH\_SIGNATURE\_REQ\_IND<sub>R</sub>(Authorization signature  
19 required indication).
  
  - 20          - BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ON\_TRAFFIC\_IDLE\_IND = ith  
21 occurrence of BCMC\_FLOW\_ON\_TRAFFIC\_IDLE\_IND<sub>R</sub> (BCMC flow on  
22 traffic state or idle state supported identifier) if  
23 BCMC\_FLOW\_ON\_TRAFFIC\_IDLE\_IND<sub>R</sub> is included; otherwise,  
24 BCMC\_FLOW\_LIST<sub>S</sub>[i].BCMC\_FLOW\_ON\_TRAFFIC\_IDLE\_IND = '01'.
  
- 25          69. *Shared Channel Configuration Order:* The mobile station shall process this  
26 message as follows:
  - 27          • If ORDQ<sub>R</sub> is set to '00000000', the mobile station shall perform the  
28 following:
    - 29          - The mobile station shall set REV\_FCH\_ASSIGNED<sub>S</sub> to '1'.
    - 30          - If CH\_IND<sub>S</sub> is equal to '11' , the mobile station shall begin transmitting  
31 on the Reverse Fundamental Channel.
    - 32          - If CH\_IND<sub>S</sub> is equal to '00' and EXT\_CH\_IND<sub>S</sub> is equal to '01111',  
33 '10001', '10011', or '10101', the mobile station shall begin transmitting  
34 on the Reverse Fundamental Channel and do the following:
      - 35          + If EXT\_CH\_IND<sub>S</sub> is equal to '01111', store EXT\_CH\_IND<sub>S</sub> = '00110'
      - 36          + If EXT\_CH\_IND<sub>S</sub> is equal to '10001', store EXT\_CH\_IND<sub>S</sub> = '10010'
      - 37          + If EXT\_CH\_IND<sub>S</sub> is equal to '10011', store EXT\_CH\_IND<sub>S</sub> = '01110'

- 1                   +    If EXT\_CH\_IND<sub>S</sub> is equal to '10101', store EXT\_CH\_IND<sub>S</sub> = '10110'
- 2           •    If ORDQ<sub>r</sub> is set to '00000001', the mobile station shall do the following:
- 3               –    The mobile station shall set REV\_FCH\_ASSIGNED<sub>S</sub> to '0'.
- 4               –    If CH\_IND<sub>S</sub> is equal to '11' , the mobile station shall stop transmitting
- 5                   on the Reverse Fundamental Channel.
- 6               –    If CH\_IND<sub>S</sub> is equal to '00' and EXT\_CH\_IND<sub>S</sub> is equal to '00110',
- 7                   '10010', '01110', or '10110', the mobile station shall stop transmitting
- 8                   on the Reverse Fundamental Channel and do the following:
- 9                   +    If EXT\_CH\_IND<sub>S</sub> is equal to '00110', store EXT\_CH\_IND<sub>S</sub> = '01111'
- 10                  +    If EXT\_CH\_IND<sub>S</sub> is equal to '10010', store EXT\_CH\_IND<sub>S</sub> = '10001'
- 11                  +    If EXT\_CH\_IND<sub>S</sub> is equal to '01110', store EXT\_CH\_IND<sub>S</sub> = '10011'
- 12                  +    If EXT\_CH\_IND<sub>S</sub> is equal to '10110', store EXT\_CH\_IND<sub>S</sub> = '10101'

13       70. *Service Status Order:* For each of the SERVICE\_STATUS field included in this  
 14       message, the mobile station shall indicate the status to corresponding service  
 15       instance. For each of the SERVICE\_STATUS field set to '001' (service request  
 16       rejected), the mobile station shall perform the following:

- 17       •    The mobile station shall terminate the call control instance corresponding
- 18           to the SR\_ID associated with this SERVICE\_STATUS field.
- 19       •    The mobile station shall send an indication to the affected service instance
- 20           indicating that the call control instance has been terminated.
- 21       •    If a TAG is associated with the SR\_ID corresponding to this
- 22           SERVICE\_STATUS field, the mobile station shall remove the TAG value
- 23           from the TAG\_OUTSTANDING\_LIST and disable the corresponding
- 24           enhanced origination timer

25       71. *Radio Configuration Parameters Message:* If any of the field of the message is  
 26       set to an invalid value, then the mobile station shall send a *Mobile Station*  
 27       *Reject Order* with the ORDQ field set to '00000100' (message field not in valid  
 28       range). Otherwise, the mobile station shall perform the following:

- 29       •    If FOR\_FCH\_ACK\_MASK\_RL\_BLANKING<sub>r</sub> is included, the mobile station
- 30           shall perform the following:
- 31           –    Set FOR\_FCH\_ACK\_MASK\_RL\_BLANKING<sub>S</sub> to
- 32                FOR\_FCH\_ACK\_MASK\_RL\_BLANKING<sub>r</sub>.
- 33       •    If FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>r</sub> is included, the mobile
- 34           station shall perform the following:
- 35           –    Set FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>S</sub> to
- 36                FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>r</sub>.
- 37       •    If REV\_FCH\_ACK\_MASK<sub>r</sub> is included, the mobile station shall set
- 38           REV\_FCH\_ACK\_MASK<sub>S</sub> to REV\_FCH\_ACK\_MASK<sub>r</sub>.

- 1           • If FOR\_SCH\_ACK\_MASK\_RL\_BLANKING<sub>r</sub> is included, the mobile station  
2           shall perform the following:  
3           – Set FOR\_SCH\_ACK\_MASK\_RL\_BLANKING<sub>s</sub> to  
4           FOR\_SCH\_ACK\_MASK\_RL\_BLANKING<sub>r</sub>.
- 5           • If FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>r</sub> is included, the mobile  
6           station shall perform the following:  
7           – Set FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>s</sub> to  
8           FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>r</sub>.
- 9           • If REV\_SCH\_ACK\_MASK<sub>r</sub> is included, the mobile station shall set  
10          REV\_SCH\_ACK\_MASK<sub>s</sub> to REV\_SCH\_ACK\_MASK<sub>r</sub>.
- 11          • If FOR\_N2M\_IND<sub>r</sub> is included, the mobile station shall set FOR\_N2M\_IND<sub>s</sub>  
12          to FOR\_N2M\_IND<sub>r</sub>.
- 13          • If RPC\_MODE<sub>r</sub> is included, the mobile station shall set RPC\_MODE<sub>s</sub> to  
14          RPC\_MODE<sub>r</sub>.
- 15          • If PWR\_CNTL\_STEP\_ZERO\_RATE<sub>r</sub> is included, the mobile station shall set  
16          PWR\_CNTL\_STEP\_ZERO\_RATE<sub>s</sub> to PWR\_CNTL\_STEP\_ZERO\_RATE<sub>r</sub>.
- 17          • If FOR\_FCH\_BLANKING\_DUTYCYCLE is included, the mobile station shall  
18          set FOR\_FCH\_BLANKING\_DUTYCYCLE<sub>s</sub> to  
19          FOR\_FCH\_BLANKING\_DUTYCYCLE<sub>r</sub>.
- 20          • If REV\_FCH\_BLANKING\_DUTYCYCLE is included, the mobile station shall  
21          perform the following:  
22          – Set REV\_FCH\_BLANKING\_DUTYCYCLE<sub>s</sub> to  
23          REV\_FCH\_BLANKING\_DUTYCYCLE<sub>r</sub>.
- 24          – If the mobile station does not have R-SCH burst assigned with RC08,  
25          then set REV\_FCH\_BLANKING\_DUTYCYCLE\_IN\_USE to  
26          REV\_FCH\_BLANKING\_DUTYCYCLE<sub>r</sub>.
- 27          • If REV\_ACKCH\_GAIN\_ADJ\_ACS1<sub>r</sub> is included, the mobile station shall  
28          perform the following:  
29          – Set REV\_ACKCH\_GAIN\_ADJ\_ACS1<sub>s</sub> to REV\_ACKCH\_GAIN\_ADJ\_ACS1<sub>r</sub>.
- 30          • If REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS<sub>r</sub> is included, the mobile station  
31          shall perform the following:  
32          – Set REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS<sub>s</sub> to  
33          REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS<sub>r</sub>.
- 34          • If NUM\_RC\_PARAMS\_RECORDS is set to non-zero value, the mobile station  
35          shall update RC\_PARAMS\_RECORD<sub>s</sub>[i] as follows:



- 1                   – If entry for PILOT\_PN<sub>r</sub> exists then RC\_PARAMS\_RECORD<sub>s</sub>[i] is the  
2                   existing entry, otherwise RC\_PARAMS\_RECORD<sub>s</sub>[i] is a new entry with  
3                   REV\_SCH\_ACK\_CH\_WALSH[00], REV\_SCH\_ACK\_BIT[00],  
4                   REV\_SCH\_ACK\_CH\_WALSH[01], and REV\_SCH\_ACK\_BIT[01] fields set  
5                   to NULL.
- 6                   – Set RC\_PARAMS\_RECORD<sub>s</sub>[i].PILOT\_PN to PILOT\_PN<sub>r</sub>.
- 7                   – Set RC\_PARAMS\_RECORD<sub>s</sub>[i].QOF\_SET\_IN\_USE to QOF\_SET\_IN\_USE<sub>r</sub>.
- 8                   – If REV\_SCH0\_ACK\_CH\_WALSH is included, the mobile station shall set  
9                   RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_CH\_WALSH[00] to  
10                  REV\_SCH0\_ACK\_CH\_WALSH<sub>r</sub>.
- 11                  – If REV\_SCH0\_ACK\_BIT is included, the mobile station shall set  
12                  RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_BIT[00] to  
13                  REV\_SCH0\_ACK\_BIT<sub>r</sub>.
- 14                  – If REV\_SCH1\_ACK\_CH\_WALSH is included, the mobile station shall set  
15                  RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_CH\_WALSH[01] to  
16                  REV\_SCH1\_ACK\_CH\_WALSH<sub>r</sub>.
- 17                  – If REV\_SCH1\_ACK\_BIT is included, the mobile station shall set  
18                  RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_BIT[01] to  
19                  REV\_SCH1\_ACK\_BIT<sub>r</sub>.
- 20                  – Set RC\_PARAMS\_RECORD<sub>s</sub>[i].FOR\_FCH\_CCSH\_INTERLEAVER\_TYPE to  
21                  FOR\_FCH\_CCSH\_INTERLEAVER\_TYPE<sub>r</sub>.
- 22                  • If the mobile station receives a message that is not included in the above list,  
23                  cannot be processed, or requires a capability which is not supported, the mobile  
24                  station shall discard the message and send a *Mobile Station Reject Order* (ORDQ set  
25                  to the applicable reason code as determined from Table 2.7.3-1) within T<sub>56m</sub>  
26                  seconds. If the mobile station receives a Call Control message (see 2.6.10) which is  
27                  directed to a Call Control instance that does not exist, the mobile station shall  
28                  send a *Mobile Station Reject Order* with ORDQ field set to '00010001' (no call  
29                  control instance present with the specified identifier) to the base station within  
30                  T<sub>56m</sub> seconds.
- 31                  • If the bits of TMSI\_CODE<sub>s-p</sub> are not all equal to '1', and if System Time (in 80 ms  
32                  units) exceeds TMSI\_EXP\_TIME<sub>s-p</sub> × 2<sup>12</sup>, the mobile station shall set all the bits of  
33                  TMSI\_CODE<sub>s-p</sub> to '1' within T<sub>66m</sub> seconds.
- 34                  • If the full-TMSI timer expires or has expired, the mobile station shall set all the bits  
35                  of TMSI\_CODE<sub>s-p</sub> to '1'. The mobile station shall update the registration variables  
36                  as described in 2.6.5.5.2.5.
- 37                  • If the Forward Packet Data Channel is assigned, whenever the mobile station  
38                  transmitter is disabled, the MS shall set FPDCH\_DTX\_INDICATOR<sub>s</sub> to '1'.

- If the Forward Packet Data Channel is assigned, whenever the mobile station transmitter is enabled, the mobile station shall perform the following procedures:
  - The MS shall set FPDCH\_DTX\_INDICATOR<sub>S</sub> to '0'..
  - If the mobile station transmitter has been disabled for at least TX\_DISABLED\_TIMER<sub>S</sub>, the mobile station shall send SIG-HandoffPDCH.Indication (handoff\_type = ASSIGN) primitive to the MAC layer.

#### 2.6.4.4 Release Substate

In this substate, the mobile station confirms the disconnect of all calls and physical channels.

Upon entering the *Release Substate*, the mobile station shall perform the following:

- The mobile station shall set the substate timer for T<sub>55m</sub> seconds.
- If the mobile station enters the *Release Substate* with a power-down indication, the mobile station shall send a *Release Order* (ORDQ = '00000001'), and shall perform power-down registration procedures (see 2.6.5.5.4.4). The Layer 3 shall terminate all Call Control instances.
- If the mobile station enters the *Release Substate* with a mobile station release indication, the mobile station shall send a *Release Order* as follows:
  - If the mobile station supports operation in the reduced slot cycle mode following release from the traffic channel, the mobile station shall set ORDQ to '00000011', RETURN\_CAUSE<sub>S</sub> to '0000', and perform the following:
    - + If T\_SLOTTED<sub>S</sub> is equal to 0, the mobile station shall perform the following:
      - o Set the RSC\_MODE\_IND field as specified in 2.7.3.5. If RSC\_MODE\_IND is set to '1', then:
        - ◇ Set RSC\_MODE\_ENABLED to YES.
        - ◇ Set the RSC\_END\_TIME\_UNIT and RSC\_END\_TIME\_VALUE fields as specified in 2.7.3.5, and store the system time specified by these fields as RSC\_END\_TIME.
        - ◇ Set the RSCI field as specified in 2.7.3.5 and store it as RSCI<sub>S</sub>; if RSCI<sub>S</sub> is equal to '0111', set SLOTTED<sub>S</sub> to NO.
        - ◇ Set IGNORE\_QPCH<sub>S</sub> to '1'.
      - + Otherwise, the mobile station shall set the RSC\_MODE\_IND field to '0'.
    - Otherwise, the mobile station shall set ORDQ to '00000000', and set RETURN\_CAUSE<sub>S</sub> to '0000'.
  - If the mobile station enters the *Release Substate* with a service inactive indication, the mobile station shall send a *Release Order* (ORDQ = '00000010'), and set RETURN\_CAUSE<sub>S</sub> to '0000'.

- 1     • If the mobile station enters the *Release Substate* with a base station release  
2     indication, the mobile station shall send a *Release Order* (ORDQ = '00000000').  
3     The Layer 3 shall terminate all Call Control instances. The mobile station shall  
4     disable its transmitter, set RETURN\_CAUSE<sub>S</sub> to '0000', and shall perform the  
5     procedures as specified in 2.6.4.4.1.
- 6     • If the mobile station entered the *Release Substate* with a base station extended  
7     release indication, the mobile station shall perform the following:
  - 8       – The mobile station shall send an *Extended Release Response Message* to the  
9       base station as follows:
    - 10          + If the RSC\_MODE\_SUPPORTED field in the received *Extended Release*  
11          *Message* was set to '1' and the mobile station requests operation in the  
12          reduced slot cycle mode, the mobile station shall set the RSC\_MODE\_IND  
13          field to '1' and perform the following:
      - 14           o Set RSC\_MODE\_ENABLED to YES.
      - 15           o Set the RSC\_END\_TIME\_UNIT and RSC\_END\_TIME\_VALUE fields as  
16           specified in 2.7.2.3.2.25, and store the system time specified by these  
17           fields as RSC\_END\_TIME. The value of RSC\_END\_TIME shall be no later  
18           than the system time specified by MAX\_RSC\_END\_TIME\_UNIT<sub>r</sub> and  
19           MAX\_RSC\_END\_TIME\_VALUE<sub>r</sub> received in the *Extended Release*  
20           *Message*.
      - 21           o Set the RSCI field as specified in 2.7.2.3.2.25 and store it as RSCI<sub>S</sub>; if  
22           RSCI<sub>S</sub> is equal to '0111', set SLOTTED<sub>S</sub> to NO.
      - 23           o Set IGNORE\_QPCH<sub>S</sub> to IGNORE\_QPCH<sub>r</sub> received in the *Extended*  
24           *Release Message*.
    - 25          + Otherwise, the mobile station shall set the RSC\_MODE\_IND field to '0'.
  - 26       – The Layer 3 shall terminate all Call Control instances.
  - 27       – The mobile station shall disable its transmitter, set RETURN\_CAUSE<sub>S</sub> to '0000',  
28       and shall perform the procedures as specified in 2.6.4.4.1.
- 29     • If the mobile station entered the *Release Substate* with a base station extended  
30     release with mini message indication, then the mobile station shall perform the  
31     following:
  - 32       – The mobile station shall send an *Extended Release Response Mini Message* to  
33       the base station.
  - 34       – The Layer 3 shall terminate all Call Control instances.
  - 35       – The mobile station shall disable its transmitter, set RETURN\_CAUSE<sub>S</sub> to '0000',  
36       and shall perform the procedures as specified in 2.6.4.4.1.

- 1 • If the mobile station enters the *Release Substate* with a redirection indication, the  
2 mobile station shall send a *Release Order* (ORDQ = '00000000') and shall enter the  
3 *System Determination Substate* of the *Mobile Station Initialization State* with a  
4 redirection indication (see 2.6.1.1). The Layer 3 shall terminate all Call Control  
5 instances.
- 6 • If the mobile station enters the *Release Substate* with an NDSS off indication, the  
7 mobile station shall send a *Release Order* (ORDQ = '00000000'), and shall enter the  
8 *System Determination Substate* of the *Mobile Station Initialization State* with an  
9 NDSS off indication (see 2.6.1.1). The Layer 3 shall terminate all Call Control  
10 instances.

11 While in the *Release Substate*, the mobile station shall perform the following:

- 12 • If the substate timer expires, the Layer 3 shall terminate all Call Control instances,  
13 and the mobile station shall disable its transmitter and shall enter the *System*  
14 *Determination Substate* of the *Mobile Station Initialization State* with a release  
15 indication (see 2.6.1.1).
- 16 • The mobile station shall perform Forward Traffic Channel supervision as specified  
17 in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the Layer 3 shall  
18 terminate all Call Control instances, and shall enter the *System Determination*  
19 *Substate* of the *Mobile Station Initialization State* with a release indication (see  
20 2.6.1.1).
- 21 • The mobile station shall adjust its transmit power as specified in [2].
- 22 • The mobile station shall perform Forward Traffic Channel power control as specified  
23 in 2.6.4.1.1.
- 24 • The mobile station shall perform handoff processing as specified in 2.6.6.
- 25 • If the Fundamental Channel is present, the mobile station shall transmit null  
26 traffic, except when transmitting signaling traffic, on the Reverse Fundamental  
27 Channel.
- 28 • The mobile station shall process Forward Traffic Channel signaling traffic and shall  
29 discard other types of Forward Traffic Channel traffic.
- 30 • The mobile station shall perform registration timer maintenance as specified in  
31 2.6.5.5.4.2.
- 32 • If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an  
33 acknowledgment failure, the Layer 3 shall terminate all Call Control instances, and  
34 the mobile station shall disable its transmitter and enter the *System Determination*  
35 *Substate* of the *Mobile Station Initialization State* with a release indication (see  
36 2.6.1.1).
- 37 • If the Layer 3 receives an "enter traffic channel substate indication" from a Call  
38 Control instance, the Layer 3 shall enter the *Traffic Channel substate*.

- 1 • If Layer 3 receives a 'message rejected indication' from a Call Control instance,  
2 mobile station shall send a *Mobile Station Reject Order* (ORDQ set to the applicable  
3 reason code as determined from Table 2.7.3-1) within T<sub>56m</sub> seconds as follows:
  - 4 - If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, the mobile station shall  
5 include the CON\_REF\_INCL field with this message and shall perform the  
6 following: if the corresponding Call Control instance is identified by NULL, the  
7 mobile station shall either set the CON\_REF\_INCL field of the message to '0' or  
8 set the CON\_REF\_INCL field to '1' and set the CON\_REF field to the connection  
9 reference of the service option connection corresponding to this Call Control  
10 instance; otherwise, the mobile station shall set the CON\_REF\_INCL field of the  
11 message to '1' and the CON\_REF field of the message to the connection  
12 reference of the service option connection corresponding to this Call Control  
13 instance.
- 14 • If the mobile station receives a message which is included in the following list, and  
15 if every message field value is within its permissible range, the mobile station shall  
16 process the message as described below and in accordance with the message's  
17 action time (see 2.6.4.1.5):
  - 18 1. *Alert With Information Message*: If P\_REV\_IN\_USE<sub>s</sub> is less than seven, the Layer  
19 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3  
20 shall deliver this message to the Call Control instance identified by NULL.
  - 21 2. *Authentication Request Message*: The mobile station shall process the message  
22 and shall respond as specified in 2.3.12.5.2.
  - 23 3. *Candidate Frequency Search Control Message*: The mobile station shall  
24 process the message as specified in 2.6.6.2.5.1.
  - 25 4. *Candidate Frequency Search Request Message*: The mobile station shall  
26 process the message as specified in 2.6.6.2.5.1.
  - 27 5. *Data Burst Message*
  - 28 6. *Extended Alert With Information Message*: The mobile station shall perform the  
29 following: If CON\_REF\_INCL<sub>r</sub> equals '0', the Layer 3 shall deliver this message  
30 to the Call Control instance identified by NULL; otherwise, the Layer 3 shall  
31 deliver this message to the Call Control instance identified by CON\_REF<sub>r</sub>.
  - 32 7. *Extended Handoff Direction Message*: The mobile station shall process the  
33 message as specified in 2.6.6.2.5.1.
  - 34 8. *Extended Neighbor List Update Message*: The mobile station shall process the  
35 message as specified in 2.6.6.2.5.1.
  - 36 9. *Extended Supplemental Channel Assignment Message*: The mobile station  
37 shall process the message as specified in 2.6.6.2.5.1.
  - 38 10. *General Handoff Direction Message*: The mobile station shall process the  
39 message as specified in 2.6.6.2.5.1.
  - 40 11. *In-Traffic System Parameters Message*: The mobile station shall process the

- 1 message as specified in 2.6.4.1.4.
- 2 12. *Local Control Order*
- 3 13. *Mobile Assisted Burst Operation Parameters Message*: The mobile station shall  
4 process the message as specified in 2.6.6.2.5.1.
- 5 14. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter  
6 and record the reason for the *Lock Until Power-Cycled Order* in the mobile  
7 station's semi-permanent memory (LCKRSN\_P<sub>s-p</sub> equals the least-significant  
8 four bits of ORDQ<sub>r</sub>). The mobile station should notify the user of the locked  
9 condition. The Layer 3 shall terminate all Call Control instances. The Layer 3  
10 shall enter the *System Determination Substate* of the *Mobile Station*  
11 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the  
12 *System Access State* again until after the next mobile station power-up or until  
13 it has received an *Unlock Order*. This requirement shall take precedence over  
14 any other mobile station requirement specifying entry to the *System Access*  
15 *State*.
- 16 15. *Maintenance Required Order*: The mobile station shall record the reason for  
17 the *Maintenance Required Order* in the mobile station's semi-permanent  
18 memory (MAINTRSN<sub>s-p</sub> equals the least-significant four bits of ORDQ<sub>r</sub>). The  
19 mobile station shall remain in the unlocked condition. The mobile station  
20 should notify the user of the maintenance required condition.
- 21 16. *Mobile Station Registered Message*: The mobile station shall process the  
22 message as specified in 2.6.5.5.4.3.
- 23 17. *Neighbor List Update Message*: The mobile station shall process the message  
24 as specified in 2.6.6.2.5.1.
- 25 18. *Outer Loop Report Request Order*: The mobile station shall send the *Outer Loop*  
26 *Report Message* in assured mode to the base station.
- 27 19. *Power Control Message*: The mobile station shall process the message as  
28 specified in 2.6.4.1.1.3.
- 29 20. *Power Control Parameters Message*: The mobile station shall process the  
30 message as specified in 2.6.4.1.1.2.
- 31 21. *Power Up Function Message*: The mobile station shall process the message as  
32 specified in 2.6.4.1.7.1.
- 33 22. *Power Up Function Completion Message*: The mobile station shall process the  
34 message as specified in 2.6.4.1.7.3.
- 35 23. *Rate Change Message*: The mobile station shall process the message as  
36 specified in 2.6.4.1.1.4.
- 37 24. *Release Order*: The mobile station shall disable its transmitter. The Layer 3  
38 shall terminate all Call Control instances. The mobile station shall set  
39 RSC\_MODE\_ENABLED to NO. If the mobile station enters the *Release*  
40 *Substate* with a power-down indication, the mobile station may power down;

otherwise, the mobile station shall perform the procedures as specified in 2.6.4.4.1.

25. *Retrieve Parameters Message*: The mobile station shall send, within  $T_{56m}$  seconds, a *Parameters Response Message*.

26. *Retry Order*: The mobile station shall process the order as follows:

- If  $RETRY\_TYPE_R$  is equal to '000', the mobile station shall set  $RETRY\_DELAY_S[RETRY\_TYPE]$  to 0, where  $RETRY\_TYPE$  is equal to '001', '010', '011', '100', or '101'.
- If  $RETRY\_TYPE_R$  is equal to '001', '100', or '101', then the mobile station shall perform the following:
  - If  $RETRY\_DELAY_R$  is equal to '00000000', then the mobile station shall set  $RETRY\_DELAY_S[RETRY\_TYPE_R]$  to 0.
  - If  $RETRY\_DELAY_R$  is not equal to '00000000', the mobile station shall set  $RETRY\_DELAY_S[RETRY\_TYPE_R]$  as follows:
    - + If the most significant bit of the  $RETRY\_DELAY_R$  is 0, set  $RETRY\_DELAY\_UNIT_S$  to 1000ms. If the most significant bit of the  $RETRY\_DELAY_R$  is '1', set  $RETRY\_DELAY\_UNIT_S$  to 60000ms.
    - + The mobile station shall set  $RETRY\_DELAY\_VALUE_S$  to the seven least significant bits of  $RETRY\_DELAY_R$ .
    - + The mobile station shall store the next system time 80 ms boundary +  $RETRY\_DELAY\_VALUE_S \times RETRY\_DELAY\_UNIT_S$  ms as  $RETRY\_DELAY_S[RETRY\_TYPE_R]$ .

27. *Service Option Control Message*: The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

28. *Service Option Control Order*: The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

29. *Service Redirection Message*: The mobile station shall disable its transmitter. If the mobile station enters the *Release Substate* with a power-down indication, the mobile station may power down (if powering down, the Layer 3 shall terminate all Call Control instances); otherwise, the mobile station shall process the message as follows:

- If  $RECORD\_TYPE_R$  is '00000000', the mobile station shall perform the following:
  - The mobile station shall set  $RETURN\_IF\_FAIL_S = RETURN\_IF\_FAIL_R$ .
  - If  $DELETE\_TMSI_R$  is equal to '1', the mobile station shall set all the bits of  $TMSI\_CODE_{S-p}$  to '1'.
  - The mobile station shall disable the full-TMSI timer.

- 1           – The Layer 3 shall terminate all Call Control instances, and shall enter  
2           the *System Determination Substate of the Mobile Station Initialization*  
3           State with an NDSS off indication (see 2.6.1.1).
  - 4           • If RECORD\_TYPE is not equal to '00000000', REDIRECT\_TYPE<sub>r</sub> is '1', and  
5           the mobile station supports the band class and operating mode specified in  
6           the message, the mobile station shall perform the following:
    - 7           – The mobile station shall store the redirection record received in the  
8           message as REDIRECT\_REC<sub>s</sub>.
    - 9           – The mobile station shall set RETURN\_IF\_FAIL<sub>s</sub> = RETURN\_IF\_FAIL<sub>r</sub>.
    - 10          – If DELETE\_TMSI<sub>r</sub> is equal to '1', the mobile station shall set all the bits  
11          of TMSI\_CODE<sub>s-p</sub> to '1'.
    - 12          – The mobile station shall disable the full-TMSI timer.
    - 13          – The Layer 3 shall terminate all Call Control instances, and shall enter  
14          the *System Determination Substate of the Mobile Station Initialization*  
15          State with a redirection indication (see 2.6.1.1).
  - 16          • Otherwise, the mobile station shall discard the message and send a *Mobile*  
17          *Station Reject Order* (ORDQ set to the applicable reason code as determined  
18          from Table 2.7.3-1) within T<sub>56m</sub> seconds.
- 19   30. *Status Request Message*: The mobile station shall send, within T<sub>56m</sub> seconds,  
20   a Status Response Message. If the message does not specify any qualification  
21   information (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000000'), the mobile station  
22   shall include the requested information records in the *Status Response*  
23   *Message*. If the message specifies a band class (QUAL\_INFO\_TYPE<sub>r</sub> is equal to  
24   '00000001'), the mobile station shall only include the requested information  
25   records for the specified band class (BAND\_CLASS<sub>r</sub>) in the *Status Response*  
26   *Message*. If the message specifies a band class and an operating mode  
27   (QUAL\_INFO\_TYPE<sub>r</sub> is equal to '00000010'), the mobile station shall only  
28   include the requested information records for the specified band class  
29   (BAND\_CLASS<sub>r</sub>) and operating mode (OP\_MODE<sub>r</sub>) in the *Status Response*  
30   *Message*. If the message specifies a band class or a band class and an  
31   operating mode which are not supported by the mobile station, the mobile  
32   station shall send a *Mobile Station Reject Order* with ORDQ set to '00000110'  
33   (message requires a capability that is not supported by the mobile station). If  
34   the response to this message exceeds the allowable length, the mobile station  
35   shall send a *Mobile Station Reject Order* with ORDQ set to '00001000'  
36   (response message would exceed the allowable length). If the message  
37   specifies an information record which is not supported by the mobile station  
38   for the specified band class and operating mode, the mobile station shall send  
39   a *Mobile Station Reject Order* with ORDQ set to '00001001' (information record  
40   is not supported for the specified band class and operating mode).
- 41   31. *Status Request Order*: If CDMABAND<sub>s</sub> is equal to '00000', the mobile station  
42   shall send, a *Status Message* within T<sub>56m</sub> seconds. The mobile station shall



1 respond with information corresponding to the current band class and  
2 operating mode.

3 32. *Supplemental Channel Assignment Message*: The mobile station shall process  
4 the message as specified in 2.6.6.2.5.1.

5 33. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and  
6 code as follows:

- 7 • The mobile station shall store the length of the TMSI zone field by setting  
8 ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> to TMSI\_ZONE\_LEN<sub>r</sub>;
- 9 • The mobile station shall store the assigning TMSI zone number by setting  
10 the ASSIGNING\_TMSI\_ZONE\_LEN<sub>s-p</sub> least significant octets of  
11 ASSIGNING\_TMSI\_ZONE<sub>s-p</sub> to TMSI\_ZONE<sub>r</sub>, and
- 12 • The mobile station shall store the TMSI code by setting TMSI\_CODE<sub>s-p</sub> to  
13 TMSI\_CODE<sub>r</sub>.

14 The mobile station shall set the TMSI expiration time by setting  
15 TMSI\_EXP\_TIME<sub>s-p</sub> to TMSI\_EXP\_TIME<sub>r</sub>. The mobile station shall disable the  
16 full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment*  
17 *Completion Message* within T<sub>56m</sub> seconds.

18 34. *Universal Handoff Direction Message*: The mobile station shall process the  
19 message as specified in 2.6.6.2.5.1.

20 35. *User Zone Reject Message*: The mobile station shall process this message as  
21 specified in 2.6.9.2.2.

22 36. *User Zone Update Message*: The mobile station shall process this message as  
23 specified in 2.6.9.2.2.

24 37. *Extended Release Message*:

- 25 • If USE\_EXT\_CH\_IND is equal to '0' and CH\_IND is equal to '111' or the  
26 physical channels indicated by the two least significant bits of CH\_IND  
27 includes all the physical channels (FCH, DCCH, or both) currently being  
28 processed by the mobile station, then the mobile station shall perform the  
29 following:

- 30 – If the mobile station supports operation in the reduced slot cycle mode  
31 following release of the traffic channel, the mobile station shall perform  
32 the following:

- 33 + If RSC\_MODE\_ENABLED is equal to YES, the mobile station shall  
34 perform the following:

- 35 o If RSC\_MODE\_SUPPORTED<sub>r</sub> is equal to '1', the mobile station  
36 shall perform the following:

- 37 ◇ Set RSC\_END\_TIME to the earlier of the current value of

- 1 RSC\_END\_TIME, and the system time specified by  
 2 MAX\_RSC\_END\_TIME\_UNIT<sub>r</sub> and  
 3 MAX\_RSC\_END\_TIME\_VALUE<sub>r</sub>.
- 4 ◇ Set IGNORE\_QPCH<sub>s</sub> to IGNORE\_QPCH<sub>r</sub>.
- 5 o If RSC\_MODE\_SUPPORTED<sub>r</sub> is equal to '0', the mobile station  
 6 shall set RSC\_MODE\_ENABLED to NO.
- 7 + If RSC\_MODE\_ENABLED is equal to NO, the mobile station shall  
 8 perform the following:
- 9 o If REQ\_RSCI\_INCL<sub>r</sub> is included and set to '1', and the mobile  
 10 station sent a *Release Order* with ORDQ equal to '00000011', the  
 11 mobile station shall send an *Extended Release Response Message*  
 12 with the RSC\_MODE\_IND field set to '1', and perform the  
 13 following:
- 14 ◇ Set RSC\_MODE\_ENABLED to YES.
- 15 ◇ Set the RSC\_END\_TIME\_UNIT and RSC\_END\_TIME\_VALUE  
 16 fields as specified in 2.7.2.3.2.25, and store the system time  
 17 specified by these fields as RSC\_END\_TIME. The value of  
 18 RSC\_END\_TIME shall be no later than the system time  
 19 specified by MAX\_RSC\_END\_TIME\_UNIT<sub>r</sub> and  
 20 MAX\_RSC\_END\_TIME\_VALUE<sub>r</sub> received in the *Extended*  
 21 *Release Message*.
- 22 ◇ Set the RSCI field as specified in 2.7.2.3.2.25 and store it as  
 23 RSCI<sub>s</sub>; if RSCI<sub>s</sub> is equal to '0111', set SLOTTED<sub>s</sub> to NO.
- 24 ◇ Set IGNORE\_QPCH<sub>s</sub> to IGNORE\_QPCH<sub>r</sub>.
- 25 – The mobile station shall disable its transmitter.
- 26 – The Layer 3 shall terminate all Call Control instances.
- 27 – If the mobile station enters the *Release Substate* with a power-down  
 28 indication, the mobile station may power down; otherwise, the mobile  
 29 station shall perform the procedures as specified in 2.6.4.4.1.
- 30 • Otherwise, the mobile station shall discard the *Extended Release Message*  
 31 and send a *Mobile Station Reject Order* with ORDQ field set to '00000010'  
 32 (message not accepted in this state) within T<sub>56m</sub> seconds.

- 1 • If the mobile station receives a message that is not included in the above list or  
2 cannot be processed, the mobile station shall discard the message and send a  
3 *Mobile Station Reject Order* (ORDQ set to the applicable reason code as determined  
4 from Table 2.7.3-1) within  $T_{56m}$  seconds. If the mobile station receives a Call  
5 Control message (see 2.6.10) which is directed to a Call Control instance that does  
6 not exist, the mobile station shall send a *Mobile Station Reject Order* with ORDQ  
7 field set to '00010001' (no call control instance present with the specified identifier)  
8 to the base station within  $T_{56m}$  seconds.
- 9 • If the bits of  $TMSI\_CODE_{S-p}$  are not all equal to '1', and if System Time (in 80 ms  
10 units) exceeds  $TMSI\_EXP\_TIME_{S-p} \times 2^{12}$ , the mobile station shall set all the bits of  
11  $TMSI\_CODE_{S-p}$  to '1' within  $T_{66m}$  seconds.
- 12 • If the full-TMSI timer expires or has expired, the mobile station shall set all the bits  
13 of  $TMSI\_CODE_{S-p}$  to '1'. The mobile station shall update the registration variables  
14 as described in 2.6.5.5.2.5.

#### 15 2.6.4.4.1 Procedures for Exiting the Release Substate

16 The mobile station shall perform the following procedures in the order listed below.

17 If the mobile station received an *Extended Release Message* with the  
18  $RER\_MODE\_ENABLED$  field set to '1', then the mobile station shall set  
19  $RER\_MODE\_ENABLED$  to YES,  $RER\_COUNT$  to 0, and shall perform the following:

- 20 • The mobile station shall store the following:
  - 21 – Maximum number of *Radio Environment Messages* that the mobile station is  
22 permitted to transmit while in radio environment reporting mode  
23 ( $RER\_MAX\_NUM\_MSG_S = infinity$ , if  $RER\_MAX\_NUM\_MSG\_IDX_r$  is equal to  
24 '111'; otherwise,  $RER\_MAX\_NUM\_MSG_S = 2^{RER\_MAX\_NUM\_MSG\_IDX_r}$ ).
  - 25 – Maximum number of pilots to maintain in  $RER\_PILOT\_LIST$   
26 ( $MAX\_RER\_PILOT\_LIST\_SIZE_S = MAX\_RER\_PILOT\_LIST\_SIZE_r$ ).
  - 27 – System identification for radio environment reporting mode ( $RER\_SID_S = SID_S$ ).
  - 28 – Network identification for radio environment reporting mode ( $RER\_NID_S = NID_S$ ).
- 29 • The mobile station shall initialize the radio environment report pilot list  
30 ( $RER\_PILOT\_LIST$ ) to contain the set of pilots that made up the Active Set on the  
31 Traffic Channel.
- 32 • The mobile station shall enable the radio environment report timer with an initial  
33 value of *infinity* if  $RER\_TIME_r$  is equal to '111'; otherwise, the mobile station shall  
34 enable the radio environment report timer with an initial value of  $2^{RER\_TIME_r}$   
35 seconds if  $RER\_TIME\_UNIT_r$  is equal to '00', or  $2^{RER\_TIME_r}$  minutes if  
36  $RER\_TIME\_UNIT_r$  is equal to '01', or  $2^{RER\_TIME_r}$  hours if  $RER\_TIME\_UNIT_r$  is equal  
37 to '10'.

38 If the mobile station received an *Extended Release Message* with the  
39  $TKZ\_MODE\_ENABLED$  field set to '1', then the mobile station shall set  $TKZ\_COUNT$  to 0,  
40 and shall perform the following:

- 1     • The mobile station shall store the following:
  - 2       – Tracking zone identifier ( $TKZ\_ID_S = TKZ\_ID_R$ ).
  - 3       – Tracking zone list length ( $TKZ\_LIST\_LEN_S = TKZ\_LIST\_LEN_R$ ).
  - 4       – TKZ timer ( $TKZ\_TIMER_S = TKZ\_TIMER_R$ ).
  - 5       – Maximum number of *Radio Environment Messages* that the mobile station is
  - 6       permitted to transmit while in tracking zone mode ( $TKZ\_MAX\_NUM\_MSG_S =$
  - 7       *infinity*, if  $TKZ\_MAX\_NUM\_MSG\_IDX_R$  is equal to '111'; otherwise,
  - 8        $TKZ\_MAX\_NUM\_MSG_S = 2^{TKZ\_MAX\_NUM\_MSG\_IDX_R}$ ).
  - 9       – System identification for tracking zone mode ( $TKZ\_SID_S = SID_S$ ).
  - 10      – Network identification for tracking zone mode ( $TKZ\_NID_S = NID_S$ ).
  - 11      – Tracking zone update period ( $TKZ\_UPDATE\_PRD_S = TKZ\_UPDATE\_PRD_R$ ).
- 12    • If  $RER\_MODE\_ENABLED$  is equal to NO, the mobile station shall set
- 13     $TKZ\_MODE\_ENABLED$  to YES; otherwise, the mobile station shall set
- 14     $TKZ\_MODE\_PENDING$  to YES.
- 15    • If  $TKZ\_MODE\_ENABLED$  is equal to YES, the mobile station shall perform the
- 16    following:
  - 17      – Initialize the tracking zone list ( $TKZ\_LIST$ ) to contain  $TKZ\_ID_S$ .
  - 18      – Enable the tracking zone update timer with an initial value of infinity if
  - 19       $TKZ\_UPDATE\_PRD_S$  is equal to '1111'; otherwise, the mobile station shall
  - 20      enable the tracking zone update timer with an initial value of  $2^{TKZ\_UPDATE\_PRD_S} +$
  - 21       $6$  seconds.

22 The mobile station shall perform the following procedures to determine whether to enter  
 23 the *Mobile Station Idle State* or *System Determination Substate* of the *Mobile Station*  
 24 *Initialization State*.

25 If the mobile station received an *Extended Release Message* with  
 26  $DIRECT\_TO\_IDLE\_INFO\_INCL$  field equal to '1' and  $RELEASE\_TYPE_R$  equal to '011', the  
 27 mobile station shall enter the *System Determination Substate* of the *Mobile Station*  
 28 *Initialization Substate* with a release indication (see 2.6.1.1).

29 If the mobile station received an *Extended Release Message* with  
 30  $DIRECT\_TO\_IDLE\_INFO\_INCL$  field equal to '1',  $RELEASE\_TYPE_R$  equal to a value other  
 31 than '011', and all the following conditions are met:

- 32    • The system indicated by this message is a preferred system according to system
- 33    selection process of the mobile station, and
- 34    • If the  $BAND\_CLASS$  field is included in this message, the mobile station supports the
- 35    band class capability specified by this field, and
- 36    • If the  $SR1\_TD\_MODE$  field is included in this message, the mobile station supports
- 37    the transmit diversity capability specified by this field, and

- 1 • The mobile station is able to select one of the pilots in the DIRECT TO IDLE record of  
2 the *Extended Release Message* with sufficient signal strength to enter *Mobile Station*  
3 *Idle State*.

4 then, the mobile station shall perform the following:

- 5 • If RELEASE\_TYPE<sub>r</sub> equals '000', the mobile station shall perform the following:
  - 6 – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall set CDMABAND<sub>s</sub> to  
7 BAND\_CLASS<sub>r</sub> and CDMACH<sub>s</sub> to CDMA\_FREQ<sub>r</sub>.
  - 8 – The mobile station shall store the following:
    - 9 + PAGECH<sub>s</sub> = PAGE\_CH<sub>r</sub>
    - 10 + PRAT<sub>s</sub> = PRAT<sub>r</sub>
  - 11 – The mobile station shall then perform the following:
    - 12 + Set its code channel to PAGECH<sub>s</sub>,
    - 13 + Set the Paging Channel data rate as determined by PRAT<sub>s</sub>,
    - 14 + The mobile station shall enter the *Mobile Station Idle State* on the CDMA  
15 Channel specified by CDMABAND<sub>s</sub> and CDMACH<sub>s</sub> and acquire the specified  
16 Paging Channel. If BCMC\_INFO\_INCL<sub>r</sub> is included and is equal to '1', the  
17 mobile station may start monitoring the BCMC flows corresponding to the  
18 BCMC\_FLOW\_IDs (See section 2.6.13.11) included in this message after  
19 entering the *Mobile Station Idle State* as specified in section 2.6.13, using  
20 the BCMC flow information included in this message.
- 21 • If RELEASE\_TYPE<sub>r</sub> equals '001', the mobile station shall perform the following:
  - 22 – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall set CDMABAND<sub>s</sub> to  
23 BAND\_CLASS<sub>r</sub> and CDMACH<sub>s</sub> to CDMA\_FREQ<sub>r</sub>.
  - 24 – The mobile station shall store the following:
    - 25 + BCCH<sub>s</sub> = SR1\_BCCH\_CODE\_CHAN\_NON\_TD<sub>r</sub>
    - 26 + BCCH\_CODE\_RATE<sub>s</sub> = SR1\_CRAT\_NON\_TD<sub>r</sub>
    - 27 + BRAT<sub>s</sub> = SR1\_BRAT\_NON\_TD<sub>r</sub>
  - 28 – The mobile station shall then perform the following:
    - 29 + Set its Primary Broadcast Control Channel code channel to BCCH<sub>s</sub>,
    - 30 + Set the Primary Broadcast Control Channel data rate as determined by  
31 BRAT<sub>s</sub>,
    - 32 + Set the Primary Broadcast Control Channel code rate as determined by  
33 BCCH\_CODE\_RATE<sub>s</sub>,
    - 34 + The mobile station shall enter the *Mobile Station Idle State* on the CDMA  
35 Channel specified by CDMABAND<sub>s</sub> and CDMACH<sub>s</sub> and acquire the specified  
36 Primary Broadcast Control Channel. If BCMC\_INFO\_INCL<sub>r</sub> is included and  
37 is equal to '1', the mobile station may start monitoring the BCMC flows

- 1 corresponding to the BCMC\_FLOW\_IDs (See section 2.6.13.11) included in  
 2 this message after entering the *Mobile Station Idle State* as specified in  
 3 section 2.6.13, using the BCMC flow information included in this message.
- 4 • If RELEASE\_TYPE<sub>r</sub> equals '010', the mobile station shall perform the following:
    - 5 – If FREQ\_INCL<sub>r</sub> equals '1', the mobile station shall set CDMABAND<sub>s</sub> to  
 6 BAND\_CLASS<sub>r</sub> and CDMACH<sub>s</sub> to CDMA\_FREQ<sub>r</sub>.
    - 7 – The mobile station shall store the following:
      - 8 + BCCH<sub>s</sub> = SR1\_BCCH\_CODE\_CHAN\_TD<sub>r</sub>
      - 9 + BCCH\_CODE\_RATE<sub>s</sub> = SR1\_CRAT\_TD<sub>r</sub>
      - 10 + BRAT<sub>s</sub> = SR1\_BRAT\_TD<sub>r</sub>
    - 11 – The mobile station shall then perform the following:
      - 12 + Set its Primary Broadcast Control Channel code channel to BCCH<sub>s</sub>,
      - 13 + Set the Primary Broadcast Control Channel data rate as determined by  
 14 BRAT<sub>s</sub>,
      - 15 + Set the Primary Broadcast Control Channel code rate as determined by  
 16 BCCH\_CODE\_RATE<sub>s</sub>,
      - 17 + The mobile station shall enter the *Mobile Station Idle State* on the CDMA  
 18 Channel specified by CDMABAND<sub>s</sub> and CDMACH<sub>s</sub> and acquire the specified  
 19 Primary Broadcast Control Channel that supports Transmit Diversity. If  
 20 BCMC\_INFO\_INCL<sub>r</sub> is included and is equal to '1', the mobile station may  
 21 start monitoring the BCMC flows corresponding to the BCMC\_FLOW\_IDs  
 22 (See section 2.6.13.11) included in this message after entering the *Mobile*  
 23 *Station Idle State* as specified in section 2.6.13, using the BCMC flow  
 24 information included in this message.
  - 25 Otherwise, the mobile station shall perform the following:
    - 26 • If RELEASE\_TO\_IDLE\_IND<sub>s</sub> is equal to '0', the mobile station shall enter the System  
 27 Determination Substate of the Mobile Station Initialization State with a release  
 28 indication (see 2.6.1.1).
    - 29 • If RELEASE\_TO\_IDLE\_IND<sub>s</sub> is equal to '1', the mobile station shall perform the  
 30 following:
      - 31 – If the mobile station has stored BCCH information (BCCH Walsh Code, BCCH  
 32 data rate, and BCCH code rate) for a base station which has sufficient pilot  
 33 strength, the mobile station shall restore the BCCH information to BCCH<sub>s</sub>,  
 34 BRAT<sub>s</sub> and BCCH\_CODE\_RATE<sub>s</sub>, and then perform the following:
        - 35 + Set its Primary Broadcast Control Channel code channel to BCCH<sub>s</sub>,
        - 36 + Set the Primary Broadcast Control Channel data rate as determined by  
 37 BRAT<sub>s</sub>,
        - 38 + Set the Primary Broadcast Control Channel code rate as determined by

- 1 BCCH\_CODE\_RATE<sub>S</sub>,
- 2 + The mobile station shall enter the *Mobile Station Idle State*.
- 3 – Otherwise, the mobile station shall perform the following:
- 4 + If the mobile station has stored PCH information (PCH number and PCH
- 5 data rate) for a base station which has sufficient pilot strength, the mobile
- 6 station shall restore the PCH information to PAGECH<sub>S</sub> and PRAT<sub>S</sub>, and then
- 7 perform the following:
- 8 o Set its code channel to PAGECH<sub>S</sub>,
- 9 o Set the Paging Channel data rate as determined by PRAT<sub>S</sub>,
- 10 o The mobile station shall enter the *Mobile Station Idle State*,
- 11 + Otherwise, the mobile station shall perform the following:
- 12 o If IDLE\_SID is equal to SID<sub>S</sub>, IDLE\_CDMABAND is equal to
- 13 CDMABAND<sub>S</sub>, IDLE\_NID is equal to NID<sub>S</sub>, and IDLE\_P\_REV is equal to
- 14 P\_REV<sub>S</sub>, and the mobile station decides to enter the *Mobile Station Idle*
- 15 *State*, the mobile station shall perform the following:
- 16 ◇ The mobile station shall set CDMACH<sub>S</sub> to IDLE\_CDMA\_CHAN.
- 17 ◇ If IDLE\_BCCH\_CHAN is equal to '1', the mobile station shall perform
- 18 the following:
- 19 – Set its Primary Broadcast Control Channel code channel to
- 20 BCCH<sub>S</sub>,
- 21 – Set the Primary Broadcast Control Channel data rate as
- 22 determined by BRAT<sub>S</sub>,
- 23 – Set the Primary Broadcast Control Channel code rate as
- 24 determined by BCCH\_CODE\_RATE<sub>S</sub>,
- 25 – The mobile station shall enter the *Mobile Station Idle State*.
- 26 ◇ If IDLE\_BCCH\_CHAN is equal to '0', the mobile station shall perform
- 27 the following:
- 28 – Set its code channel to PAGECH<sub>S</sub>,
- 29 – Set the Paging Channel data rate as determined by PRAT<sub>S</sub>,
- 30 – The mobile station shall enter the *Mobile Station Idle State*.
- 31 o Otherwise, the mobile station shall enter the *System Determination*
- 32 *Substate* of the *Mobile Station Initialization State* with a release
- 33 indication (see 2.6.1.1).

## 1 2.6.5 Registration

### 2 2.6.5.1 Forms of Registration

3 Registration is the process by which the mobile station notifies the base station of its  
4 location, status, identification, slot cycle, and other characteristics. The mobile station  
5 informs the base station of its location and status so that the base station can efficiently  
6 page the mobile station when establishing a mobile station terminated call. For operation  
7 in the slotted mode, the mobile station supplies the SLOT\_CYCLE\_INDEX parameter so  
8 that the base station can determine which slots the mobile station is monitoring. The  
9 mobile station supplies the station class mark and the protocol revision number so that  
10 the base station knows the capabilities of the mobile station.

11 The CDMA system supports 12 different forms of registration:

- 12 1. Power-up registration. The mobile station registers when it powers on, switches  
13 from using a different frequency block designator, switches from using a different  
14 band class, switches from using an alternative operating mode, or upon the  
15 insertion of an R-UIM into a powered-on ME.
- 16 2. Power-down registration. The mobile station registers when it powers off if  
17 previously registered in the current serving system.
- 18 3. Timer-based registration. The mobile station registers when a timer expires.
- 19 4. Distance-based registration. The mobile station registers when the distance  
20 between the current base station and the base station in which it last registered  
21 exceeds a threshold.
- 22 5. Zone-based registration. The mobile station registers when it enters a new zone.
- 23 6. Parameter-change registration. The mobile station registers when certain of its  
24 stored parameters change or when it enters a new system.
- 25 7. Ordered registration. The mobile station registers when the base station requests  
26 it.
- 27 8. Implicit registration. When a mobile station successfully sends an *Origination*  
28 *Message*, *Reconnect Message*, *Call Recovery Request Message*, or *Page Response*  
29 *Message*, the base station can infer the mobile station's location. This is  
30 considered an implicit registration.
- 31 9. Traffic Channel registration. Whenever the base station has registration  
32 information for a mobile station that has been assigned to a Traffic Channel, the  
33 base station can notify the mobile station that it is registered.
- 34 10. User Zone Registration. The mobile station registers when it selects an active User  
35 Zone (see 2.6.9.1.2).
- 36 11. Encryption/Message Integrity re-sync required registration. The mobile station  
37 registers when extended encryption is turned on and the mobile station determines  
38 that it can not decrypt any messages from the base station (see 2.3.12.4.1.3) or the  
39 mobile station registers when message integrity is supported and the mobile station  
40 determines that it can not validate the MACI of any messages from the base station.



12. BCMC registration. BCMC registration is performed by a mobile station currently monitoring or desiring to monitor a BCMC flow.

The first five forms of registration, User Zone Registration, and Encryption/Message Integrity re-sync required registration, as a group, are called autonomous registration and are enabled by roaming status (see 2.6.5.3). Parameter-change registration is independent of roaming status. Ordered registration is initiated by the base station through an *Order Message*. Implicit registration does not involve the exchange of any registration messages between the base station and the mobile station. The base station can obtain registration information by sending the *Status Request Message* to the mobile station on either the f-csch or the f-dsch. The base station can obtain limited registration information by sending the *Status Request Order* to the mobile station on the f-dsch. The mobile station can be notified that it is registered through the *Mobile Station Registered Message*.

Any of the various forms of autonomous registration and parameter-change registration can be enabled or disabled. The forms of registration that are enabled and the corresponding registration parameters are communicated in the *System Parameters Message* on the Paging Channel, or the *ANSI-41 System Parameters Message* on the Primary Broadcast Control Channel.

In addition, the mobile station may enable or disable autonomous registration for each type of roaming described in 2.6.5.3.

#### 2.6.5.1.1 Power-Up Registration

Power-up registration is performed when the mobile station is turned on. To prevent multiple registrations when power is quickly turned on and off, or when the R-UIM is quickly inserted and removed, the mobile station delays  $T_{57m}$  seconds before registering, after entering the *Mobile Station Idle State*.

The mobile station shall maintain a power-up/initialization timer. While the power-up/initialization timer is active, the mobile station shall not make registration access attempts.

Power-up registration is performed when the mobile station changes to a different operating mode (see 2.6.5.5.1.1), or as indicated by [40]. A power-up registration is also performed when the mobile station changes band classes, serving system, or frequency block designator if the conditions stated in 2.6.5.5.1.1 are met.

#### 2.6.5.1.2 Power-Down Registration

Power-down registration is performed when the user directs the mobile station to power off. If power-down registration is performed, the mobile station does not power off until after completing the registration attempt.

The mobile station does not perform power-down registration if it has not previously registered in the system that corresponds to the current  $SID_S$  and  $NID_S$  (see 2.6.5.5.2.4).

#### 2.6.5.1.3 Timer-Based Registration

Timer-based registration causes the mobile station to register at regular intervals. Its use also allows the system to automatically deregister mobile stations that did not perform a

successful power-down registration. Timer-based registration uses a Paging Channel or a Forward Common Control Channel slot counter (equivalent to a timer with time increments of 80 ms). Timer-based registration is performed when the counter reaches a maximum value ( $\text{REG\_COUNT\_MAX}_S$ ) that is controlled by the base station via the  $\text{REG\_PRD}$  field of the *System Parameters Message* or *ANSI-41 System Parameters Message*. The base station disables timer-based registration by setting  $\text{REG\_PRD}$  to zero.

The mobile station shall maintain a timer-based registration counter ( $\text{REG\_COUNT}_S$ ). The mobile station shall compute and store the timer expiration count ( $\text{REG\_COUNT\_MAX}_S$ ) as

$$\text{REG\_COUNT\_MAX}_S = \lfloor 2^{\text{REG\_PRD}/4} \rfloor.$$

The mobile station shall maintain an indicator of timer-based registration timer enable status ( $\text{COUNTER\_ENABLED}_S$ ).

The counter is reset after each successful registration.

Whenever the mobile station changes  $\text{COUNTER\_ENABLED}_S$  from NO to YES, it shall set  $\text{REG\_COUNT}_S$  as follows:

If the mobile station supports the procedure described in section 2.6.5.1.3.1 and the conditions for suppression of randomization of timer-based registration are met, the mobile station shall set  $\text{REG\_COUNT}_S$  to 0; otherwise, the mobile station shall set  $\text{REG\_COUNT}_S$  based upon the value of  $\text{TBR\_RAND\_WINDOW}_S$  as shown in Table 2.6.5.1.3-1. When setting  $\text{REG\_COUNT}_S$  to a pseudorandom value, the mobile station shall use the pseudorandom number generator specified in 2.6.7.2.

**Table 2.6.5.1.3-1. Percentage of Randomization for Timer-based registration**

Value of <b>TBR_RAND_WINDOW</b> (binary)	Meaning	<b>REG_COUNT<sub>S</sub></b>
00	0% randomization	0
01	25% randomization	Pseudorandom value between 0 and $\lfloor \text{REG\_COUNT\_MAX}_S/4 \rfloor - 1$
10	50% randomization	Pseudorandom value between 0 and $\lfloor \text{REG\_COUNT\_MAX}_S/2 \rfloor - 1$
11	100% randomization	Pseudorandom value between 0 and $(\text{REG\_COUNT\_MAX}_S - 1)$

If the mobile station is operating in the non-slotted mode, it shall increment the timer-based registration counter once per 80 ms whenever  $\text{COUNTER\_ENABLED}_S$  equals YES. If the mobile station is operating in slotted mode, it may increment the timer-based registration counter when it begins to monitor the Paging Channel (see 2.6.2.1.1.3) or the Forward Common Control Channel. A mobile station operating in the slotted mode shall

increment the counter by the same amount that the counter would have been incremented if the mobile station had been operating in the non-slotted mode.<sup>32</sup>

#### 2.6.5.1.3.1 Timer-Based Registration based on Frequency of Implicit Registrations

A mobile station may support a procedure to prevent unnecessary timer-based registrations when implicit registrations are sent frequently.

If the mobile station supports this procedure, the mobile station shall set REG\_COUNT<sub>s</sub> to 0 when it changes COUNTER\_ENABLED<sub>s</sub> from NO to YES if all of the following conditions for suppression of randomization of timer-based registrations are met:

- the mobile station has been powered on for the past  $\lfloor 2^{\text{REG\_PRD}/4} \rfloor \times 0.32$  seconds,
- in every period of  $\lfloor 2^{\text{REG\_PRD}/4} \rfloor \times 0.08$  consecutive seconds in the past  $\lfloor 2^{\text{REG\_PRD}/4} \rfloor \times 0.32$  seconds the mobile station sent at least one *Origination Message*, *Page Response Message*, or *Reconnect Message*, or the mobile station was in the *Mobile Station Control on the Traffic Channel State* for at least part of the period,
- TBR\_RAND\_SUPPR\_ENABLE<sub>s</sub> is equal to '1'.
- If either of the following two conditions are true:
  - the mobile station was not in the *Mobile Station Control on the Traffic Channel State* at any time during the past  $\lfloor 2^{\text{REG\_PRD}/4} \rfloor \times 0.32$  seconds, or
  - the mobile station was in the *Mobile Station Control on the Traffic Channel State* during the past  $\lfloor 2^{\text{REG\_PRD}/4} \rfloor \times 0.32$  seconds, but it was not continuously in the *Mobile Station Control on the Traffic Channel State* for the entire duration of the past  $\lfloor 2^{\text{REG\_PRD}/4} \rfloor \times 0.32$  seconds.

#### 2.6.5.1.4 Distance-Based Registration

Distance-based registration causes a mobile station to register when the distance between the current base station and the base station in which it last registered exceeds a threshold. The mobile station determines that it has moved a certain distance by computing a distance measure based on the difference in latitude and longitude between the current base station and the base station where the mobile station last registered. If this distance measure exceeds the threshold value, the mobile station registers.

The mobile station stores the base station latitude (BASE\_LAT\_REG<sub>s-p</sub>), the base station longitude (BASE\_LONG\_REG<sub>s-p</sub>) and the registration distance (REG\_DIST\_REG<sub>s-p</sub>), of the base station to which the first access probe (for a *Registration Message*, *Origination Message*, *Reconnect Message*, *Call Recovery Request Message*, or *Page Response Message* sent on the r-csch) was transmitted after entering the *System Access State*. The mobile

---

<sup>32</sup> For example, if the mobile station uses a 2.56 second slot cycle, then it may increment the counter by 32 every time it becomes active.

station shall compute the current base station's distance from the last registration point (DISTANCE) as:

$$\text{DISTANCE} = \left\lfloor \frac{\sqrt{(\Delta\text{lat})^2 + (\Delta\text{long})^2}}{16} \right\rfloor,$$

where

$$\Delta\text{lat} = \text{BASE\_LAT}_S - \text{BASE\_LAT\_REG}_{S-p}$$

and

$$\Delta\text{long} = (\text{BASE\_LONG}_S - \text{BASE\_LONG\_REG}_{S-p}) \times \cos(\pi/180 \times \text{BASE\_LAT\_REG}_{S-p}/14400).$$

The mobile station shall compute DISTANCE with an error of no more than  $\pm 5\%$  of its true value when  $|\text{BASE\_LAT\_REG}_{S-p}/14400|$  is less than 60 and with an error of no more than  $\pm 7\%$  of its true value when  $|\text{BASE\_LAT\_REG}_{S-p}/14400|$  is between 60 and 70.<sup>33</sup>

#### 2.6.5.1.5 Zone-Based Registration

Registration zones are groups of base stations within a given system and network. A base station's zone assignment is identified by the REG\_ZONE field of the *System Parameters Message*, *ANSI-41 System Parameters Message* or *Mobile Station Registered Message*.

Zone-based registration causes a mobile station to register whenever it determines it is in a new zone (see 2.6.5.5.2.1), not on its internally stored list of visited registration zones. A zone is added to the list whenever a registration (including implicit registration) occurs, and is deleted upon expiration of a timer. After a system access, timers are enabled for every zone except one that was successfully registered by the access.

A mobile station can be registered in more than one zone. Zones are uniquely identified by a zone number (REG\_ZONE) plus the SID and NID of the zone.

The mobile station shall store a list of the zones in which the mobile station has registered (ZONE\_LIST<sub>S</sub>). Each entry in ZONE\_LIST<sub>S</sub> shall include the zone number (REG\_ZONE) and the (SID, NID) pair for the zone. The mobile station shall be capable of storing at least N<sub>9m</sub> entries in ZONE\_LIST<sub>S</sub>. A base station shall be considered to be in ZONE\_LIST<sub>S</sub> only if the base station's REG\_ZONE, SID and NID are found in an entry in ZONE\_LIST<sub>S</sub>. The mobile station provides storage for one entry of ZONE\_LIST<sub>S</sub> in semi-permanent memory, ZONE\_LIST<sub>S-p</sub> (see 2.3.4).

The mobile station shall maintain a zone list entry timer for each entry in ZONE\_LIST<sub>S</sub>. When an entry in ZONE\_LIST<sub>S</sub> is removed from the list, the corresponding zone list entry timer shall be disabled. The timer duration shall be as determined from the stored value of ZONE\_TIMER<sub>S</sub> using Table 3.7.2.3.2.1-1. The mobile station shall provide a means to examine each timer's value while the timer is active, so that the age of list entries can be compared.

---

<sup>33</sup> BASE\_LAT and BASE\_LONG are given in units of 1/4 seconds. BASE\_LAT/14400 and BASE\_LONG/14400 are in units of degrees.

1 If the mobile station supports one of more band classes that contain multiple frequency  
 2 block designators, the mobile station shall maintain an identifier of the frequency block  
 3 designator for each entry in ZONE\_LIST<sub>s</sub> (see [45]). When the mobile station adds a zone  
 4 to ZONE\_LIST<sub>s</sub>, the mobile station shall include the identifier for the frequency block  
 5 designator.<sup>34</sup>

6 If the mobile station supports multiple band classes, the mobile station shall maintain an  
 7 identifier of the band class for each entry in ZONE\_LIST<sub>s</sub> (see [45]). When the mobile  
 8 station adds a zone to ZONE\_LIST<sub>s</sub>, the mobile station shall include the identifier for the  
 9 band class.

10 The base station controls the maximum number of zones in which a mobile station may be  
 11 considered registered, by means of the TOTAL\_ZONES field of the *System Parameters*  
 12 *Message*, *ANSI-41 System Parameters Message* or *Mobile Station Registered Message*.  
 13 When an entry is added to the zone list, or if TOTAL\_ZONES is decreased, the mobile  
 14 station removes entries from the zone list if there are more entries than allowed by the  
 15 setting of TOTAL\_ZONES.

16 Whenever ZONE\_LIST<sub>s</sub> contains more than TOTAL\_ZONES<sub>s</sub> entries, the mobile station  
 17 shall delete the excess entries according to the following rules:

- 18 • If TOTAL\_ZONES<sub>s</sub> is equal to zero, the mobile station shall delete all entries.
- 19 • If TOTAL\_ZONES<sub>s</sub> is not equal to zero, the mobile station shall delete those entries  
 20 having active zone list entry timers, starting with the oldest entry, as determined by  
 21 the timer values, and continuing in order of decreasing age until no more than  
 22 TOTAL\_ZONES<sub>s</sub> entries remain.

23 The mobile station shall store a list of the systems/networks in which the mobile station  
 24 has registered (SID\_NID\_LIST<sub>s</sub>). Each entry in SID\_NID\_LIST<sub>s</sub> shall include the (SID, NID)  
 25 pair for the system/network. The mobile station shall be capable of storing N<sub>10m</sub> entries  
 26 in SID\_NID\_LIST<sub>s</sub>. A base station shall be considered to be in the SID\_NID\_LIST<sub>s</sub> only if  
 27 the base station's SID and NID are found in an entry in SID\_NID\_LIST<sub>s</sub>. The mobile  
 28 station shall provide storage for one entry of SID\_NID\_LIST<sub>s</sub> in semi-permanent memory  
 29 (SID\_NID\_LIST<sub>s-p</sub>).

30 If the mobile station supports one or more band classes that contain multiple frequency  
 31 block designators, the mobile station shall maintain an identifier of the frequency block  
 32 designator for each entry in SID\_NID\_LIST<sub>s</sub> (see [45]). When the mobile station adds an  
 33 entry to SID\_NID\_LIST<sub>s</sub>, the mobile station shall include the identifier for the frequency  
 34 block designator.

35 If the mobile station supports multiple band classes, the mobile station shall maintain an  
 36 identifier of the band class for each entry in SID\_NID\_LIST<sub>s</sub> (see [45]). When the mobile

---

<sup>34</sup> The mobile station need not maintain a separate identifier for Band Class 0, as the least significant bit of the SID identifies the serving system.

station adds an entry to  $SID\_NID\_LIST_S$ , the mobile station shall include the identifier for the band class.

The mobile station shall maintain a SID/NID list entry timer for each entry in  $SID\_NID\_LIST_S$ . When an entry in  $SID\_NID\_LIST_S$  is removed from the list, the corresponding SID/NID list entry timer shall be disabled. The timer duration shall be as determined from the stored value of  $ZONE\_TIMER_S$  using Table 3.7.2.3.2.1-1. The mobile station shall provide a means to examine each timer's value while the timer is active, so that the age of list entries can be compared.

Whenever  $SID\_NID\_LIST_S$  contains more than  $N_{10m}$  entries, the mobile station shall delete the excess entries according to the following rule:

- The mobile station shall delete those entries having active SID/NID list entry timers, starting with the oldest entry, as determined by the timer values, and continuing in order of decreasing age.

Whenever  $MULT\_SIDS_S$  is equal to '0' and  $SID\_NID\_LIST$  contains entries with different SIDs, the mobile station shall delete the excess entries according to the following rules:

- If the SID/NID entry timer for any entry is disabled, the mobile station shall delete all entries not having the same SID as the entry whose timer is disabled;
- Otherwise, the mobile station shall delete all entries not having the same SID as the newest entry in  $SID\_NID\_LIST$ , as determined by the timer values.

Whenever  $MULT\_NIDS_S$  is equal to '0', and  $SID\_NID\_LIST$  contains more than one entry for any SID, the mobile station shall delete the excess entries for each SID according to the following rules:

- If the SID/NID entry timer for any entry is disabled, the mobile station shall delete all entries for that SID except the entry whose timer is disabled;
- For all other SIDs, the mobile station shall delete all entries for each SID except the newest entry, as determined by the timer values.

#### 2.6.5.1.6 Parameter-Change Registration

Parameter-change registration is performed when a mobile station modifies any of the following stored parameters:

- The preferred slot cycle index ( $SLOT\_CYCLE\_INDEX_p$ )
- The station class mark ( $SCM_p$ )
- The call termination enabled indicators ( $MOB\_TERM\_HOME_p$ ,  $MOB\_TERM\_FOR\_SID_p$ , and  $MOB\_TERM\_FOR\_NID_p$ )

Parameter-change registration is also performed when any of the following capabilities supported by the mobile station changes:

- The band classes
- The band subclasses
- The power classes

- 1       • The radio configurations
- 2       • The operating modes
- 3       • Transmit diversity (OTD or STS)
- 4       • Quick Paging Channel
- 5       • Spreading Rate 3 common channels support
- 6       • Encryption capability

7       Parameter-change registration is performed whenever there is no entry in the mobile  
8       station's `SID_NID_LISTs` that matches the base station's `SID` and `NID`.

9       Parameter-change registration is independent of the roaming status of the mobile  
10      station.<sup>35</sup>

11      Whenever a parameter changes, the mobile station shall delete all entries from  
12      `SID_NID_LISTs`.

#### 13      2.6.5.1.7 Ordered Registration

14      The base station can command the mobile station to register by sending a *Registration*  
15      *Request Order*. Ordered registration is performed in the *Mobile Station Order and Message*  
16      *Processing Operation* (2.6.2.4). Requirements are specified in 2.6.5.5.2.3.

#### 17      2.6.5.1.8 Implicit Registration

18      Whenever an *Origination Message*, *Reconnect Message*, *Call Recovery Request Message*, or  
19      *Page Response Message* is sent, the base station can infer the location of the mobile  
20      station. This is considered an implicit registration. Requirements are specified in  
21      2.6.5.5.3.

#### 22      2.6.5.1.9 Traffic Channel Registration

23      While a mobile station is assigned a Traffic Channel, the mobile station is notified that it is  
24      registered through the *Mobile Station Registered Message*. Requirements are specified in  
25      2.6.5.5.4.3.

#### 26      2.6.5.1.10 User Zone Registration

27      User Zone registration is performed when the mobile station selects an active User Zone  
28      (see 2.6.9.2.1).

#### 29      2.6.5.1.11 Encryption/Message Integrity Re-sync Required Registration

30      Encryption/Message Integrity re-sync required registration is performed when the mobile  
31      station determines that it can not decrypt any message or validate the MACI of any  
32      message from the base station (see 2.3.12.4.1.3). This type of registration is needed for the

---

<sup>35</sup> The indicator `REG_ENABLED` does not govern parameter-change registration.

mobile station to recover from any encryption/message integrity out-of-sync scenario.

#### 2.6.5.1.12 BCMC Registration

BCMC registration is performed when the mobile station is to monitor a BCMC flow that is being transmitted from a band class or frequency different than where the mobile station currently resides. The BCMC registration is also used when the mobile station desires to monitor a BCMC flow configured for transmission which is currently not being transmitted. Requirements are specified in 2.6.13.3.

BCMC registration is performed by a mobile station currently monitoring or desiring to monitor a BCMC flow; it is performed for the following reasons:

1) When the mobile station is to monitor a BCMC flow given by BCMC\_FLOW\_ID, if the band class or frequency where this BCMC flow is being transmitted is different from the band class or frequency where the mobile station currently resides, the mobile station performs a BCMC registration to inform the base station so that the base station can determine in which frequency to page the mobile station.

2) The BCMC registration is also used when the mobile station desires to monitor a BCMC flow configured for transmission which is currently not being transmitted, the mobile station performs a BCMC registration to request transmission of that flow.

3) When the mobile station is currently monitoring a BCMC flow and the base station turns on the registration required flag in the *BCMC Service Parameters Message*, the mobile station performs a BCMC registration. Requirements are specified in 2.6.13.3.

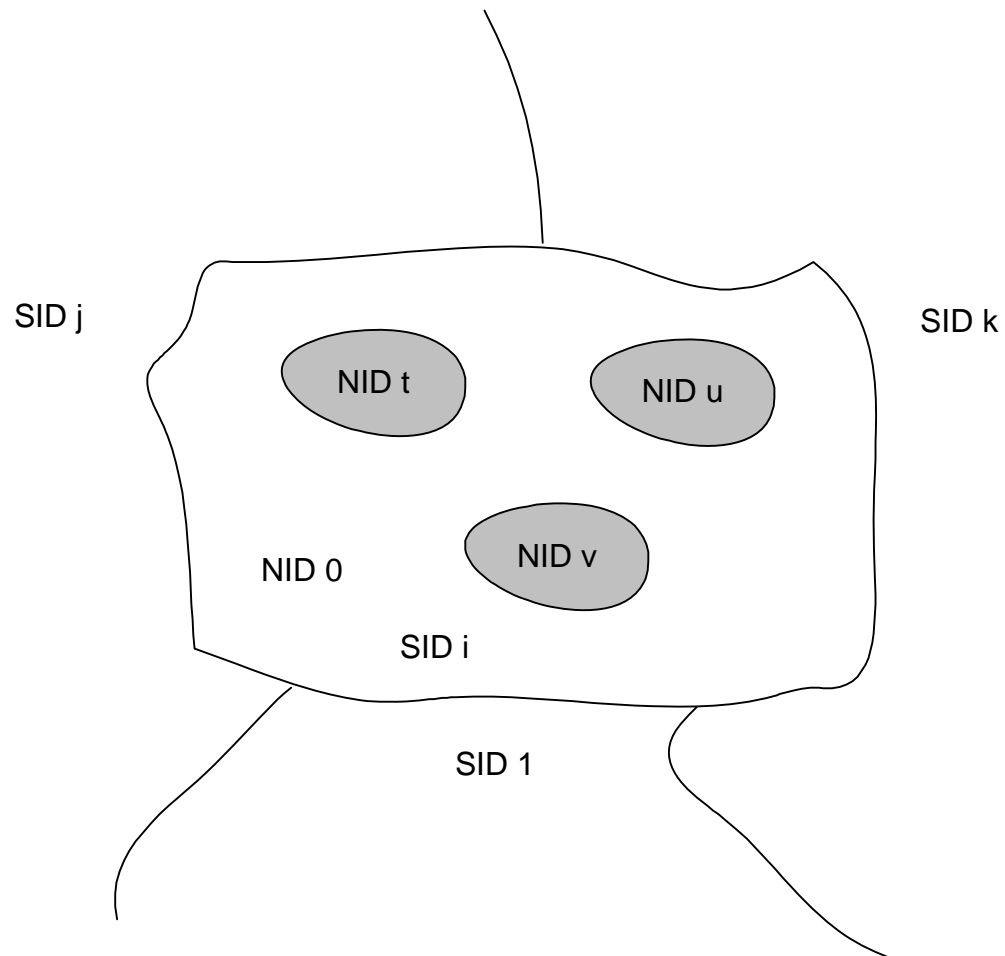
#### 2.6.5.2 Systems and Networks

A base station is a member of a cellular or PCS system and a network. A network is a subset of a system.

Systems are labeled with an identification called the system identification or SID; networks within a system are given a network identification or NID. A network is uniquely identified by the pair (SID, NID). The SID number 0 is a reserved value. The NID number 0 is a reserved value indicating all base stations that are not included in a specific network. The NID number 65535 ( $2^{16}-1$ ) is a reserved value the mobile station may use for roaming status determination (see 2.6.5.3) to indicate that the mobile station considers the entire SID (regardless of NID) as home (non-roaming).

Figure 2.6.5.2-1 shows an example of systems and networks. SID *i* contains three networks labeled *t*, *u*, and *v*. A base station in system *i* that is not in one of these three networks is in NID 0.





**Figure 2.6.5.2-1. Systems and Networks Example**

### 2.6.5.3 Roaming

The mobile station has a list of one or more home (non-roaming) (SID, NID) pairs. A mobile station is roaming if the stored (SID<sub>s</sub>, NID<sub>s</sub>) pair (received in the *System Parameters Message* on the Paging Channel, or the *ANSI-41 System Parameters Message* on the Primary Broadcast Control Channel) does not match one of the mobile station's non-roaming (SID, NID) pairs. Two types of roaming are defined: A mobile station is a foreign NID roamer if the mobile station is roaming and there is some (SID, NID) pair in the mobile station's (SID, NID) list for which SID is equal to SID<sub>s</sub>. A mobile station is a foreign SID roamer if there is no (SID, NID) pair in the mobile station's (SID, NID) list for which SID is

1 equal to  $SID_s$ <sup>36</sup>. The mobile station may use the special NID value 65535 to indicate that  
 2 the mobile station considers all NIDs within a SID to be non-roaming (i.e., that the mobile  
 3 station is not roaming when operating with any base station in that system).

4 The mobile station shall store three 1-bit parameters in its permanent memory (see 2.3.8).  
 5 These parameters are  $MOB\_TERM\_HOME_p$ ,  $MOB\_TERM\_FOR\_SID_p$ , and  $MOB\_TERM\_FOR\_NID_p$ . The mobile station shall set  $MOB\_TERM\_HOME_p$  to '1' if the mobile station is  
 6 configured to receive mobile station terminated calls when using a home (SID, NID) pair;  
 7 otherwise, the mobile station shall set  $MOB\_TERM\_HOME_p$  to '0'. The mobile station shall  
 8 set  $MOB\_TERM\_FOR\_SID_p$  to '1' if the mobile station is configured to receive mobile  
 9 station terminated calls when it is a foreign SID roamer; otherwise  $MOB\_TERM\_FOR\_SID_p$   
 10 shall be set to '0'. The mobile station shall set  $MOB\_TERM\_FOR\_NID_p$  to '1' if the mobile  
 11 station is configured to receive mobile station terminated calls when it is a foreign NID  
 12 roamer; otherwise the mobile station shall set  $MOB\_TERM\_FOR\_NID_p$  to '0'.  
 13

14 The mobile station determines the registration status using these parameters and the  
 15  $HOME\_REG$ ,  $FOR\_NID\_REG$ , and  $FOR\_SID\_REG$  fields of the *System Parameters Message*  
 16 or *ANSI-41 System Parameters Message*.

17 The mobile station shall store a mobile station call termination enabled indicator,  
 18  $MOB\_TERM_s$ . The mobile station shall set  $MOB\_TERM_s$  to YES if any of the following  
 19 conditions is met:

- 20 • The mobile station is not roaming, and  $MOB\_TERM\_HOME_p$  is equal to '1'; or
- 21 • The mobile station is a foreign NID roamer and  $MOB\_TERM\_FOR\_NID_p$  is equal to  
 22 '1'; or
- 23 • The mobile station is a foreign SID roamer and  $MOB\_TERM\_FOR\_SID_p$  is equal to  
 24 '1'; otherwise the mobile station shall set  $MOB\_TERM_s$  to NO.

25 The mobile station shall store a registration status indicator,  $REG\_ENABLED_s$ . The mobile  
 26 station shall set the indicator  $REG\_ENABLED_s$  to YES if any of the following conditions is  
 27 met for the mobile station:

- 28 • The mobile station is not roaming, and both  $HOME\_REG_s$  and  $MOB\_TERM\_HOME_p$   
 29 are equal to '1'; or
- 30 • The mobile station is a foreign NID roamer and both  $FOR\_NID\_REG_s$  and  
 31  $MOB\_TERM\_FOR\_NID_p$  are equal to '1'; or

---

<sup>36</sup> For example, suppose a mobile station has the following SID, NID list: (2, 3), (2, 0), (3, 1). If the base station (SID, NID) pair is (2, 3), then the mobile station is not roaming because the (SID, NID) pair is in the list. If the base station (SID, NID) pair is (2, 7), then the mobile station is a foreign NID roamer, because the SID 2 is in the list, but the (SID, NID) pair (2, 7) is not in the list. If the base station (SID, NID) pair is (4, 0), then the mobile station is a foreign SID roamer, because SID 4 is not in the list.

- 1       • The mobile station is a foreign SID roamer and both FOR\_SID\_REG<sub>S</sub> and
- 2       MOB\_TERM\_FOR\_SID<sub>P</sub> are equal to '1'; otherwise the mobile station shall set
- 3       REG\_ENABLED<sub>S</sub> to NO.

4       The mobile station performs autonomous registrations if REG\_ENABLED<sub>S</sub> is YES.

#### 5       2.6.5.4 Registration Timers and Indicators

6       The mobile station shall provide the following registration timers:

- 7       • Power-up/initialization timer (see 2.6.5.1.1).
- 8       • Timer-based registration timer (see 2.6.5.1.3).
- 9       • Zone list entry timers (see 2.6.5.1.5).
- 10      • SID/NID list entry timers (see 2.6.5.1.5).
- 11      • BCMC frequency registration timer (see 2.6.13).
- 12      • BCMC registration required timer (see 2.6.13).

13      The mobile station shall provide a means of enabling and disabling each timer. When a  
14      timer is disabled, it shall not be considered expired. A timer that has been enabled is  
15      referred to as active.

#### 16      2.6.5.5 Registration Procedures

##### 17      2.6.5.5.1 Actions in the Mobile Station Initialization State

##### 18      2.6.5.5.1.1 Power-Up or Change to a Different Operating Mode, Band Class, Serving 19      System, Frequency Block Designator, or R-UIM Insertion.

20      Upon power-up, the mobile station shall perform the following actions:

- 21      • Delete all entries of ZONE\_LIST<sub>S</sub>.
- 22      • If ZONE\_LIST<sub>S-P</sub> contains an entry, copy the entry to ZONE\_LIST<sub>S</sub> and disable the
- 23      corresponding entry timer.
- 24      • Delete all entries of SID\_NID\_LIST<sub>S</sub>.
- 25      • If SID\_NID\_LIST<sub>S-P</sub> contains an entry, copy the entry to SID\_NID\_LIST<sub>S</sub> and disable
- 26      the corresponding entry timer.
- 27      • Set the registered flag (REGISTERED<sub>S</sub>) to NO.
- 28      • Set timer-based registration enable status (COUNTER\_ENABLED<sub>S</sub>) to NO.
- 29      • Set autonomous registration enable status (REG\_ENABLED<sub>S</sub>) to NO.
- 30      • Set RETURN\_CAUSE<sub>S</sub> to '0000'.
- 31      • Set KEY\_ID, LAST\_2G\_KEY\_ID<sub>S</sub>, and LAST\_3G\_KEY\_ID<sub>S</sub> to '00'.
- 32      • Set ENC\_KEY[i] and INT\_KEY[i] to NULL, where i ranges from '00' to '11'.
- 33      • Set D\_SIG\_ENCRYPT\_MODE<sub>S</sub> and C\_SIG\_ENCRYPT\_MODE<sub>S</sub> to '000'.

- 1       • Set RESTORE\_KEYS to '0'.
- 2       • If the UIM contains IK and CK, the mobile station shall set KEY\_ID to '10',  
3       RESTORE\_KEYS to '1', INT\_KEY[KEY\_ID] to IK, ENC\_KEY[KEY\_ID] to CK,  
4       TX\_EXT\_SSEQ[.][KEY\_ID] and TX\_EXT\_SSEQ[.][KEY\_ID] to any 24-bit value  
5       multiplied by 256.
- 6   If any of the following conditions is true:
  - 7       • BYPASS\_REG\_IND<sub>S</sub> is equal to '00' and the mobile station has switched from using  
8       CDMA
    - 9           – in a different band class, or
    - 10          – in a different serving system in a band class that supports multiple serving  
11          systems (e.g., Band Class 0), or
    - 12          – in a different frequency block designator in a band class that supports  
13          frequency block designator allocations (e.g. Band Class 1)
  - 14       • BYPASS\_REG\_IND<sub>S</sub> is equal to '01' and, for a reason other than processing the  
15       *Extended CDMA Channel List Message*, the mobile station has switched from using  
16       CDMA)
    - 17           – in a different band class, or
    - 18           – in a different serving system in a band class that supports multiple serving  
19           systems (e.g., Band Class 0), or
    - 20           – in a different frequency block designator in a band class that supports  
21           frequency block designator allocations (e.g. Band Class 1)
  - 22       • BYPASS\_REG\_IND<sub>S</sub> is equal to '10', SID<sub>S</sub> is different than REG\_SID<sub>S</sub> and the mobile  
23       station has switched from using CDMA
    - 24           – in a different band class, or
    - 25           – in a different serving system in a band class that supports multiple serving  
26           systems (e.g., Band Class 0), or
    - 27           – in a different frequency block designator in a band class that supports  
28           frequency block designator allocations (e.g. Band Class 1)
- 29   the mobile station shall perform the following actions:
  - 30       • Set timer-based registration enable status (COUNTER\_ENABLED<sub>S</sub>) to NO.
  - 31       • Set autonomous registration enable status (REG\_ENABLED<sub>S</sub>) to NO.
  - 32       • Set RETURN\_CAUSE<sub>S</sub> to '0000'.
  - 33       • Set the registered flag (REGISTERED<sub>S</sub>) to NO.
  - 34       • Set KEY\_ID, LAST\_2G\_KEY\_ID<sub>S</sub>, and LAST\_3G\_KEY\_ID<sub>S</sub> to '00'.
  - 35       • Set ENC\_KEY[i] and INT\_KEY[i] to NULL, where i ranges from '00' to '11'.
  - 36       • Set RESTORE\_KEYS to '0'.

- 1       • If the UIM contains IK and CK, the mobile station shall set KEY\_ID to '10',  
2       RESTORE\_KEYS to '1', INT\_KEY[KEY\_ID] to IK, ENC\_KEY[KEY\_ID] to CK,  
3       TX\_EXT\_SSEQ[.][KEY\_ID] and TX\_EXT\_SSEQ[.][KEY\_ID] to any 24-bit value  
4       multiplied by 256.

#### 5       2.6.5.5.1.2 Timer Maintenance

6       While in the *Mobile Station Initialization State*, the mobile station shall update all active  
7       registration timers (see 2.6.5.4). If any timer expires while in this state, the mobile station  
8       shall preserve the expiration status so that further action can be taken in the *Mobile*  
9       *Station Idle State*.

#### 10      2.6.5.5.1.3 Entering the Mobile Station Idle State

11      Before entering the *Mobile Station Idle State* from the *Mobile Station Initialization State*, the  
12      mobile station shall perform the following action:

- 13       • If REGISTERED<sub>S</sub> is equal to NO, enable the power-up/initialization timer with an  
14       expiration time of T<sub>57m</sub> seconds (see 2.6.5.1.1) only when the mobile station is  
15       entering this state with a power-up indication.

#### 16      2.6.5.5.2 Actions in the Mobile Station Idle State

17      Requirements in this section and its subsections apply only when the mobile station is in  
18      the *Mobile Station Idle State*.

#### 19      2.6.5.5.2.1 Idle Registration Procedures

20      These procedures are performed whenever the mobile station is in the *Mobile Station Idle*  
21      *State* (see 2.6.2.1.3).

22      While in the *Mobile Station Idle State*, the mobile station shall update all active registration  
23      timers (see 2.6.5.4).

24      If the power-up/initialization timer has expired or is disabled, the mobile station shall  
25      perform the following actions in the order given. If any action necessitates a registration,  
26      the mobile station shall enter the *Update Overhead Information Substate* of the *System*  
27      *Access State* (see 2.6.3) with a registration indication.

- 28       1. The timer-based registration timer shall be enabled (COUNTER\_ENABLED<sub>S</sub> = YES)  
29       and the timer count (REG\_COUNT<sub>S</sub>) shall be set to a pseudorandom number as  
30       specified in 2.6.5.1.3, if the following conditions are met:  
31       a. COUNTER\_ENABLED<sub>S</sub> is equal to NO; and  
32       b. The stored configuration parameters are current (see 2.6.2.2); and  
33       c. REG\_ENABLED<sub>S</sub> is equal to YES; and  
34       d. REG\_PRD<sub>S</sub> is not equal to zero.
- 35       2. If any zone list entry timer (see 2.6.5.1.5) has expired, the mobile station shall  
36       delete the corresponding entry from ZONE\_LIST<sub>S</sub>.

- 1        3. If any SID/NID list entry timer (see 2.6.5.1.5) has expired, the mobile station shall  
2        delete the corresponding entry from SID\_NID\_LIST<sub>S</sub>.
- 3        4. The mobile station shall perform power-up registration, as specified in 2.6.5.1.1, if  
4        all the following conditions are met:
  - 5        a. POWER\_UP\_REG<sub>S</sub> is equal to '1'; and
  - 6        b. The stored configuration parameters are current (see 2.6.2.2); and
  - 7        c. REGISTERED<sub>S</sub> is equal to NO, and
  - 8        d. REG\_ENABLED<sub>S</sub> is equal to YES.
- 9        5. The mobile station shall perform parameter-change registration (see 2.6.5.1.6) if all  
10       the following conditions are met:
  - 11       a. PARAMETER\_REG<sub>S</sub> is equal to '1'; and
  - 12       b. The stored configuration parameters are current (see 2.6.2.2); and
  - 13       c. There is no entry of SID\_NID\_LIST<sub>S</sub> whose SID and NID fields match the stored  
14       SID<sub>S</sub> and NID<sub>S</sub>.
- 15       6. The mobile station shall perform timer-based registration (see 2.6.5.1.3) if all the  
16       following conditions are met:
  - 17       a. COUNTER\_ENABLED<sub>S</sub> is equal to YES; and
  - 18       b. The stored configuration parameters are current (see 2.6.2.2); and
  - 19       c. REG\_ENABLED<sub>S</sub> is equal to YES; and
  - 20       d. REG\_COUNT<sub>S</sub> is greater than or equal to REG\_COUNT\_MAX<sub>S</sub>.
- 21       7. The mobile station shall perform distance-based registration (see 2.6.5.1.4) if all the  
22       following conditions are met:
  - 23       a. REG\_DIST<sub>S</sub> is not equal to zero; and
  - 24       b. The stored configuration parameters are current (see 2.6.2.2); and
  - 25       c. REG\_ENABLED<sub>S</sub> is equal to YES; and
  - 26       d. The current base station's distance from the base station in which the mobile  
27       station last registered (see 2.6.5.1.4) is greater than or equal to  
28       REG\_DIST\_REG<sub>S-p</sub>.
- 29       8. The mobile station shall perform zone-based registration (see 2.6.5.1.5) if all the  
30       following conditions are met:
  - 31       a. TOTAL\_ZONES<sub>S</sub> is not equal to zero; and
  - 32       b. The stored configuration parameters are current (see 2.6.2.2); and
  - 33       c. REG\_ENABLED<sub>S</sub> is equal to YES; and
  - 34       d. There is no entry of ZONE\_LIST<sub>S</sub> whose SID, NID and REG\_ZONE fields match  
35       the stored SID<sub>S</sub>, NID<sub>S</sub> and REG\_ZONE<sub>S</sub>.

- 1       9. The mobile station shall perform User Zone registration (see 2.6.2.5.1.10) if it
- 2       selects an active User Zone (see 2.6.9.1.2).
- 3       10. The mobile station shall perform encryption/message integrity re-sync required
- 4       registration (see 2.6.5.1.11) if all the following conditions are met:
- 5       a. REG\_SECURITY\_RESYNC is equal to YES or REGISTER\_IN\_IDLE<sub>S</sub> is equal to
- 6       '1'; and
- 7       b. None of the above registrations have been performed since the last entering of
- 8       the *Mobile Station Idle State*.

#### 9       2.6.5.5.2.2 Processing the Registration Fields of the System Parameters Message and

#### 10      ANSI-41 System Parameters Message

11      When the mobile station processes the *System Parameters Message* or *ANSI-41 System*

12      *Parameters Message*, it shall perform the following actions:

- 13      1. If REG\_PRD<sub>S</sub> is equal to zero, the mobile station shall set COUNTER\_ENABLED<sub>S</sub> to
- 14      NO.
- 15      2. If REG\_PRD<sub>S</sub> is not equal to zero, the mobile station shall set REG\_COUNT\_MAX<sub>S</sub>
- 16      as specified in 2.6.5.1.3.
- 17      3. The mobile station shall update its roaming status and set REG\_ENABLED<sub>S</sub> as
- 18      specified in 2.6.5.3.
- 19      4. If ZONE\_LIST<sub>S</sub> contains more than TOTAL\_ZONES<sub>S</sub> entries, the mobile station shall
- 20      delete the excess entries according to the rules specified in 2.6.5.1.5.
- 21      5. If MULT\_SIDS<sub>S</sub> is equal to '0' and SID\_NID\_LIST contains entries with different
- 22      SIDs, delete the excess entries according to the rules specified in 2.6.5.1.5.
- 23      6. If MULT\_NIDS<sub>S</sub> is equal to '0' and SID\_NID\_LIST contains more than one entry for
- 24      any SID, delete the excess entries according to the rules specified in 2.6.5.1.5.

#### 25      2.6.5.5.2.3 Ordered Registration

26      Ordered registration is performed after receiving a *Registration Request Order* while in the

27      *Mobile Station Order and Message Processing Operation* (see 2.6.2.4).

28      The mobile station shall enter the *Update Overhead Information Substate* of the *System*

29      *Access State* with a registration indication within T<sub>33m</sub> seconds after the *Registration*

30      *Request Order* is received.

#### 31      2.6.5.5.2.4 Power Off

32      These procedures are performed when the mobile station is directed by the user to power

33      off.

34      The mobile station shall perform the following actions:

- 35      • If an entry of ZONE\_LIST<sub>S</sub> does not have an active timer, copy that entry to
- 36      ZONE\_LIST<sub>S-p</sub>; otherwise, delete any entry in ZONE\_LIST<sub>S-p</sub>.

- If an entry of  $SID\_NID\_LIST_S$  does not have an active timer, copy that entry to  $SID\_NID\_LIST_{S-p}$ ; otherwise, delete any entry in  $SID\_NID\_LIST_{S-p}$ .

The mobile station shall perform power-down registration (see 2.6.5.1.2) by entering the *System Access State* with a registration indication within  $T_{33m}$  seconds after the user directs the mobile station to power off, if all the following conditions are true:

- $REG\_ENABLED_S$  equals YES; and
- $POWER\_DOWN\_REG_S$  equals '1'; and
- There is an entry of  $SID\_NID\_LIST_S$  for which the SID and NID fields are equal to  $SID_S$  and  $NID_S$ ; and
- The power-up/initialization timer (see 2.6.5.1.1) is disabled or has expired.

#### 2.6.5.5.2.5 Full-TMSI Timer Expiration

When the mobile station sets all the bits of  $TMSI\_CODE_{S-p}$  to '1' upon expiration of the full-TMSI timer (see 2.6.2), the mobile station shall delete all entries from  $SID\_NID\_LIST_S$  and  $ZONE\_LIST_S$ .

#### 2.6.5.5.3 Actions in the System Access State

Requirements in this section and its subsections apply only when the mobile station is in the *System Access State*.

##### 2.6.5.5.3.1 Successful Access, Registration, or Implicit Registration

These procedures shall be performed after the mobile station receives confirmation of delivery of a *Registration Message*, *Origination Message*, *Reconnect Message*, *Call Recovery Request Message*, or *Page Response Message* sent on the r-csch (see 2.6.3.1.2).

- Disable the power-up/initialization timer (see 2.6.5.1.1).
- Set  $DIGITAL\_REG_{S-p}$  to '00000001'.
- Set  $REG\_COUNT_S$  to zero.
- Set  $REGISTERED_S$  to YES.
- If an explicit or implicit registration was sent, set  $SLOT\_CYCLE\_INDEX\_REG$  to the slot cycle index the mobile station included in the message.
- If  $BYPASS\_REG\_IND_S$  is equal to '00', the mobile station shall perform the following:
  - Delete all entries from  $ZONE\_LIST_S$  belonging to a different band class (see [45]) than  $CDMABAND_S$ .
  - If  $CDMABAND_S$  contains multiple serving systems, delete all entries from  $ZONE\_LIST_S$  that have a SID from a different serving system than  $SERVSYS_S$ .
  - If  $CDMABAND_S$  contains multiple frequency block designators, delete all entries from  $ZONE\_LIST_S$  belonging to a different frequency block designator (see [45]) than the frequency block designator associated with  $REG\_SID_S$ .



- 1 • Add REG\_ZONE<sub>S</sub>, REG\_SID<sub>S</sub>, and REG\_NID<sub>S</sub> to ZONE\_LIST<sub>S</sub> if not already in
- 2 the list. If required, include the band class identifier and block identifier for the
- 3 current band and frequency block designator as specified in 2.6.5.1.5.
- 4 • Disable the zone list entry timer for the entry of ZONE\_LIST<sub>S</sub> containing
- 5 REG\_ZONE<sub>S</sub>, REG\_SID<sub>S</sub>, and REG\_NID<sub>S</sub>. For any other entry of ZONE\_LIST<sub>S</sub>
- 6 whose entry timer is not active, enable the entry timer with the duration specified
- 7 by REG\_ZONE\_TIMER<sub>S</sub> (see 2.6.5.1.5).
- 8 • If ZONE\_LIST<sub>S</sub> contains more than TOTAL\_ZONES<sub>S</sub> entries, delete the excess
- 9 entries according to the rules specified in 2.6.5.1.5.
- 10 • If BYPASS\_REG\_IND<sub>S</sub> is equal to '00', the mobile station shall perform the
- 11 following:
  - 12 – Delete all entries from SID\_NID\_LIST<sub>S</sub> belonging to a different band class (see
  - 13 [45]) than CDMABAND<sub>S</sub>.
  - 14 – If CDMABAND<sub>S</sub> contains multiple serving systems, delete all entries from
  - 15 SID\_NID\_LIST<sub>S</sub> that have a SID from a different serving system than SERVSYS<sub>S</sub>.
  - 16 – If CDMABAND<sub>S</sub> contains multiple frequency block designators, delete all entries
  - 17 from SID\_NID\_LIST<sub>S</sub> belonging to a different frequency block designator (see
  - 18 [45]) than the frequency block designator associated with REG\_SID<sub>S</sub>.
- 19 • Add REG\_SID<sub>S</sub> and REG\_NID<sub>S</sub> to SID\_NID\_LIST<sub>S</sub> if not already in the list. If
- 20 required, include the band class identifier and block identifier for the current band
- 21 and frequency block designator as specified in 2.6.5.1.5.
- 22 • Disable the SID/NID list entry timer for the entry of SID\_NID\_LIST<sub>S</sub> containing
- 23 REG\_SID<sub>S</sub>, and REG\_NID<sub>S</sub>. For any other entry of SID\_NID\_LIST<sub>S</sub> whose entry
- 24 timer is not active, enable the entry timer with the duration specified in 2.6.5.1.5.
- 25 • If SID\_NID\_LIST<sub>S</sub> contains more than N<sub>10m</sub> entries, delete the excess entries
- 26 according to the rules specified in 2.6.5.1.5.
- 27 • If MULT\_SIDS<sub>S</sub> is equal to '0' and SID\_NID\_LIST contains entries with different
- 28 REG\_SID<sub>S</sub>, delete the excess entries according to the rules specified in 2.6.5.1.5.
- 29 • If MULT\_NIDS<sub>S</sub> is equal to '0' and SID\_NID\_LIST contains more than one entry for
- 30 any SID, delete the excess entries according to the rules specified in 2.6.5.1.5.
- 31 • Set the stored location of last registration (BASE\_LAT\_REG<sub>S-p</sub> and BASE\_LONG-
- 32 \_REG<sub>S-p</sub>) to the current base station's location (BASE\_LAT<sub>S</sub> and BASE\_LONG<sub>S</sub>).
- 33 Set the stored registration distance (REG\_DIST\_REG<sub>S-p</sub>) to the current base
- 34 station's registration distance (REG\_DIST<sub>S</sub>).
- 35 • Set REG\_SECURITY\_RESYNC to NO.
- 36 • Set REGISTER\_IN\_IDLE<sub>S</sub> to '0'.

37 These procedures shall be performed after the mobile station receives confirmation of  
 38 delivery of any other message:

- 39 • Set DIGITAL\_REG<sub>S-p</sub> to '00000001'.

- 1       • If BYPASS\_REG\_IND<sub>S</sub> is equal to '00', the mobile station shall perform the
- 2       following:
- 3       – Delete all entries from ZONE\_LIST<sub>S</sub> belonging to a different band class (see [45])
- 4       than CDMABAND<sub>S</sub>.
- 5       – If CDMABAND<sub>S</sub> contains multiple serving systems, delete from ZONE\_LIST<sub>S</sub> all
- 6       entries from ZONE\_LIST<sub>S</sub> that have a SID from a different serving system than
- 7       SERVSYS<sub>S</sub>.
- 8       – If CDMABAND<sub>S</sub> contains multiple frequency block designators, delete all entries
- 9       from ZONE\_LIST<sub>S</sub> belonging to a different frequency block designator (see [45])
- 10      than the frequency block designator associated with SID<sub>S</sub>.
- 11      • For any entry of ZONE\_LIST<sub>S</sub> not matching REG\_ZONE<sub>S</sub>, SID<sub>S</sub>, and NID<sub>S</sub> and not
- 12      having an active entry timer, enable the entry timer with the duration specified by
- 13      ZONE\_TIMER<sub>S</sub> (see 2.6.5.1.5).
- 14      • If BYPASS\_REG\_IND<sub>S</sub> is equal to '00', the mobile station shall perform the
- 15      following:
- 16      – Delete all entries from SID\_NID\_LIST<sub>S</sub> belonging to a different band class (see
- 17      [45]) than CDMABAND<sub>S</sub>.
- 18      – If CDMABAND<sub>S</sub> contains multiple serving systems, delete from SID\_NID\_LIST<sub>S</sub>
- 19      all entries from SID\_NID\_LIST<sub>S</sub> that have a SID from a different serving system
- 20      than SERVSYS<sub>S</sub>.
- 21      – If CDMABAND<sub>S</sub> contains multiple frequency block designators, delete all entries
- 22      from SID\_NID\_LIST<sub>S</sub> belonging to a different frequency block designator (see
- 23      [45]) than the frequency block designator associated with SID<sub>S</sub>.
- 24      • For any entry of SID\_NID\_LIST<sub>S</sub> not matching SID<sub>S</sub> and NID<sub>S</sub> and not having an
- 25      active entry timer, enable the entry timer with the duration specified by
- 26      ZONE\_TIMER<sub>S</sub> (see 2.6.5.1.5).

#### 27   2.6.5.5.3.2 Unsuccessful Access

28   These procedures are performed when the mobile station declares an access attempt  
29   failure when in the *System Access State* (see 2.6.3).

30   The mobile station shall perform the following actions:

- 31      • Set DIGITAL\_REG<sub>S-p</sub> to '00000001'.
- 32      • If an explicit or implicit registration was sent, set SLOT\_CYCLE\_INDEX\_REG to
- 33      min(SLOT\_CYCLE\_INDEX\_REG, slot cycle index the mobile station included in the
- 34      message).
- 35      • If BYPASS\_REG\_IND<sub>S</sub> is equal to '00', the mobile station shall perform the
- 36      following:
- 37      – Delete all entries from ZONE\_LIST<sub>S</sub> belonging to a different band class (see [45])
- 38      than CDMABAND<sub>S</sub>.

- 1       – If CDMABAND<sub>S</sub> contains multiple serving systems, delete from ZONE\_LIST<sub>S</sub> all
- 2       entries from ZONE\_LIST<sub>S</sub> that have a SID from a different serving system than
- 3       SERVSYS<sub>S</sub>.
- 4       – If CDMABAND<sub>S</sub> contains multiple frequency block designators, delete all entries
- 5       from ZONE\_LIST<sub>S</sub> belonging to a different frequency block designator (see [45])
- 6       than the frequency block designator associated with SID<sub>S</sub>.
- 7       • For any entry of ZONE\_LIST<sub>S</sub> not matching REG\_ZONE<sub>S</sub>, SID<sub>S</sub>, and NID<sub>S</sub> and not
- 8       having an active entry timer, enable the entry timer with the duration specified by
- 9       ZONE\_TIMER<sub>S</sub> (see 2.6.5.1.5).
- 10      • If BYPASS\_REG\_IND<sub>S</sub> is equal to '00', the mobile station shall perform the
- 11      following:
- 12      – Delete all entries from SID\_NID\_LIST<sub>S</sub> belonging to a different band class (see
- 13      [45]) than CDMABAND<sub>S</sub>.
- 14      – If CDMABAND<sub>S</sub> contains multiple serving systems, delete from SID\_NID\_LIST<sub>S</sub>
- 15      all entries from SID\_NID\_LIST<sub>S</sub> that have a SID from a different serving system
- 16      than SERVSYS<sub>S</sub>.
- 17      – If CDMABAND<sub>S</sub> contains multiple frequency block designators, delete all entries
- 18      from SID\_NID\_LIST<sub>S</sub> belonging to a different frequency block designator (see
- 19      [45]) than the frequency block designator associated with SID<sub>S</sub>.
- 20      • For any entry of SID\_NID\_LIST<sub>S</sub> not matching SID<sub>S</sub> and NID<sub>S</sub> and not having an
- 21      active entry timer, enable the entry timer with the duration specified by
- 22      ZONE\_TIMER<sub>S</sub> (see 2.6.5.1.5).

#### 23   2.6.5.5.3.3 Power Off

24   These procedures are performed when the mobile station is directed by the user to power

25   off.

26   The mobile station shall perform the following actions:

- 27      • If an entry of ZONE\_LIST<sub>S</sub> does not have an active timer, copy that entry to
- 28      ZONE\_LIST<sub>S-p</sub>; otherwise, delete any entry in ZONE\_LIST<sub>S-p</sub>.
- 29      • If an entry of SID\_NID\_LIST<sub>S</sub> does not have an active timer, copy that entry to
- 30      SID\_NID\_LIST<sub>S-p</sub>; otherwise, delete any entry in SID\_NID\_LIST<sub>S-p</sub>.

#### 31   2.6.5.5.4 Actions in the Mobile Station Control on the Traffic Channel State

32   Requirements in this section and its subsections apply only when the mobile station is in

33   the *Mobile Station Control on the Traffic Channel State*.

##### 34   2.6.5.5.4.1 Traffic Channel Initialization

35   Upon entering the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the*

36   *Traffic Channel State*, the mobile station shall set COUNTER\_ENABLED<sub>S</sub> to NO, shall set

37   TBR\_RAND\_SUPPR\_ENABLE<sub>S</sub> to '0', and shall set TBR\_RAND\_WINDOW<sub>S</sub> to '11'.

#### 2.6.5.5.4.2 Timer Maintenance

While in the *Mobile Station Control on the Traffic Channel State*, the mobile station shall update all active registration timers.

If a zone list entry timer expires, the mobile station shall delete the corresponding entry from ZONE\_LIST<sub>S</sub>. If a SID/NID list entry timer expires, the mobile station shall delete the corresponding entry from SID\_NID\_LIST<sub>S</sub>.

#### 2.6.5.5.4.3 Processing the Mobile Station Registered Message

The mobile station receives the *Mobile Station Registered Message* on the Forward Traffic Channel when the mobile station is considered registered for the base station whose location and other parameters are included in the message.

The mobile station shall store the following parameters:

- System identification (SID<sub>S</sub> = SID<sub>T</sub>)
- Network identification (NID<sub>S</sub> = NID<sub>T</sub>)
- Registration zone (REG\_ZONE<sub>S</sub> = REG\_ZONE<sub>T</sub>)
- Number of registration zones to be retained (TOTAL\_ZONES<sub>S</sub> = TOTAL\_ZONES<sub>T</sub>)
- Zone timer length (ZONE\_TIMER<sub>S</sub> = ZONE\_TIMER<sub>T</sub>)
- Multiple SID storage indicator (MULT\_SIDS<sub>S</sub> = MULT\_SIDS<sub>T</sub>)
- Multiple NID storage indicator (MULT\_NIDS<sub>S</sub> = MULT\_NIDS<sub>T</sub>)
- Base station latitude (BASE\_LAT<sub>S</sub> = BASE\_LAT<sub>T</sub>)
- Base station longitude (BASE\_LONG<sub>S</sub> = BASE\_LONG<sub>T</sub>)
- Registration distance (REG\_DIST<sub>S</sub> = REG\_DIST<sub>T</sub>)

The mobile station shall perform the following actions:

- Set DIGITAL\_REG<sub>S-p</sub> to '00000001'.
- Add REG\_ZONE<sub>S</sub>, SID<sub>S</sub>, and NID<sub>S</sub> to ZONE\_LIST<sub>S</sub> if not already in the list. If required, include the band class identifier and block identifier for the current band and frequency block designator as specified in 2.6.5.1.5.
- If BYPASS\_REG\_IND<sub>S</sub> is equal to '00', delete all entries from ZONE\_LIST<sub>S</sub> belonging to a different band class (see [45]) than CDMABAND<sub>S</sub>.
- Disable the zone list entry timer for the entry of ZONE\_LIST<sub>S</sub> containing REG\_ZONE<sub>S</sub>, SID<sub>S</sub>, and NID<sub>S</sub>. For any other entry of ZONE\_LIST<sub>S</sub> whose entry timer is not active, enable the entry timer with the duration specified by ZONE\_TIMER<sub>S</sub> (see 2.6.5.1.5).
- If ZONE\_LIST<sub>S</sub> contains more than TOTAL\_ZONES<sub>S</sub> entries, delete the excess entries according to the rules specified in 2.6.5.1.5.
- If BYPASS\_REG\_IND<sub>S</sub> is equal to '00', delete all entries from SID\_NID\_LIST<sub>S</sub> belonging to a different band class (see [45]) than CDMABAND<sub>S</sub>.

- 1 • Add  $SID_S$  and  $NID_S$  to  $SID\_NID\_LIST_S$  if not already in the list. If required, include
- 2 the band class identifier and block identifier for the current band and frequency
- 3 block designator as specified in 2.6.5.1.5.
- 4 • Disable the  $SID/NID$  list entry timer for the entry of  $SID\_NID\_LIST_S$  containing
- 5  $SID_S$ , and  $NID_S$ . For any other entry of  $SID\_NID\_LIST_S$  whose entry timer is not
- 6 active, enable the entry timer with the duration specified in 2.6.5.1.5.
- 7 • If  $SID\_NID\_LIST_S$  contains more than  $N_{10m}$  entries, delete the excess entries
- 8 according to the rules specified in 2.6.5.1.5.
- 9 • If  $MULT\_SIDS_S$  is equal to '0' and  $SID\_NID\_LIST$  contains entries with different
- 10  $SIDs$ , delete the excess entries according to the rules specified in 2.6.5.1.5.
- 11 • If  $MULT\_NIDS_S$  is equal to '0' and  $SID\_NID\_LIST$  contains more than one entry for
- 12 any  $SID$ , delete the excess entries according to the rules specified in 2.6.5.1.5.
- 13 • Set the stored location of last registration ( $BASE\_LAT\_REG_{S-p}$  and  $BASE\_LONG\_REG_{S-p}$ ) to the base station's location ( $BASE\_LAT_S$  and  $BASE\_LONG_S$ ). Set the
- 14 stored registration distance ( $REG\_DIST\_REG_{S-p}$ ) to the base station's registration
- 15 distance ( $REG\_DIST_S$ ).
- 16
- 17 • Update its roaming status and set  $MOB\_TERM_S$  as specified in 2.6.5.3. The mobile
- 18 station should indicate to the user whether the mobile station is roaming.

#### 19 2.6.5.5.4.4 Power Off

20 These procedures are performed when the mobile station is directed by the user to power  
21 off.

22 The mobile station shall perform the following actions:

- 23 • If an entry of  $ZONE\_LIST_S$  does not have an active timer, copy that entry to
- 24  $ZONE\_LIST_{S-p}$ ; otherwise, delete the entry in  $ZONE\_LIST_{S-p}$  if  $ZONE\_LIST_{S-p}$
- 25 contains an entry.
- 26 • If an entry of  $SID\_NID\_LIST_S$  does not have an active timer, copy that entry to
- 27  $SID\_NID\_LIST_{S-p}$ ; otherwise, delete the entry in  $SID\_NID\_LIST_{S-p}$  if  $SID\_NID\_LIST_{S-p}$
- 28 contains an entry.

#### 29 2.6.6 Handoff Procedures

30 This section presents an overview and mobile station requirements for handoffs occurring  
31 while the mobile station is in the *Mobile Station Control on the Traffic Channel State* (see  
32 2.6.4). Mobile station requirements for handoffs occurring while the mobile station is in  
33 the *Mobile Station Idle State* are specified in 2.6.2.1.4.

#### 34 2.6.6.1 Overview

##### 35 2.6.6.1.1 Types of Handoff

36 The mobile station supports the following three handoff procedures while in the *Mobile*  
37 *Station Control on the Traffic Channel State*:

- 1 • *Soft Handoff*: A handoff in which the mobile station commences communications  
2 with a new base station without interrupting communications with the old base  
3 station. Soft handoff can only be used between CDMA Channels having identical  
4 Frequency Assignments. Soft handoff provides diversity of Forward Traffic  
5 Channels and Reverse Traffic Channel paths on the boundaries between base  
6 stations.
- 7 • *CDMA-to-CDMA Hard Handoff*: A handoff in which the mobile station is  
8 transitioned between disjoint sets of base stations, different band classes, different  
9 Frequency Assignments, or different frame offsets.

10 The mobile station shall support soft handoffs on the same Frequency Assignment (see  
11 2.6.6.2.7). The mobile station shall support CDMA-to-CDMA hard handoffs between band  
12 classes on which it supports CDMA operation (see 2.6.6.2.8).

### 13 2.6.6.1.2 Pilot Sets

14 Within section 2.6.6 the term pilot refers to a Pilot Channel identified by a pilot sequence  
15 offset (see [2]), a Walsh function or a quasi-orthogonal function (see [2]), and a Frequency  
16 Assignment (see [2]). A pilot is associated with the Forward Traffic Channels in the same  
17 Forward CDMA Channel. All pilots in a pilot set have the same CDMA Frequency  
18 Assignment.

19 The mobile station searches for pilots on the current CDMA Frequency Assignment to  
20 detect the presence of CDMA Channels and to measure their strengths. When the mobile  
21 station detects a pilot of sufficient strength that is not associated with any of the Forward  
22 Traffic Channels assigned to it, it sends a *Pilot Strength Measurement Message* or an  
23 *Extended Pilot Strength Measurement Message* to the base station<sup>37</sup>. The base station can  
24 then assign a Forward Traffic Channel associated with that pilot to the mobile station and  
25 direct the mobile station to perform a handoff.

26 The pilot search parameters and the rules for *Pilot Strength Measurement Message* or  
27 *Extended Pilot Strength Measurement Message* transmission are expressed in terms of the  
28 following sets of pilots:

- 29 • *Active Set*: The pilots associated with the Forward Traffic Channels assigned to the  
30 mobile station.
- 31 • *Candidate Set*: The pilots that are not currently in the Active Set but have been  
32 received by the mobile station with sufficient strength to indicate that the  
33 associated Forward Traffic Channels could be successfully demodulated.

---

<sup>37</sup> The mobile station may send a Handoff Supplementary Information Notification message to the base station if a message that mobile station is sending includes a Pilot for which the base station may require supplementary information. For example, the mobile station may send this message along with PSMM or EPSMM message.

- 1 • *Neighbor Set*: The pilots that are not currently in the Active Set or the Candidate
- 2 Set and are likely candidates for handoff.
- 3 • *Remaining Set*: The set of all possible pilots in the current system on the current
- 4 CDMA Frequency Assignment, excluding the pilots in the Neighbor Set, the
- 5 Candidate Set, and the Active Set. This set of possible pilots consists of pilots
- 6 whose pilot PN sequence offset indices are integer multiples of  $\text{PILOT\_INC}_S$ .

7 The base station may direct the mobile station to search for pilots on a different CDMA  
 8 frequency to detect the presence of CDMA Channels and to measure their strengths. The  
 9 mobile station reports the results of the search to the base station using the *Candidate*  
 10 *Frequency Search Report Message*. Depending upon the pilot strength measurements  
 11 reported in the *Candidate Frequency Search Report Message*, the base station can direct  
 12 the mobile station to perform an inter-frequency hard handoff.

13 The pilot search parameters are expressed in terms of the following sets of pilots on the  
 14 CDMA Candidate Frequency:

- 15 • *Candidate Frequency Neighbor Set*: A list of pilots on the CDMA Candidate
- 16 Frequency.
- 17 • *Candidate Frequency Search Set*: A subset of the Candidate Frequency Neighbor
- 18 Set that the base station may direct the mobile station to search.

## 19 2.6.6.2 Requirements

### 20 2.6.6.2.1 Pilot Search

21 For the pilot sets defined in 2.6.6.1.2, the base station sets the search window (range of PN  
 22 offsets) in which the mobile station is to search for usable multipath components (i.e.,  
 23 multipath components that the mobile station can use for demodulation of the associated  
 24 Forward Traffic Channel) of the pilots in the set.

25 Search performance criteria are defined in [11].

26 This search shall be governed by the following:

- 27 • *Active Set and Candidate Set*: The search procedures for pilots in the Active Set
- 28 and Candidate Set shall be identical. The search window size<sup>38</sup> for each pilot in the
- 29 Active Set and Candidate Set shall be the number of PN chips specified in Table
- 30 2.6.6.2.1-1 corresponding to  $\text{SRCH\_WIN\_A}_S$ . The mobile station should center the
- 31 search window for each pilot of the Active Set and Candidate Set around the
- 32 earliest arriving usable multipath component of the pilot. If the mobile station
- 33 receives a value greater than or equal to 13 for  $\text{SRCH\_WIN\_A}_T$ , it may store and use
- 34 the value 13 in  $\text{SRCH\_WIN\_A}_S$ .

---

<sup>38</sup> The table defines the entire search range. For example,  $\text{SRCH\_WIN\_A}_S = 6$  corresponds to a 28 PN chip search window or  $\pm 14$  PN chips around the search window center.

1

**Table 2.6.6.2.1-1. Searcher Window Sizes**

<b>SRCH_WIN_A SRCH_WIN_N SRCH_WIN_NGHB SRCH_WIN_R CF_SRCH_WIN_N</b>	<b>window_size (PN chips)</b>	<b>SRCH_WIN_A SRCH_WIN_N SRCH_WIN_NGHB R SRCH_WIN_R CF_SRCH_WIN_N</b>	<b>window_size (PN chips)</b>
0	4	8	60
1	6	9	80
2	8	10	100
3	10	11	130
4	14	12	160
5	20	13	226
6	28	14	320
7	40	15	452

2

3

**Table 2.6.6.2.1-2. Search Window Offset**

<b>SRCH_OFFSET_NGHB CF_SRCH_OFFSET_NGHB</b>	<b>Offset ( PN chips)</b>
0	0
1	$\text{window\_size}/2$
2	$\text{window\_size}$
3	$3 \times \text{window\_size} / 2$
4	$-\text{window\_size} / 2$
5	$-\text{window\_size}$
6	$-3 \times \text{window\_size} / 2$
7	Reserved

4



- 1 • *Neighbor Set:* If SRCH\_WIN\_NGHR\_INCL<sub>s</sub> is equal to '1', the search window size

2 for each pilot in the Neighbor Set shall be the number of PN chips specified in Table

3 2.6.6.2.1-1, corresponding to SRCH\_WIN\_NGHR<sub>s</sub> associated with the pilot being

4 searched. If SRCH\_WIN\_NGHR\_INCL<sub>s</sub> is equal to '0', the search window size for

5 each pilot in the Neighbor Set shall be the number of PN chips specified in Table

6 2.6.6.2.1-1 corresponding to SRCH\_WIN\_N<sub>s</sub>. If SRCH\_OFFSET\_INCL<sub>s</sub> is equal to

7 '1', the search window offset for each pilot in the Neighbor Set shall be the number

8 of PN chips specified in Table 2.6.6.2.1-2, corresponding to

9 SRCH\_OFFSET\_NGHR<sub>s</sub> associated with the pilot being searched. If

10 SRCH\_OFFSET\_INCL<sub>s</sub> is equal to '0', the search window offset for each pilot in the

11 Neighbor Set shall be zero PN chip. The mobile station should center the search

12 window for each pilot in the Neighbor Set around the pilot's PN sequence offset

13 plus the corresponding search window offset, using timing defined by the mobile

14 station's time reference (see [2]). If SEARCH\_PRIORITY\_INCL<sub>s</sub> is equal to '1', the

15 mobile station should use SEARCH\_PRIORITY<sub>s</sub> for the corresponding pilot to

16 schedule its neighbor search. If the mobile station supports hopping pilot beacons

17 and the TIMING\_INCL field of the NGHR\_REC for the corresponding pilot is equal

18 to '1', then the mobile station shall use the information included in the

19 NGHR\_TX\_OFFSET, NGHR\_TX\_DURATION, and NGHR\_TX\_PERIOD fields of

20 the NGHR\_REC for the corresponding pilot to schedule the time for searching the

21 neighbor. If ADD\_PILOT\_REC\_INCL field of the NGHR\_REC for the corresponding

22 pilot is equal to '1', the mobile station shall use the information included in the

23 NGHR\_PILOT\_REC field for searching the neighbor.
- 24 • *Remaining Set:* The search window size for each pilot in the Remaining Set shall be

25 the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to

26 SRCH\_WIN\_R<sub>s</sub>. The mobile station should center the search window for each pilot

27 in the Remaining Set around the pilot's PN sequence offset, using timing defined by

28 the mobile station's time reference (see [2]). The mobile station should only search

29 for Remaining Set pilots whose pilot PN sequence offset indices are equal to integer

30 multiples of PILOT\_INC<sub>s</sub>.

- Candidate Frequency Search Set:** If CF\_SRCH\_WIN\_NGHBR\_INCL<sub>S</sub> is equal to '1', the search window size for each pilot in the Candidate Frequency Search Set shall be the number of PN chips specified in Table 2.6.6.2.1-1, corresponding to SRCH\_WIN\_NGHBR<sub>S</sub> associated with the pilot being searched. If CF\_SRCH\_WIN\_NGHBR\_INCL<sub>S</sub> is equal to '0', the search window size for each pilot in the Candidate Frequency Search Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to CF\_SRCH\_WIN\_N<sub>S</sub>. If CF\_SRCH\_OFFSET\_INCL<sub>S</sub> is equal to '1', the search window offset for each pilot in the Candidate Frequency Search Set shall be the number of PN chips specified in Table 2.6.6.2.1-2, corresponding to SRCH\_OFFSET\_NGHBR<sub>S</sub> associated with the pilot being searched. If CF\_SRCH\_OFFSET\_INCL<sub>S</sub> is equal to '0', the search window offset for each pilot in the Candidate Frequency Search Set shall be zero PN chips. The mobile station should center the search window for each pilot in the Candidate Frequency Search Set around the pilot's PN sequence offset plus the corresponding search window offset using timing defined by the mobile station's time reference (see [2]). If CF\_SEARCH\_PRIORITY\_INCL<sub>S</sub> is equal to '1', the mobile station should use SEARCH\_PRIORITY<sub>S</sub> associated with each pilot to schedule a search of its Candidate Frequency Search Set.

#### 2.6.6.2.2 Pilot Strength Measurements

The mobile station assists the base station in the handoff process and in the Reverse Supplemental Code Channel operation and in the Reverse Supplemental Channel operation by measuring and reporting the strengths of received pilots.

For an SR1 pilot, the mobile station should use the searcher element (see [2]) to compute the strength of a pilot (PS) by adding the ratios of received pilot energy per chip,  $E_c$ , to total received spectral density (noise and signals),  $I_o$ , of at most  $k$  usable multipath components, where  $k$  is the number of demodulating elements (see [2]) supported by the mobile station.

For an SR3 pilot, the pilot strength is given by

$$\frac{1}{3} \times \left( \left( \frac{E_c}{I_o} \right)_{\text{Primary}} + \frac{\left( \frac{E_c}{I_o} \right)_1}{\Delta_1} + \frac{\left( \frac{E_c}{I_o} \right)_2}{\Delta_2} \right) \text{ where:}$$

-  $\left( \frac{E_c}{I_o} \right)_{\text{Primary}}$  is the pilot  $E_c/I_o$  measured on the Primary carrier (computed as specified above for SR1 pilots),

-  $\left( \frac{E_c}{I_o} \right)_1$  is the pilot  $E_c/I_o$  measured on the pilot on the lower frequency of the two remaining SR3 frequencies (computed as specified above for SR1 pilots), and  $\Delta_1$  is

1 the pilot power level on the lower frequency of the two remaining SR3 frequencies  
 2 relative to that of the primary SR3 pilot, i.e.  $\Delta_1 = 10^{(-SR3\_PILOT\_POWER1/10)}$ .

3 -  $\left(\frac{E_c}{I_o}\right)_2$  is the pilot  $E_c/I_o$  measured on the pilot on the higher frequency of the two  
 4 remaining SR3 frequencies (computed as specified above for SR1 pilots), and  $\Delta_2$  is  
 5 the pilot power level on the higher frequency of the two remaining SR3 frequencies  
 6 relative to that of the primary SR3 pilot, i.e.  $\Delta_2 = 10^{(-SR3\_PILOT\_POWER2/10)}$ .

#### 7 2.6.6.2.3 Handoff Drop Timer

8 The mobile station shall maintain a handoff drop timer for each pilot in the Active Set and  
 9 Candidate Set.

10 If  $P\_REV\_IN\_USE_s$  is less than or equal to three or  $SOFT\_SLOPE_s$  is equal to '000000', the  
 11 mobile station shall perform the following:

- 12 • For the Candidate Set, the mobile station shall start the timer whenever the  
 13 strength of the corresponding pilot becomes less than  $T\_DROP_s$ . The mobile  
 14 station shall reset and disable the timer if the strength of the corresponding pilot  
 15 exceeds  $T\_DROP_s$ .
- 16 • For the Active Set, the mobile station shall start the timer whenever the strength of  
 17 the corresponding pilot becomes less than  $T\_DROP_s$ . The mobile station shall reset  
 18 and disable the timer if the strength of the corresponding pilot exceeds  $T\_DROP_s$ .

19 If  $P\_REV\_IN\_USE_s$  is greater than three and  $SOFT\_SLOPE_s$  is not equal to '000000', the  
 20 mobile station shall perform the following:

- 21 • For the Candidate Set, the mobile station shall start the timer whenever the  
 22 strength of the corresponding pilot becomes less than  $T\_DROP_s$ . The mobile  
 23 station shall reset and disable the timer if the strength of the corresponding pilot  
 24 exceeds  $T\_DROP_s$ .
- 25 • For the Active Set, the mobile station shall sort the  $N_A$  pilots in the Active Set in  
 26 order of increasing strengths, i.e.,  $PS_1 < PS_2 < PS_3 < \dots < PS_{N_A}$  where the strength  
 27  $PS$  is as defined in 2.6.6.2.2. The mobile station shall start the timer whenever the  
 28 strength  $PS_i$  satisfies the following inequality:

$$29 \quad 10 \times \log_{10} PS_i < \max\left(\frac{SOFT\_SLOPE_s}{8} \times 10 \times \log_{10} \sum_{j>i} PS_j + \frac{DROP\_INTERCEPT_s}{2}, -\frac{T\_DROP_s}{2}\right)$$

$$i = 1, 2, \dots, PS_{N_A-1}$$

30

31 For the Active Set, the mobile station shall start the timer even if the timer has previously  
 32 expired. The mobile station shall reset and disable the timer whenever the above  
 33 inequality is not satisfied for the corresponding pilot.

If T\_TDROP\_RANGE<sub>s</sub> is equal to '0000' or if P\_REV\_IN\_USE<sub>s</sub> is less than 9, then the mobile station shall perform the following:

- If T\_TDROP<sub>s</sub> equals zero, the mobile station shall consider the timer expired within 100 ms of enabling it.
- Otherwise, the mobile station shall consider the timer expired within 10% of the timer expiration value shown in Table 2.6.6.2.3-1 corresponding to T\_TDROP<sub>s</sub>. If T\_TDROP<sub>s</sub> changes, the mobile station shall begin using the new value for all handoff drop timers within 100 ms.

**Table 2.6.6.2.3-1. Handoff Drop Timer Expiration Values**

<b>T_TDROP</b>	<b>Timer Expiration (seconds)</b>	<b>T_TDROP</b>	<b>Timer Expiration (seconds)</b>
0	0.1	8	27
1	1	9	39
2	2	10	55
3	4	11	79
4	6	12	112
5	9	13	159
6	13	14	225
7	19	15	319

Otherwise, the mobile shall perform the following:

- The mobile station shall select the timer expiration value as follows:
  - The mobile station shall select the timer expiration value greater than or equal to the minimum drop timer value computed as:
 
$$\max ( 0.1 \text{ seconds, range-based minimum timer expiration value } ),$$
 where the range-based minimum timer expiration value equals:
 
$$( \text{nominal timer expiration value} ) - ( \text{timer expiration range value} ),$$
 where:
    - the nominal timer expiration value is the timer expiration value in Table 2.6.6.2.3-1 corresponding to T\_TDROP<sub>s</sub> and,
    - the timer expiration range value is the timer expiration range value in Table 2.6.6.2.3-2 corresponding to T\_TDROP\_RANGE<sub>s</sub>.
  - The mobile station shall select the timer expiration value less than or equal to the maximum drop timer value which equals:

( nominal timer expiration value ) + ( timer expiration range value ),

where:

- the nominal timer expiration value is the timer expiration value in Table 2.6.6.2.3-1 corresponding to  $T\_TDROP_S$  and,
  - the timer expiration range value is the timer expiration range value in Table 2.6.6.2.3-2 corresponding to  $T\_TDROP\_RANGE_S$ .
- If the mobile station selected a timer expiration value of 0.1s then the mobile station shall consider the timer expired within 100 ms of enabling it.

**Table 2.6.6.2.3-2. Handoff Drop Timer Expiration Range Values**

<b>T_TDROP_RANGE [binary]</b>	<b>Timer Expiration Range (seconds)</b>	<b>T_TDROP_RANGE [binary]</b>	<b>Timer Expiration Range (seconds)</b>
0000	0	1000	27
0001	1	1001	39
0010	2	1010	55
0011	4	1011	79
0100	6	1100	112
0101	9	1101	159
0110	13	1110	225
0111	19	1111	319

The mobile station shall indicate the status of the handoff drop timer for all pilots in the Active Set and Candidate Set when transmitting a *Pilot Strength Measurement Message* or an *Extended Pilot Strength Measurement Message*.

#### 2.6.6.2.4 Pilot PN Phase

The mobile station shall measure the arrival time,  $PILOT\_ARRIVAL$ , for each pilot reported to the base station. The pilot arrival time shall be the time of occurrence, as measured at the mobile station antenna connector, of the earliest arriving usable multipath component of the pilot (for SR3 pilots, it is based on the earliest arriving usable multipath component from all three carriers). The arrival time shall be measured relative to the mobile station's time reference (see [2]) in units of PN chips. The mobile station shall compute the reported pilot PN phase,  $PILOT\_PN\_PHASE$ , as

$$PILOT\_PN\_PHASE = (PILOT\_ARRIVAL + (64 \times PILOT\_PN)) \bmod 2^{15},$$

where  $PILOT\_PN$  is the PN sequence offset index of the pilot (see [2]).

## 2.6.6.2.5 Handoff Messages

## 2.6.6.2.5.1 Processing of Forward Traffic Channel Handoff Messages

If the mobile station receives any of the following messages, then the mobile station shall process the message as described.

1. *Pilot Measurement Request Order*: The mobile station shall send, within  $T_{56m}$  seconds, a *Pilot Strength Measurement Message* if  $P\_REV\_IN\_USE_S$  is less than seven or a *Extended Pilot Strength Measurement Message* if  $P\_REV\_IN\_USE_S$  is equal to or greater than seven.
2. Reserved
3. *Neighbor List Update Message*: If  $P\_REV\_IN\_USE_S$  is greater than or equal to eight, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000010' (message not accepted in this state); otherwise, the mobile station shall process the message as specified in 2.6.6.2.6.3 and set  $SEARCH\_PRIORITY\_INCL_S$ ,  $SRCH\_WIN\_NGHBR\_INCL_S$ , and  $SRCH\_OFFSET\_INCL_S$  to '0', and set  $TIMING\_INCL$  for each of the neighboring base stations in the *Neighbor List Update Message* to '0'.
4. *Extended Handoff Direction Message*: The mobile station shall process the message as follows:
 

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (capability not supported), if the mobile station does not support the band class specified in the *Extended Handoff Direction Message*.

If the mobile station does not send a *Mobile Station Reject Order* in response to the *Extended Handoff Direction Message*, the mobile station shall perform the following at the action time of the message:

  - The mobile station shall send a *Handoff Completion Message* or an *Extended Handoff Completion Message* as specified in 2.6.6.2.5.2.
  - Update the Active Set, Candidate Set, and Neighbor Set in accordance with the *Extended Handoff Direction Message* processing (see 2.6.6.2.6.1, 2.6.6.2.6.2, and 2.6.6.2.6.3).
  - The mobile station shall delete all pilots that are not listed in the Active Set from the Active Set of the Supplemental Channel for the Forward Supplemental Channel Assignment (if any). If these deleted pilots include all pilots in the Active Set of the Supplemental Channel, the mobile station shall cancel the Forward Supplemental Channel Assignment.
  - Discontinue use of all Forward Traffic Channels associated with pilots not listed in the *Extended Handoff Direction Message*.
  - The mobile station shall update the Code Channel List,  $CODE\_CHAN\_LIST_S$ , as specified in 2.6.8.

- 1       • If the mobile station is currently processing Forward Supplemental Code Channels,  
2       then it shall continue processing the Forward Supplemental Code Channels using  
3       the updated Code Channel List, CODE\_CHAN\_LIST<sub>S</sub>.
- 4       • The mobile station shall set IGNORE\_SCAM<sub>S</sub> and IGNORE\_ESCAM<sub>S</sub> to '0'.
- 5       • If HARD\_INCLUDED is equal to '1', perform the following actions:  
6       – If FRAME\_OFFSET<sub>R</sub> is not equal to FRAME\_OFFSET<sub>S</sub>, change the frame  
7       offset on all of the code channels of the Forward Traffic Channel and of the  
8       Reverse Traffic Channel.  
9       – If RESET\_L2<sub>R</sub> is equal to '1', Layer 3 shall send a L2-Supervision.Request  
10      primitive to Layer 2 to reset the acknowledgment procedures as specified in  
11      [4]. The acknowledgment procedures shall be reset immediately after the  
12      action time of the *Extended Handoff Direction Message*.  
13      – If RESET\_FPC<sub>R</sub> is equal to '1', initialize the Forward Traffic Channel power  
14      control counters as specified in 2.6.4.1.1.1.  
15      – If SERV\_NEG\_TYPE<sub>R</sub> is equal to '1', set SERV\_NEG<sub>S</sub> to enabled; otherwise  
16      set SERV\_NEG<sub>S</sub> to disabled.  
17      – Use the long code mask as follows:  
18       + If PRIVATE\_LCM<sub>R</sub> equals '1', the mobile station shall use the Private  
19       Long Code Mask as specified in 2.3.6.  
20       + If PRIVATE\_LCM<sub>R</sub> equals '0', the mobile station shall use the Public Long  
21       Code Mask derived from PLCM\_TYPE<sub>S</sub> as specified in 2.3.6.  
22       + The mobile station shall indicate to the user the voice privacy mode  
23       status.  
24      – Process the ENCRYPT\_MODE field as specified in 2.3.12.2.
- 25      • Store the following parameters from the current configuration:  
26      – Serving Frequency Assignment (SF\_CDMACH<sub>S</sub> = CDMACH<sub>S</sub>)  
27      – Serving Frequency band class (SF\_BAND\_CLASS<sub>S</sub> = BAND\_CLASS<sub>S</sub>)  
28      – Serving Frequency frame offset (SF\_FRAME\_OFFSET<sub>S</sub> = FRAME\_OFFSET<sub>S</sub>)  
29      • If HARD\_INCLUDED is not equal to '1', set NUM\_PREAMBLE<sub>S</sub> = '000'.
- 30      • Store the following parameters from the *Extended Handoff Direction Message*:  
31      – *Extended Handoff Direction Message* sequence number (HDM\_SEQ<sub>S</sub> =  
32      HDM\_SEQ<sub>R</sub>)  
33      – If SEARCH\_INCLUDED is equal to '1', then store the following:  
34       + Search window size for the Active Set and Candidate Set  
35       (SRCH\_WIN\_A<sub>S</sub> = SRCH\_WIN\_A<sub>R</sub>)  
36       + Pilot detection threshold (T\_ADD<sub>S</sub> = T\_ADD<sub>R</sub>)  
37       + Pilot drop threshold (T\_DROP<sub>S</sub> = T\_DROP<sub>R</sub>)

- 1           + Active Set versus Candidate Set comparison threshold  
2           (T\_COMP<sub>S</sub> = T\_COMP<sub>R</sub>)
- 3           + Drop timer value (T\_TDROP<sub>S</sub> = T\_TDROP<sub>R</sub>)
- 4           – If HARD\_INCLUDED is equal to '1', then store the following:
- 5           + Frame offset (FRAME\_OFFSET<sub>S</sub> = FRAME\_OFFSET<sub>R</sub>)
- 6           + Nominal power setting of the target cell (NOM\_PWR<sub>S</sub> = NOM\_PWR<sub>R</sub>)
- 7           + Hard handoff traffic channel preamble count required before transmitting  
8           *Handoff Completion Message* or *Extended Handoff Completion Message*  
9           (NUM\_PREAMBLE<sub>S</sub> = NUM\_PREAMBLE<sub>R</sub>)
- 10          + CDMA band class (CDMABAND<sub>S</sub> = BAND\_CLASS<sub>R</sub>)
- 11          + Frequency assignment (CDMACH<sub>S</sub> = CDMA\_FREQ<sub>R</sub>)
- 12          + Nominal power setting of the target cell (If CDMABAND<sub>S</sub> = '00000' or  
13          CDMABAND<sub>S</sub> = '00011', then NOM\_PWR\_EXT<sub>S</sub> = '0'; otherwise,  
14          NOM\_PWR\_EXT<sub>S</sub> = NOM\_PWR\_EXT<sub>R</sub>)
- 15          – One occurrence of PILOT\_PN and PWR\_COMB\_IND for each included  
16          member of the Active Set.
- 17          – If ADD\_LENGTH is not equal to '000', then store the following:
- 18          + Protocol revision level (P\_REV<sub>S</sub> = P\_REV<sub>R</sub>)
- 19          + Protocol revision level currently in use (P\_REV\_IN\_USE<sub>S</sub> = the minimum  
20          value of P\_REV<sub>S</sub> and MOB\_P\_REV<sub>P</sub> of the current band class)
- 21          – Disable return on failure (RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> = '0')
- 22          • Perform a soft or hard handoff depending on the following conditions:
- 23          – If any of the following conditions is true, the mobile station shall perform a  
24          hard handoff:
- 25                  + HARD\_INCLUDED is set to '1' and either BAND\_CLASS<sub>R</sub> is not equal to  
26                  SF\_CDMABAND<sub>S</sub>, CDMA\_FREQ<sub>R</sub> is not equal to SF\_CDMACH<sub>S</sub>, or  
27                  FRAME\_OFFSET<sub>R</sub> is not equal to SF\_FRAME\_OFFSET<sub>S</sub>, or
- 28                  + The set of pilots specified by the message is disjoint from the Active Set  
29                  prior to the action time of the message.
- 30          – If the mobile station performs a hard handoff, it shall perform the following:
- 31                  + If a Periodic Serving Frequency Pilot Report Procedure is in progress, abort  
32                  the procedure (see 2.6.6.2.12).
- 33                  + If a Candidate Frequency periodic search is in progress, abort the periodic  
34                  search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4) and set PERIODIC\_SEARCH<sub>S</sub> to  
35                  '0'.
- 36                  + The mobile station shall cancel the Forward Supplemental Channel  
37                  assignment or the Reverse Supplemental Channel assignment (if any).



- + Perform the actions specified in 2.6.6.2.8.1. If the message specifies more than one pilot, the mobile station shall also perform the actions specified in 2.6.6.2.7.1 and 2.6.6.2.7.2.
  - Otherwise, the mobile station shall perform a soft handoff as specified in 2.6.6.2.7.

5. *Candidate Frequency Search Request Message*: The mobile station shall process the message as follows:

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (capability not supported), if the following condition is true:

- SEARCH\_MODE<sub>r</sub> is not equal to '0000', and the mobile station does not support the capability specified by SEARCH\_MODE<sub>r</sub>.

If none of the above conditions is true, the mobile station shall perform the actions described in the remainder of this section to process the *Candidate Frequency Search Request Message*.

If SEARCH\_MODE<sub>r</sub> is equal to '0000', the mobile station shall process the *Candidate Frequency Search Request Message* as follows:

- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001100' (invalid Frequency Assignment), if the Frequency Assignment specified in the message is the same as the Serving Frequency (BAND\_CLASS<sub>r</sub> is equal to CDMABAND<sub>s</sub> and CDMA\_FREQ<sub>r</sub> is equal to CDMACH<sub>s</sub>).
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001010' (search set not specified), if SEARCH\_TYPE<sub>r</sub> is equal to '01' or '11', and one of the following conditions is true:
  - PILOT\_UPDATE<sub>r</sub> is equal to '0' and the Candidate Frequency Search Set before the action time of the *Candidate Frequency Search Request Message* is empty, or
  - PILOT\_UPDATE<sub>r</sub> is equal to '1' and the message specifies an empty search set.
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001101' (search period too short), if SEARCH\_TYPE<sub>r</sub> is equal to '11' and *search\_period* is less than (max (*fwd\_time*, *rev\_time*) + T<sub>71m</sub>) seconds, where *search\_period*, *fwd\_time* and *rev\_time* are defined below.

(In the following, if PILOT\_UPDATE<sub>r</sub> is equal to '1', *rec\_search\_set* is the set of pilots specified in the *Candidate Frequency Search Request Message* with the corresponding SEARCH\_SET field set to '1'; otherwise, *rec\_search\_set* is the Candidate Frequency Search Set before the action time of the *Candidate Frequency Search Request Message*.)

*search\_period* = time period corresponding to SEARCH\_PERIOD<sub>r</sub> shown in Table 2.6.6.2.8.3.2-1

*fwd\_time* = the mobile station's estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to the Candidate Frequency, to search *rec\_search\_set*, and to re-tune to the Serving Frequency; if the mobile station searches *rec\_search\_set* in multiple visits, *fwd\_time* is the total time for all visits to the Candidate Frequency in a search period (see 2.6.6.2.8.3.2)

*rev\_time* = the mobile station's estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Reverse Traffic Channel processing in order to tune to the Candidate Frequency, to search *rec\_search\_set*, and to re-tune to the Serving Frequency; if the mobile station searches *rec\_search\_set* in multiple visits, *rev\_time* is the total time for all visits to the Candidate Frequency in a search period

- If the mobile station does not send a *Mobile Station Reject Order* in response to the *Candidate Frequency Search Request Message*, it shall perform the following:
  - The mobile station shall send a *Candidate Frequency Search Response Message* in assured mode, within T<sub>56m</sub> seconds of receiving the *Candidate Frequency Search Request Message*. The mobile station shall set the fields of the *Candidate Frequency Search Response Message* as follows:
    - + The mobile station shall set TOTAL\_OFF\_TIME\_FWD and TOTAL\_OFF\_TIME\_REV to its estimate of the total number of frames or power control groups for which it will need to suspend its current Forward Traffic Channel processing and Reverse Traffic Channel processing, respectively, in order to tune to the Candidate Frequency, to search *rec\_search\_set*, and to re-tune to the Serving Frequency (see 2.6.6.2.8.3.2). If the mobile station searches *rec\_search\_set* in multiple visits to the Candidate Frequency, the mobile station shall report the total number of frames or power control groups in all visits in a search period for which it will need to suspend its current Forward Traffic Channel and the Reverse Traffic Channel processing.
    - + The mobile station shall set MAX\_OFF\_TIME\_FWD and MAX\_OFF\_TIME\_REV to its estimate of the maximum number of frames or power control groups for which it will need to suspend its current Forward Traffic Channel processing and Reverse Traffic Channel processing, respectively, during any single visit to tune to the Candidate Frequency, to search a subset of *rec\_search\_set*, and to re-tune to the Serving Frequency.<sup>39</sup>

---

<sup>39</sup> If the mobile station searches the entire Candidate Frequency Search Set in a single visit to the  
(footnote continued on next page)

- 1           + The mobile station shall set PCG\_OFF\_TIMES to '1' if
- 2           TOTAL\_OFF\_TIME\_FWD, MAX\_OFF\_TIME\_FWD,
- 3           TOTAL\_OFF\_TIME\_REV and MAX\_OFF\_TIME\_REV are expressed in
- 4           units of power control groups. If these time estimates are expressed in
- 5           units of frames, the mobile station shall set PCG\_OFF\_TIMES to '0'. The
- 6           mobile station shall not use power control groups as the unit of duration
- 7           if P\_REV\_IN\_USE<sub>S</sub> is less than six.
  
- 8           + If ALIGN\_TIMING<sub>r</sub> is equal to '1', the mobile station shall set
- 9           ALIGN\_TIMING\_USED to '1' to indicate if it will align its search as
- 10          requested by the base station; otherwise, the mobile station shall set
- 11          ALIGN\_TIMING\_USED to '0'. If ALIGN\_TIMING\_USED is set to '1', the
- 12          mobile station shall set MAX\_NUM\_VISITS to the maximum number of
- 13          visits per search period minus one. If MAX\_NUM\_VISITS is not equal to
- 14          0, the mobile station shall set INTER\_VISIT\_TIME, in units of frames or
- 15          power control groups, to its estimate of the time between the beginning
- 16          of consecutive visits to the Candidate Frequency within the same search
- 17          period.
  
- 18          – When the message takes effect, the mobile station shall perform the
- 19          following actions:
  
- 20               + If any periodic search is in progress, the mobile station shall abort it (see
- 21               2.6.6.2.8.3.4 and 2.6.6.2.10.4).
  
- 22               + Store the following parameters from the *Candidate Frequency Search*
- 23               *Request Message*:
  
- 24                   o *Candidate Frequency Search Request Message* sequence number
- 25                   (CFSRM\_SEQ<sub>S</sub> = CFSRM\_SEQ<sub>r</sub>)
  
- 26                   o Periodic search flag: If SEARCH\_TYPE<sub>r</sub> is equal to '11', the mobile
- 27                   station shall set PERIODIC\_SEARCH<sub>S</sub> to '1'; otherwise, the mobile
- 28                   station shall set PERIODIC\_SEARCH<sub>S</sub> to '0'.
  
- 29                   o Search period on the Candidate Frequency
- 30                   (SEARCH\_PERIOD<sub>S</sub> = SEARCH\_PERIOD<sub>r</sub>)
  
- 31                   o Candidate Frequency search mode
- 32                   (SEARCH\_MODE<sub>S</sub> = SEARCH\_MODE<sub>r</sub>)
  
- 33                   o Band class for the Candidate Frequency
- 34                   (CF\_CDMABAND<sub>S</sub> = BAND\_CLASS<sub>r</sub>)
  
- 35                   o CDMA Channel number for the CDMA Candidate Frequency
- 36                   (CF\_CDMACH<sub>S</sub> = CDMA\_FREQ<sub>r</sub>)

---

Candidate Frequency, TOTAL\_OFF\_TIME\_FWD will be equal to MAX\_OFF\_TIME\_FWD, and TOTAL\_OFF\_TIME\_REV will be equal to MAX\_OFF\_TIME\_REV.

- 1           o Serving Frequency total pilot  $E_c$  threshold  
2           (SF\_TOTAL\_EC\_THRESH<sub>S</sub> = SF\_TOTAL\_EC\_THRESH<sub>T</sub>)
- 3           o Serving Frequency total pilot  $E_c/I_0$  threshold  
4           (SF\_TOTAL\_EC\_I0\_THRESH<sub>S</sub> = SF\_TOTAL\_EC\_I0\_THRESH<sub>T</sub>)
- 5           o Received power difference threshold  
6           (DIFF\_RX\_PWR\_THRESH<sub>S</sub> = DIFF\_RX\_PWR\_THRESH<sub>T</sub>)
- 7           o Candidate Frequency Total pilot  $E_c/I_0$  threshold  
8           (MIN\_TOTAL\_PILOT\_EC\_I0<sub>S</sub> = MIN\_TOTAL\_PILOT\_EC\_I0<sub>T</sub>)
- 9           o Pilot detection threshold on the CDMA Candidate Frequency  
10          (CF\_T\_ADD<sub>S</sub> = CF\_T\_ADD<sub>T</sub>)
- 11          o Maximum time on the CDMA Target Frequency that the mobile  
12          station may wait to receive a period of ( $N_{11m} \times 20$ ) ms with sufficient  
13          signal quality on the physical channel corresponding to  
14          FPC\_PRI\_CHAN<sub>S</sub>  
15          (TF\_WAIT\_TIME<sub>S</sub> = TF\_WAIT\_TIME<sub>T</sub>)
- 16          o Pilot PN sequence offset increment on the CDMA Candidate  
17          Frequency (CF\_PILOT\_INC<sub>S</sub> = CF\_PILOT\_INC<sub>T</sub>)
- 18          o Search window for pilots in the Neighbor Set on the CDMA  
19          Candidate Frequency (CF\_SRCH\_WIN\_N<sub>S</sub> = CF\_SRCH\_WIN\_N<sub>T</sub>)
- 20          o Search window for pilots in the Remaining Set on the CDMA  
21          Candidate Frequency (CF\_SRCH\_WIN\_R<sub>S</sub> = CF\_SRCH\_WIN\_R<sub>T</sub>)
- 22          o If PILOT\_UPDATE is equal to '1', the mobile station shall perform the  
23          following:
  - 24           ◇ Set CF\_SEARCH\_PRIORITY\_INCL<sub>S</sub> and  
25           CF\_SRCH\_WIN\_NGHR\_INCL<sub>S</sub> to the values corresponding to  
26           CF\_NGHR\_SRCH\_MODE shown in Table 2.6.6.2.5.1-1,  
27           ◇ Set CF\_SRCH\_OFFSET\_INCL<sub>S</sub> to CF\_SRCH\_OFFSET\_INCL<sub>T</sub>.
- 28          o If PILOT\_UPDATE is equal to '1', the mobile station shall replace the  
29          Candidate Frequency Neighbor Set with all neighbor pilots specified  
30          in the *Candidate Frequency Search Request Message*. Specifically,  
31          the mobile station shall store the following:
  - 32           ◇ Set the NGHR\_PN field of the Candidate Frequency Neighbor  
33           Set Pilot Record to NGHR\_PN<sub>T</sub>.
  - 34           ◇ Set the ADD\_PILOT\_REC\_INCL field of the Candidate Frequency  
35           Neighbor Set Pilot Record to ADD\_PILOT\_REC\_INCL<sub>T</sub>. If  
36           ADD\_PILOT\_REC\_INCL<sub>T</sub> is equal to '1', the mobile station shall  
37           store the following:

- 1                   - Set the NGHBR\_PILOT\_REC\_TYPE field of the Candidate
- 2                   Frequency Neighbor Set Pilot Record to
- 3                   NGHBR\_PILOT\_REC\_TYPE<sub>r</sub>.
- 4                   - If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> equals '000', the mobile station
- 5                   shall set the TD\_POWER\_LEVEL and TD\_MODE fields of the
- 6                   Candidate Frequency Neighbor Set Pilot Record to
- 7                   TD\_POWER\_LEVEL<sub>r</sub> and TD\_MODE<sub>r</sub>, respectively.
- 8                   - If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile
- 9                   station shall
- 10                  + Set the AUX\_PILOT\_QOF field of the Candidate Frequency
- 11                  Neighbor Set Pilot Record to QOF<sub>r</sub>.
- 12                  + Set the AUX\_PILOT\_WALSH\_CODE field of the Candidate
- 13                  Frequency Neighbor Set Pilot Record to
- 14                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 15                  specified by WALSH\_LENGTH<sub>r</sub>.
- 16                  - If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile
- 17                  station shall:
- 18                  + Set the AUX\_PILOT\_TD\_QOF field of the Candidate
- 19                  Frequency Neighbor Set Pilot Record to QOF<sub>r</sub>.
- 20                  + Set the AUX\_PILOT\_WALSH\_CODE field of the Candidate
- 21                  Frequency Neighbor Set Pilot Record to AUX\_WALSH<sub>r</sub>
- 22                  with the Walsh Code length specified by
- 23                  WALSH\_LENGTH<sub>r</sub>.
- 24                  + Set the AUX\_TD\_POWER\_LEVEL field of the Candidate
- 25                  Frequency Neighbor Set Pilot Record to
- 26                  AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 27                  + Set the TD\_MODE field of the Candidate Frequency
- 28                  Neighbor Set Pilot Record to TD\_MODE<sub>r</sub>.
- 29                  - If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile
- 30                  station shall:
- 31                  + Set the SR3\_PRIMARY\_PILOT field of Candidate
- 32                  Frequency Neighbor Set Pilot Record to
- 33                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 34                  + Set the SR3\_PILOT\_POWER1 field of Candidate Frequency
- 35                  Neighbor Set Pilot Record to SR3\_PILOT\_POWER1<sub>r</sub>.
- 36                  + Set the SR3\_PILOT\_POWER2 field of Candidate Frequency
- 37                  Neighbor Set Pilot Record to SR3\_PILOT\_POWER2<sub>r</sub>.
- 38                  - If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile
- 39                  station shall:

- 1                   + Set the SR3\_PRIMARY\_PILOT field of Candidate
- 2                   Frequency Neighbor Set Pilot Record to
- 3                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 4                   + Set the SR3\_PILOT\_POWER1 field of Candidate Frequency
- 5                   Neighbor Set Pilot Record to SR3\_PILOT\_POWER1<sub>r</sub>.
- 6                   + Set the SR3\_PILOT\_POWER2 field of Candidate Frequency
- 7                   Neighbor Set Pilot Record to SR3\_PILOT\_POWER2<sub>r</sub>.
- 8                   + Set the AUX\_PILOT\_QOF field of Candidate Frequency
- 9                   Neighbor Set Pilot Record to QOF<sub>r</sub>.
- 10                  + Set the AUX\_PILOT\_WALSH\_CODE field of Candidate
- 11                  Frequency Neighbor Set Pilot Record to
- 12                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 13                  specified by WALSH\_LENGTH<sub>r</sub>.
- 14                  + If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the
- 15                  AUX\_PILOT\_QOF1 field of Candidate Frequency Neighbor
- 16                  Set Pilot Record to QOF1<sub>r</sub> and set the
- 17                  AUX\_PILOT\_WALSH\_CODE1 field of Candidate Frequency
- 18                  Neighbor Set Pilot Record to AUX\_PILOT\_WALSH1<sub>r</sub> with
- 19                  the Walsh Code length specified by WALSH\_LENGTH1<sub>r</sub>;
- 20                  otherwise, set the AUX\_PILOT\_QOF1 field of Candidate
- 21                  Frequency Neighbor Set Pilot Record to QOF<sub>r</sub> and set the
- 22                  AUX\_PILOT\_WALSH\_CODE1 field of Candidate Frequency
- 23                  Neighbor Set Pilot Record to AUX\_PILOT\_WALSH<sub>r</sub> with
- 24                  the Walsh Code length specified by WALSH\_LENGTH<sub>r</sub>.
- 25                  + If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the
- 26                  AUX\_PILOT\_QOF2 field of Candidate Frequency Neighbor
- 27                  Set Pilot Record to QOF2<sub>r</sub> and set the
- 28                  AUX\_PILOT\_WALSH\_CODE2 field of Candidate Frequency
- 29                  Neighbor Set Pilot Record to AUX\_PILOT\_WALSH2<sub>r</sub> with
- 30                  the Walsh Code length specified by WALSH\_LENGTH2<sub>r</sub>;
- 31                  otherwise, set the AUX\_PILOT\_QOF2 field of Candidate
- 32                  Frequency Neighbor Set Pilot Record to QOF<sub>r</sub> and set the
- 33                  AUX\_PILOT\_WALSH\_CODE2 field of Candidate Frequency
- 34                  Neighbor Set Pilot Record to AUX\_PILOT\_WALSH<sub>r</sub> with
- 35                  the Walsh Code length specified by WALSH\_LENGTH<sub>r</sub>.
- 36                  o If PILOT\_UPDATE is equal to '1' and CF\_SEARCH\_PRIORITY\_INCL<sub>s</sub> is
- 37                  equal to '1', the mobile station shall store the search priority
- 38                  (SEARCH\_PRIORITY<sub>s</sub> = SEARCH\_PRIORITY<sub>r</sub>) associated with each of
- 39                  the neighboring base stations contained in the Candidate Frequency
- 40                  Neighbor Set.
- 41                  o If PILOT\_UPDATE is equal to '1' and CF\_SRCH\_WIN\_NGHR\_INCL<sub>s</sub>
- 42                  is equal to '1', the mobile station shall perform the following:

- ◇ Store the neighbor pilot channel search window size ( $SRCH\_WIN\_NGHBR_S = SRCH\_WIN\_NGHBR_T$ ) associated with each of the neighboring base stations contained in the Candidate Frequency Neighbor Set,
- ◇ If  $CF\_SRCH\_OFFSET\_INCL_T$  equals '1', store the neighbor pilot channel search window offset ( $SRCH\_OFFSET\_NGHBR_S = SRCH\_OFFSET\_NGHBR_T$ ) associated with each of the neighboring base stations contained in the Candidate Frequency Neighbor Set.
- If  $PILOT\_UPDATE$  is equal to '1', the mobile station shall replace the Candidate Frequency Search Set with all flagged pilots (those with the corresponding  $SEARCH\_SET$  field set to '1') specified in the *Candidate Frequency Search Request Message*.
- + If  $ALIGN\_TIMING_T$  is equal to '1' and the mobile station will align its search as requested by the base station, the mobile station shall set  $ALIGN\_TIMING\_USED_S$  to '1' and  $SEARCH\_OFFSET_S$  to  $SEARCH\_OFFSET_T$ ; otherwise, the mobile station shall set  $ALIGN\_TIMING\_USED_S$  to '0' and  $SEARCH\_OFFSET_S$  to '000000'.
- + If the mobile station sets the  $PCG\_OFF\_TIMES$  field of the *Candidate Frequency Search Response Message* to '1', it shall set  $SEARCH\_TIME\_RESOLUTION_S$  to 0.00125; otherwise, it shall set  $SEARCH\_TIME\_RESOLUTION_S$  to 0.02.
- + If  $SEARCH\_TYPE_T$  is equal to '01', the mobile station shall perform a single search of the Candidate Frequency Search Set, as described in 2.6.6.2.8.3.1. If  $SEARCH\_TYPE_T$  is equal to '11', the mobile station shall perform the periodic search procedures, as described in 2.6.6.2.8.3.2.

**Table 2.6.6.2.5.1-1. Search Parameter Settings**

<b>NGHBR_SRCH_-MODE</b> <b>CF_NGHBR_-SRCH_MODE</b>	<b>SEARCH_-PRIORITY_INCL</b> <b>CF_SEARCH_-PRIORITY_INCL</b>	<b>SRCH_WIN_-NGHBR_INCL</b> <b>CF_SRCH_-WIN_NGHBR_INCL</b>
00	0	0
01	1	0
10	0	1
11	1	1

6. *Candidate Frequency Search Control Message*: The mobile station shall process the message as follows:

If  $SEARCH\_MODE_S$  is equal to '0000':

- 1       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
2       set to '00001010' (search set not specified), if SEARCH\_TYPE<sub>r</sub> is not equal to  
3       '00' and the Candidate Frequency Search Set is empty.
- 4       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
5       set to '00001011' (invalid search request), if SEARCH\_TYPE<sub>r</sub> is not equal to '00'  
6       and the Candidate Frequency is the same as the Serving Frequency  
7       (CF\_CDMABAND<sub>s</sub> is equal to CDMABAND<sub>s</sub> and CF\_CDMACH<sub>s</sub> is equal to  
8       CDMACH<sub>s</sub>).
- 9       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
10      set to '00001101' (search period too short), if SEARCH\_TYPE<sub>r</sub> is equal to '11'  
11      and *search\_period* is less than (max (*fwd\_time*, *rev\_time*) + T<sub>71m</sub>) seconds,  
12      where  
13      *search\_period* = time period corresponding to SEARCH\_PERIOD<sub>r</sub> shown in  
14      Table 2.6.6.2.8.3.2-1,  
15      *fwd\_time* = the mobile station's estimate of the total length of time, in  
16      seconds, for which the mobile station will need to suspend its  
17      current Forward Traffic Channel processing in order to tune to  
18      the Candidate Frequency, to search the Candidate Frequency  
19      Search Set and to re-tune to the Serving Frequency; if the  
20      mobile station searches the Candidate Frequency Search Set in  
21      multiple visits, *fwd\_time* is the total time for all visits to the  
22      Candidate Frequency in a search period (see 2.6.6.2.8.3.2),  
23      and  
24      *rev\_time* = the mobile station's estimate of the total length of time, in  
25      seconds, for which the mobile station will need to suspend its  
26      current Reverse Traffic Channel processing in order to tune to  
27      the Candidate Frequency, to search the Candidate Frequency  
28      Search Set and to re-tune to the Serving Frequency; if the  
29      mobile station searches the Candidate Frequency Search Set in  
30      multiple visits, *rev\_time* is the total time for all visits to the  
31      Candidate Frequency in a search period.
- 32      • If the mobile station does not reject the *Candidate Frequency Search Control*  
33      *Message*, it shall perform the following actions when the message takes effect:  
34      – If any periodic search is in progress, the mobile station shall abort it (see  
35      2.6.6.2.8.3.4 and 2.6.6.2.10.4).  
36      – If ALIGN\_TIMING<sub>r</sub> is equal to '1' and the mobile station will align its search  
37      as requested by the base station, the mobile station shall set  
38      ALIGN\_TIMING\_USED<sub>s</sub> to '1'; otherwise, the mobile station shall set  
39      ALIGN\_TIMING\_USED<sub>s</sub> to '0' and SEARCH\_OFFSET<sub>s</sub> to '000000'.  
40      – If SEARCH\_TYPE<sub>r</sub> is equal to '00', the mobile station shall set  
41      PERIODIC\_SEARCH<sub>s</sub> to '0'.



- 1           – If SEARCH\_TYPE<sub>R</sub> is equal to '01':
- 2           + The mobile station shall set PERIODIC\_SEARCH<sub>S</sub> to '0'.
- 3           + The mobile station shall perform a single search of the Candidate
- 4           Frequency Search Set, as described in 2.6.6.2.8.3.1.
- 5           – If SEARCH\_TYPE<sub>R</sub> is equal to '11':
- 6           + The mobile station shall set PERIODIC\_SEARCH<sub>S</sub> to '1'.
- 7           + The mobile station shall perform the periodic search procedures for the
- 8           Candidate Frequency Search Set, as described in 2.6.6.2.8.3.2.

9       7. *Extended Neighbor List Update Message*: The mobile station shall update its  
10 neighbor set as specified in 2.6.6.2.6.3 and perform the following:

- 11       • If NGHBR\_SRCH\_MODE<sub>R</sub> is equal to '01' or '11', the mobile station shall store
- 12       the search priority (SEARCH\_PRIORITY<sub>S</sub> = SEARCH\_PRIORITY<sub>P</sub>) associated with
- 13       each of the neighboring base stations contained in the *Extended Neighbor List*
- 14       *Update Message* which are in the mobile's neighbor set.
- 15       • If NGHBR\_SRCH\_MODE<sub>R</sub> is equal to '01' or '00', the mobile station shall set the
- 16       SRCH\_OFFSET\_INCL<sub>S</sub> field '0'.
- 17       • If NGHBR\_SRCH\_MODE<sub>R</sub> is equal to '10' or '11', the mobile station shall perform
- 18       the following:
  - 19       – Store the neighbor pilot channel search window size
  - 20       (SRCH\_WIN\_NGHBR<sub>S</sub> = SRCH\_WIN\_NGHBR<sub>P</sub>) associated with each of the
  - 21       neighboring base stations contained in the *Extended Neighbor List Updated*
  - 22       *Message* which are in the mobile's neighbor set,
  - 23       – If SRCH\_OFFSET\_INCL<sub>R</sub> equals '1', set the SRCH\_OFFSET\_NGHBR field of
  - 24       NGHBR\_REC[i] to the i<sup>th</sup> occurrence of SRCH\_OFFSET\_NGHBR<sub>R</sub>,
  - 25       – Set SRCH\_OFFSET\_INCL<sub>S</sub> to SRCH\_OFFSET\_INCL<sub>R</sub>.
- 26       • The mobile station shall update the default search window size for its Neighbor
- 27       Set (SRCH\_WIN\_N<sub>S</sub> = SRCH\_WIN\_N<sub>P</sub>).
- 28       • The mobile station shall set SEARCH\_PRIORITY\_INCL<sub>S</sub> and
- 29       SRCH\_WIN\_NGHBR\_INCL<sub>S</sub> to the value specified in Table 2.6.6.2.5.1-1
- 30       corresponding to NGHBR\_SRCH\_MODE<sub>R</sub>.
- 31       • If USE\_TIMING is equal to '1', the mobile station shall store the timing included
- 32       flag (TIMING\_INCL) associated with each of the neighboring base stations
- 33       contained in the *Extended Neighbor List Update Message* which are in the
- 34       mobile station neighbor set; otherwise the mobile station shall set the timing
- 35       included flag (TIMING\_INCL) associated with each of the neighboring base
- 36       stations to '0'.

- 1       • If USE\_TIMING is equal to '1' and TIMING\_INCL<sub>r</sub> is equal to '1', the mobile  
2       station shall store the neighbor transmit time offset (NGHBR\_TX\_OFFSET =  
3       NGHBR\_TX\_OFFSET<sub>r</sub>) associated with each of the neighboring base stations  
4       contained in the *Extended Neighbor List Update Message* which are in the  
5       mobile station neighbor set.
- 6       • If USE\_TIMING is equal to '1' and the TIMING\_INCL is equal to '1', then the  
7       mobile station shall perform the following:
  - 8       – If the GLOBAL\_TIMING\_INCL field is equal to '1', then the mobile station  
9       shall store the neighbor transmit time duration (NGHBR\_TX\_DURATION =  
10       GLOBAL\_TX\_DURATION<sub>r</sub>) and the neighbor transmit time duration  
11       (NGHBR\_TX\_PERIOD = GLOBAL\_TX\_PERIOD<sub>r</sub>) contained in the *Extended*  
12       *Neighbor List Update Message*.
  - 13       – If the GLOBAL\_TIMING\_INCL field is equal to '0', then the mobile station  
14       shall store the neighbor transmit time duration (NGHBR\_TX\_DURATION =  
15       NGHBR\_TX\_DURATION<sub>r</sub>) and the neighbor transmit time duration  
16       (NGHBR\_TX\_PERIOD = NGHBR\_TX\_PERIOD<sub>r</sub>) associated with each of the  
17       neighboring base stations contained in the *Extended Neighbor List Update*  
18       *Message* which are in the mobile station neighbor set.
- 19       • The mobile station shall set RESQ\_ENABLED<sub>s</sub> = RESQ\_ENABLED<sub>r</sub>. If  
20       RESQ\_ENABLED<sub>s</sub> is equal to '1', then the mobile station shall store:
  - 21       – Call rescue delay timer value (RESQ\_DELAY\_TIME<sub>s</sub> = RESQ\_DELAY\_TIME<sub>r</sub>)
  - 22       – Call rescue allowed timer value (RESQ\_ALLOWED\_TIME<sub>s</sub> =  
23       RESQ\_ALLOWED\_TIME<sub>r</sub>)
  - 24       – Call rescue attempt timer value (RESQ\_ATTEMPT\_TIME<sub>s</sub> =  
25       RESQ\_ATTEMPT\_TIME<sub>r</sub>)
  - 26       – Code channel index for call rescue (RESQ\_CODE\_CHAN<sub>s</sub> =  
27       RESQ\_CODE\_CHAN<sub>r</sub>)
  - 28       – Quasi-Orthogonal Function mask identifier for call rescue (RESQ\_QOF<sub>s</sub> =  
29       RESQ\_QOF<sub>r</sub>)
  - 30       – Minimum time between consecutive rescues (RESQ\_MIN\_PERIOD<sub>s</sub> =  
31       RESQ\_MIN\_PERIOD<sub>r</sub> + 1) if RESQ\_MIN\_PERIOD\_INCL<sub>r</sub> is equal to '1';  
32       otherwise, RESQ\_MIN\_PERIOD<sub>s</sub> = '00000'.
  - 33       – The required number of transmissions of a regular PDU before declaring L2  
34       Acknowledgment Failure when Call Rescue is enabled  
35       (RESQ\_NUM\_TOT\_TRANS\_20MS<sub>s</sub> = RESQ\_NUM\_TOT\_TRANS\_20MS<sub>r</sub>) if  
36       included.
  - 37       – The required number of transmissions of a mini PDU before declaring L2  
38       Acknowledgment Failure when Call Rescue is enabled  
39       (RESQ\_NUM\_TOT\_TRANS\_5MS<sub>s</sub> = RESQ\_NUM\_TOT\_TRANS\_5MS<sub>r</sub>) if  
40       included.

- 1           – The mobile station shall set the Traffic Channel preamble length for Call  
2           Rescue Soft Handoff as follows:
  - 3           + If the mobile station is operating in Radio Configuration 1 or 2, set  
4           RESQ\_NUM\_PREAMBLE\_RC1\_RC2<sub>S</sub> = RESQ\_NUM\_PREAMBLE<sub>R</sub>;
  - 5           + If the mobile station is operating in Radio Configuration greater 2, set  
6           RESQ\_NUM\_PREAMBLE<sub>S</sub> = RESQ\_NUM\_PREAMBLE<sub>R</sub>.
- 7           – The power level adjustment to be applied to the last closed-loop power level  
8           when re-enabling the transmitter for call rescue soft handoff  
9           (RESQ\_POWER\_DELTA<sub>S</sub> = RESQ\_POWER\_DELTA<sub>R</sub>).
- 10          – Set the NGHBR\_RESQ\_CONFIGURED field of NGHBR\_REC[i] to the i<sup>th</sup>  
11          occurrence of NGHBR\_RESQ\_CONFIGURED<sub>R</sub>.
- 12          • For each of the neighboring base stations contained in the *General Neighbor*  
13          *List Message*, the mobile station shall set ADD\_PILOT\_REC\_INCL field of  
14          NGHBR\_REC[i] to the i<sup>th</sup> occurrence of ADD\_PILOT\_REC\_INCL<sub>R</sub>. If  
15          ADD\_PILOT\_REC\_INCL<sub>R</sub> equals '1', for each pilot, the mobile station shall also  
16          perform the following:
  - 17          – Set the NGHBR\_PILOT\_REC\_TYPE field of NGHBR\_PILOT\_REC to  
18          NGHBR\_PILOT\_REC\_TYPE<sub>R</sub>.
  - 19          – If NGHBR\_PILOT\_REC\_TYPE<sub>R</sub> is equal to '000'. The mobile station shall set  
20          the TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to TD\_POWER\_LEVEL<sub>R</sub>  
21          and set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE<sub>R</sub>.
  - 22          – If NGHBR\_PILOT\_REC\_TYPE<sub>R</sub> is equal to '001', the mobile station shall:
    - 23          + Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>R</sub>
    - 24          + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to  
25          AUX\_PILOT\_WALSH<sub>R</sub> with the Walsh Code length specified by  
26          WALSH\_LENGTH<sub>R</sub>
  - 27          – If NGHBR\_PILOT\_REC\_TYPE<sub>R</sub> is equal to '010', the mobile station shall:
    - 28          + Set the AUX\_PILOT\_TD\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>R</sub>.
    - 29          + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to  
30          AUX\_WALSH<sub>R</sub> with the Walsh Code length specified by  
31          WALSH\_LENGTH<sub>R</sub>.
    - 32          + Set the AUX\_TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to  
33          AUX\_TD\_POWER\_LEVEL<sub>R</sub>.
    - 34          + Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE<sub>R</sub>.
  - 35          – If NGHBR\_PILOT\_REC\_TYPE<sub>R</sub> is equal to '011', the mobile station shall:
    - 36          + Set the SR3\_PRIMARY\_PILOT field of NGHBR\_PILOT\_REC to  
37          SR3\_PRIMARY\_PILOT<sub>R</sub>.

- 1           + Set the SR3\_PILOT\_POWER1 field of NGHBR\_PILOT\_REC to
- 2           SR3\_PILOT\_POWER1<sub>r</sub>.
- 3           + Set the SR3\_PILOT\_POWER2 field of NGHBR\_PILOT\_REC to
- 4           SR3\_PILOT\_POWER2<sub>r</sub>.
- 5           – If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
- 6           + Set the SR3\_PRIMARY\_PILOT field of NGHBR\_PILOT\_REC to
- 7           SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 8           + Set the SR3\_PILOT\_POWER1 field of NGHBR\_PILOT\_REC to
- 9           SR3\_PILOT\_POWER1<sub>r</sub>.
- 10          + Set the SR3\_PILOT\_POWER2 field of NGHBR\_PILOT\_REC to
- 11          SR3\_PILOT\_POWER2<sub>r</sub>.
- 12          + Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF<sub>r</sub>.
- 13          + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to
- 14          AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 15          WALSH\_LENGTH<sub>r</sub>.
- 16          + If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1 field of
- 17          NGHBR\_PILOT\_REC to QOF1<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE1
- 18          field of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh
- 19          Code length specified by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the
- 20          AUX\_PILOT\_QOF1 field of NGHBR\_PILOT\_REC to QOF<sub>r</sub> and set the
- 21          AUX\_PILOT\_WALSH\_CODE1 field of NGHBR\_PILOT\_REC to
- 22          AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 23          WALSH\_LENGTH<sub>r</sub>.
- 24          + If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2 field of
- 25          NGHBR\_PILOT\_REC to QOF2<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2
- 26          field of NGHBR\_PILOT\_REC to AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh
- 27          Code length specified by WALSH\_LENGTH2<sub>r</sub>; otherwise, set the
- 28          AUX\_PILOT\_QOF2 field of NGHBR\_PILOT\_REC to QOF<sub>r</sub> and set the
- 29          AUX\_PILOT\_WALSH\_CODE2 field of NGHBR\_PILOT\_REC to
- 30          AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 31          WALSH\_LENGTH<sub>r</sub>.
- 32       8. *Supplemental Channel Assignment Message*: The mobile station shall process this
- 33       message as follows:
- 34       The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set
- 35       to the specified value if any of the following conditions is true, and shall not
- 36       perform any other action described in this section for processing the *Supplemental*
- 37       *Channel Assignment Message*:

- 1       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
2       set to '00000110' (capability not supported), if the number of forward or reverse  
3       Supplemental Code Channels specified in the *Supplemental Channel*  
4       *Assignment Message* is greater than the maximum number of Supplemental  
5       Code Channels supported by the mobile station.
- 6       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
7       set to '00000011' (message structure not acceptable), if both  
8       USE\_REV\_HDM\_SEQ and EXPL\_REV\_START\_TIME or both  
9       USE\_FOR\_HDM\_SEQ and EXPL\_FOR\_START\_TIME specified in the  
10      *Supplemental Channel Assignment Message* are set to '1'.
- 11      • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
12      set to '00000100' (message field not in valid range), if PILOT\_PN specified in the  
13      *Supplemental Channel Assignment Message* is not in the Active Set and this  
14      message is not linked with a *General Handoff Direction Message*.

15      If none of the above conditions is true, the mobile station shall perform the  
16      following.

- 17      • The mobile station shall store the following parameters from the *Supplemental*  
18      *Channel Assignment Message*:
  - 19       – Use *General Handoff Direction Message* forward sequence number indicator  
20       (USE\_FOR\_HDM\_SEQ<sub>S</sub> = USE\_FOR\_HDM\_SEQ<sub>R</sub>)
  - 21       – If USE\_FOR\_HDM\_SEQ<sub>R</sub> is equal to '1', then the mobile station shall store  
22       the following:
    - 23          + The sequence number of the *General Handoff Direction Message* to  
24          which this messaged is linked for the Forward Supplemental Code  
25          Channel assignment (FOR\_LINKED\_HDM\_SEQ<sub>S</sub> =  
26          FOR\_LINKED\_HDM\_SEQ<sub>R</sub>)
    - 27          + The forward Supplemental Code Channel assignment order  
28          (SCAM\_FOR\_ORDER<sub>S</sub> = least significant bit of FOR\_SUP\_CONFIG<sub>R</sub>)
    - 29          + The forward duration assignment indicator  
30          (SCAM\_FOR\_DURATION\_MODE<sub>S</sub> = USE\_FOR\_DURATION<sub>R</sub>).
  - 31       – Use *General Handoff Direction Message* reverse sequence number indicator  
32       (USE\_REV\_HDM\_SEQ<sub>S</sub> = USE\_REV\_HDM\_SEQ<sub>R</sub>)
  - 33       – If USE\_REV\_HDM\_SEQ<sub>R</sub> is equal to '1', then the mobile station shall store  
34       the following:
    - 35          + The sequence number of the *General Handoff Direction Message* to  
36          which this messaged is linked for the Reverse Supplemental Code  
37          Channel assignment (REV\_LINKED\_HDM\_SEQ<sub>S</sub> =  
38          REV\_LINKED\_HDM\_SEQ<sub>R</sub>)
    - 39          + The reverse duration assignment indicator  
40          (SCAM\_REV\_DURATION\_MODE<sub>S</sub> = USE\_REV\_DURATION<sub>R</sub>).

- 1       • If  $USE\_RETRY\_DELAY_R$  is '0', then the mobile station shall store 0 as  
2        $RETRY\_DELAY_S$ . The mobile station may send subsequent *Supplemental*  
3       *Channel Request Messages* whenever  $RETRY\_DELAY_S$  is set to 0.
- 4       • If  $USE\_RETRY\_DELAY_R$  is set to '1', the mobile station shall interpret the  
5       *Supplemental Channel Assignment Message* as an indication that the base  
6       station has specified a *Supplemental Channel Request Message* retry delay in  
7        $RETRY\_DELAY_R$  as follows:
  - 8       – The mobile station shall store the next system time 80 ms boundary +  
9        $RETRY\_DELAY_R \times 320$  ms as  $RETRY\_DELAY_S$ . The mobile station shall not  
10       send any subsequent *Supplemental Channel Request Message* until after the  
11       system time stored in  $RETRY\_DELAY_S$ . At the system time stored in  
12        $RETRY\_DELAY_S$ , the mobile station shall reset  $RETRY\_DELAY_S$  to 0.
  - 13       – If  $RETRY\_DELAY_R$  is '00000000', then the mobile station shall store 0 as  
14        $RETRY\_DELAY_S$ . The mobile station may send subsequent *Supplemental*  
15       *Channel Request Messages* whenever  $RETRY\_DELAY_S$  is set to 0.
  - 16       – If  $RETRY\_DELAY_R$  is '11111111', then the mobile station shall store *infinity*  
17       as  $RETRY\_DELAY_S$ , and the mobile station shall not send any further  
18       *Supplemental Channel Request Messages* until the mobile station receives a  
19       new *Supplemental Channel Assignment Message* with no retry delay or a  
20       non-infinite retry delay specified, or until the mobile station receives a  
21       *General Handoff Direction Message* with a  $CLEAR\_RETRY\_DELAY$  indication  
22       set.
- 23       • If  $REV\_INCLUDED_R$  is equal to '1', then the mobile station shall process Reverse  
24       Supplemental Code Channel assignment information for the *Supplemental*  
25       *Channel Assignment Message*. This information shall be processed as follows:
  - 26       – The mobile station shall store  $USE\_T\_ADD\_ABORT_R$ , the Reverse  
27       Supplemental Code Channel assignment T\_ADD abort indicator, as  
28        $USE\_T\_ADD\_ABORT_S$ .
  - 29       – The mobile station shall store  $REV\_DTX\_DURATION_R$ , Reverse Supplemental  
30       Channel Discontinuous Transmission Duration, as  $REV\_DTX\_DURATION_S$ .
  - 31       – If  $REV\_PARMS\_INCLUDED_R$  is equal to '1', the mobile station shall store the  
32       following:
    - 33       +  $T\_MULCHAN_S = T\_MULCHAN_R$
    - 34       +  $BEGIN\_PREAMBLE_S = BEGIN\_PREAMBLE_R$
    - 35       +  $RESUME\_PREAMBLE_S = RESUME\_PREAMBLE_R$
  - 36       – If  $IGNORE\_SCAM_S$  is equal to '1' and  $SCRM\_SEQ\_NUM_R$  is not present or is  
37       present and is not equal to  $SCRM\_SEQ\_NUM_S$ , then the mobile station shall  
38       not process the remaining Reverse Supplemental Code Channel assignment  
39       information in this message.

- 1           – If IGNORE\_SCAM<sub>S</sub> is equal to '1' and SCRM\_SEQ\_NUM<sub>R</sub> is present and is  
2           equal to SCRM\_SEQ\_NUM<sub>S</sub>, then the mobile station shall set  
3           IGNORE\_SCAM<sub>S</sub> to '0'.
- 4           – The mobile station shall set REV\_START\_TIME<sub>S</sub> as follows:
  - 5           + If EXPL\_REV\_START\_TIME<sub>R</sub> is equal to '1', the mobile station shall set  
6           the REV\_START\_TIME<sub>S</sub> to REV\_START\_TIME<sub>R</sub>.
  - 7           + If USE\_REV\_HDM\_SEQ<sub>R</sub> is equal to '1' and REV\_LINKED\_HDM\_SEQ<sub>R</sub> is  
8           not equal to HDM\_SEQ<sub>S</sub>, the mobile station shall set the  
9           REV\_START\_TIME<sub>S</sub> to NULL.
  - 10          + If USE\_REV\_HDM\_SEQ<sub>R</sub> is equal to '1' and REV\_LINKED\_HDM\_SEQ<sub>R</sub> is  
11          equal to HDM\_SEQ<sub>S</sub>, then the mobile station shall set the  
12          REV\_START\_TIME<sub>S</sub> to the action time of the *General Handoff Direction*  
13          *Message* that is linked to the *Supplemental Channel Assignment*  
14          *Message*.
  - 15          + If EXPL\_REV\_START\_TIME<sub>R</sub> is equal to '0' and USE\_REV\_HDM\_SEQ<sub>R</sub> is  
16          equal to '0', the mobile station shall set the REV\_START\_TIME<sub>S</sub> to the  
17          next 80 ms boundary following the action time of the *Supplemental*  
18          *Channel Assignment Message*.
- 19          – The mobile station shall set NUM\_REV\_CODES<sub>S</sub> to NUM\_REV\_CODES<sub>R</sub>. If  
20          REV\_START\_TIME<sub>S</sub> is not equal to NULL, the mobile station shall perform the  
21          following actions:
  - 22          + If NUM\_REV\_CODES<sub>R</sub> is equal to '000', the mobile station shall stop  
23          transmitting the Reverse Supplemental Code Channels at the start time  
24          specified by REV\_START\_TIME<sub>S</sub>.
  - 25          + If NUM\_REV\_CODES<sub>R</sub> is not equal to '000', the mobile station shall set  
26          PILOT\_GATING\_USE\_RATE to '0' at the action time of the message and  
27          the mobile station may start transmitting on NUM\_REV\_CODES<sub>S</sub>  
28          Reverse Supplemental Code Channels at the start time specified by  
29          REV\_START\_TIME<sub>S</sub> for a duration of time specified by the following  
30          rules:
    - 31          o If USE\_REV\_DURATION<sub>R</sub> is equal to '1', the mobile station shall set  
32          REV\_DURATION<sub>S</sub> to REV\_DURATION<sub>R</sub>. The mobile station may  
33          continue transmitting on the Reverse Supplemental Code Channels  
34          for a period of (REV\_DURATION<sub>S</sub> × 80) ms, or until it receives the  
35          action time of a subsequent *General Handoff Direction Message* or a  
36          *Supplemental Channel Assignment Message* that specifies a different  
37          Reverse Supplemental assignment duration or start time.

- o If  $USE\_REV\_DURATION_R$  is equal to '0', the mobile station may continue to transmit indefinitely on the Reverse Supplemental Code Channels, or until it receives the action time of a subsequent *General Handoff Direction Message* or a *Supplemental Channel Assignment Message* that specifies a different Reverse Supplemental assignment duration or start time.
- If  $FOR\_INCLUDED$  is equal to '1', then the mobile station shall process Forward Supplemental Code Channel assignment information as follows:
  - The mobile station shall assign a value to  $FOR\_START\_TIME_S$  according to the following rules:
    - + If  $EXPL\_FOR\_START\_TIME$  is equal to '1', the mobile station shall set the  $FOR\_START\_TIME_S$  to  $FOR\_START\_TIME_R$ .
    - + If  $USE\_FOR\_HDM\_SEQ_R$  is equal to '1' and  $FOR\_LINKED\_HDM\_SEQ_R$  is not equal to  $HDM\_SEQ_S$ , the mobile station shall set the  $FOR\_START\_TIME_S$  to NULL.
    - + If  $USE\_FOR\_HDM\_SEQ_R$  is equal to '1' and  $FOR\_LINKED\_HDM\_SEQ_R$  is equal to  $HDM\_SEQ_S$ , then the mobile station shall set the  $FOR\_START\_TIME_S$  to the action time of the *General Handoff Direction Message* that is linked to the *Supplemental Channel Assignment Message*.
    - + If  $EXPL\_FOR\_START\_TIME_R$  is equal to '0' and  $USE\_FOR\_HDM\_SEQ_R$  equals '0', the mobile station shall set the  $FOR\_START\_TIME_S$  to the action time of the *Supplemental Channel Assignment Message*.
  - If  $FOR\_SUP\_CONFIG_R$  is equal to '00' and  $FOR\_START\_TIME_S$  is not equal to NULL, the mobile station should stop processing the Forward Supplemental Code Channels at the time specified by  $FOR\_START\_TIME_S$ .
  - If  $FOR\_SUP\_CONFIG_R$  is equal to '01' and  $FOR\_START\_TIME_S$  is not equal to NULL, the mobile station shall set  $PILOT\_GATING\_USE\_RATE$  to '0' at the action time of the message and start processing the Forward Supplemental Code Channels in the  $CODE\_CHAN\_LIST_S$  at  $FOR\_START\_TIME_S$  for a period of time specified by the following rules:
    - + If  $USE\_FOR\_DURATION$  is equal to '1', the mobile station shall set  $FOR\_DURATION_S$  to  $FOR\_DURATION_R$ . The mobile station shall continue processing the Forward Supplemental Code Channels for a period of  $(FOR\_DURATION_S \times 80)$  ms, or until it receives the action time of a subsequent *Supplemental Channel Assignment Message* or a *General Handoff Direction Message* that specifies a different Forward Supplemental assignment duration or start time.



- 1           + If  $USE\_FOR\_DURATION_R$  is equal to '0', the mobile station shall
- 2           continue processing the Forward Supplemental Code Channels until it
- 3           receives the action time of a subsequent *Supplemental Channel*
- 4           *Assignment Message* or a *General Handoff Direction Message* that
- 5           specifies a different Forward Supplemental assignment duration or start
- 6           time.
- 7        – If  $FOR\_SUP\_CONFIG_R$  is equal to '10', the mobile station shall perform the
- 8        following:
- 9           + The mobile station shall update the  $CODE\_CHAN\_LIST_S$  as specified in
- 10          2.6.8.
- 11          + If  $FOR\_START\_TIME_S$  is not equal to NULL the mobile station should
- 12          stop processing Forward Supplemental Code Channels at the time
- 13          specified by  $FOR\_START\_TIME_S$ .
- 14        – If  $FOR\_SUP\_CONFIG_R$  is equal to '11', the mobile station shall perform the
- 15        following:
- 16           + The mobile station shall update the  $CODE\_CHAN\_LIST_S$  as specified in
- 17          2.6.8.
- 18           + If  $FOR\_START\_TIME_S$  is not equal to NULL, then the mobile station shall
- 19          set  $PILOT\_GATING\_USE\_RATE$  to '0' at the action time of the message
- 20          and start processing the Forward Supplemental Code Channels in the
- 21           $CODE\_CHAN\_LIST_S$  at the time specified by  $FOR\_START\_TIME_S$  for a
- 22          period of time specified by the following rules:
- 23           o If  $USE\_FOR\_DURATION_R$  is equal to '1', the mobile station shall set
- 24            $FOR\_DURATION_S$  to  $FOR\_DURATION_R$ . The mobile station shall
- 25           continue processing the Forward Supplemental Code Channels for
- 26            $(FOR\_DURATION_S \times 80)$  ms, until it receives a subsequent
- 27           *Supplemental Channel Assignment Message* or a *General Handoff*
- 28           *Direction Message* that specifies a different Forward Supplemental
- 29           assignment duration or start time.
- 30           o If  $USE\_FOR\_DURATION_R$  is equal to '0', the mobile station shall
- 31           continue processing the Forward Supplemental Code Channels until
- 32           it receives a subsequent *Supplemental Channel Assignment Message*
- 33           or a *General Handoff Direction Message* that specifies a different
- 34           Forward Supplemental assignment duration or start time.

35   9. *General Handoff Direction Message*: The mobile station shall process the message  
36   as follows:

37   In addition to the requirements in this section, if the  $SCR\_INCLUDED$  field is  
38   included in this message and is set to '1' the mobile station shall also process this  
39   message in accordance with the requirements for the active service subfunction  
40   (see 2.6.4.1.2.2).

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to the specified value if any of the following conditions is true, and shall not perform any other action described in this section for processing the *General Handoff Direction Message*:

- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (capability not supported), if the mobile station does not support the band class specified in the *General Handoff Direction Message*.
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (capability not supported), if the number of forward or reverse Supplemental Code Channels specified in the *General Handoff Direction Message* is greater than the maximum number of Supplemental Code Channels supported by the mobile station.
- If the SCR\_INCLUDED field is included in this message and is set to '1', the mobile station shall perform the following:
  - The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000111' (message cannot be handled by the current mobile station configuration), if the mobile station does not support the service configuration specified in the *General Handoff Direction Message*.
  - The mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T<sub>56m</sub> seconds, if the mobile station supports the service configuration specified but does not accept the service configuration specified in the *General Handoff Direction Message*.
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000111' (message cannot be handled by the current mobile station configuration), if the NNSCR\_INCLUDED field is included and set to '1' and the SCR\_INCLUDED field is either not included or included but set to '0', and the mobile station does not support the configuration specified in the non-negotiable service configuration information record in the *General Handoff Direction Message*.
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001010' (search set not specified), if the PERIODIC\_SEARCH field is included in the *General Handoff Direction Message* and is set to '1', and the Candidate Frequency Search Set is empty.
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001101' (search period too short), if the PERIODIC\_SEARCH field is included in the *General Handoff Direction Message* and is set to '1', and *search\_period* is less than  $(\max(\text{fwd\_time}, \text{rev\_time}) + T_{71m} \text{ seconds})$ , where *search\_period* = time period corresponding to SEARCH\_PERIOD<sub>s</sub> shown in Table 2.6.6.2.8.3.2-1,

*fwd\_time* = the mobile station's estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to the CDMA Candidate Frequency, to search the Candidate Frequency Search Set, and to re-tune to the Serving Frequency; if the mobile station searches the Candidate Frequency Search Set in multiple visits, *fwd\_time* is the total time for all visits to the CDMA Candidate Frequency in a search period (see 2.6.6.2.8.3.2),

and

*rev\_time* = the mobile station's estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Reverse Traffic Channel processing in order to tune to the CDMA Candidate Frequency, to search the Candidate Frequency Search Set, and to re-tune to the Serving Frequency; if the mobile station searches the Candidate Frequency Search Set in multiple visits, *rev\_time* is the total time for all visits to the CDMA Candidate Frequency in a search period.

If none of the above conditions is true, the mobile station shall perform the actions described in the remainder of this section to process the *General Handoff Direction Message* at the action time of the message.

If EXTRA\_PARMS is equal to '1', the mobile station shall store the return on failure indicator from the *General Handoff Direction Message* (RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> = RETURN\_IF\_HANDOFF\_FAIL<sub>R</sub>); otherwise the mobile station shall set RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> to '0'.

The mobile station shall set RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> to '0' (disable return on failure) if any of the following conditions is true:

- If P\_REV\_IN\_USE<sub>S</sub> is less than or equal to four and the mobile station does not support hard handoff with return on failure, or
- At least one of the pilots specified by the message is also included in the Active Set prior to the action time of the message, and one of the following conditions is true:
  - EXTRA\_PARMS is equal to '0', or
  - EXTRA\_PARMS is equal to '1', the message specifies the same Frequency Assignment as the Serving Frequency (BAND\_CLASS<sub>R</sub> is equal to CDMABAND<sub>S</sub> and CDMA\_FREQ<sub>R</sub> is equal to CDMACH<sub>S</sub>), and FRAME\_OFFSET<sub>R</sub> is equal to FRAME\_OFFSET<sub>S</sub>.

The mobile station shall store the following parameters from its current configuration:

- CDMA band class (SF\_CDMABAND<sub>S</sub> = CDMABAND<sub>S</sub>)
- Frequency assignment (SF\_CDMACH<sub>S</sub> = CDMACH<sub>S</sub>)

- 1       • Frame Offset ( $SF\_FRAME\_OFFSET_S = FRAME\_OFFSET_S$ )
- 2       If  $RETURN\_IF\_HANDOFF\_FAIL_S$  is equal to '1', the mobile station shall also store
- 3       the following parameters from its current configuration:
- 4       • Protocol revision level
- 5        ( $SF\_P\_REV_S = P\_REV_S$ )
- 6       • Protocol revision level in use on the Serving Frequency
- 7        ( $SF\_P\_REV\_IN\_USE_S = P\_REV\_IN\_USE_S$ )
- 8       • Search window size for the Active Set and Candidate Set
- 9        ( $SF\_SRCH\_WIN\_A_S = SRCH\_WIN\_A_S$ )
- 10       • Search window size for the Neighbor Set
- 11        ( $SF\_SRCH\_WIN\_N_S = SRCH\_WIN\_N_S$ )
- 12       • Search window size for the Remainder Set
- 13        ( $SF\_SRCH\_WIN\_R_S = SRCH\_WIN\_R_S$ )
- 14       • Pilot detection threshold
- 15        ( $SF\_T\_ADD_S = T\_ADD_S$ )
- 16       • Pilot drop threshold
- 17        ( $SF\_T\_DROP_S = T\_DROP_S$ )
- 18       • Active Set versus Candidate Set comparison threshold
- 19        ( $SF\_T\_COMP_S = T\_COMP_S$ )
- 20       • Drop timer value
- 21        ( $SF\_T\_TDROP_S = T\_TDROP_S$ )
- 22       • Drop timer range value ( $SF\_T\_TDROP\_RANGE_S = T\_TDROP\_RANGE_S$ )
- 23       • Soft slope for the dynamic add and drop thresholds
- 24        ( $SF\_SOFT\_SLOPE_S = SOFT\_SLOPE_S$ )
- 25       • Intercept for the dynamic add threshold
- 26        ( $SF\_ADD\_INTERCEPT_S = ADD\_INTERCEPT_S$ )
- 27       • Intercept for the dynamic drop threshold
- 28        ( $SF\_DROP\_INTERCEPT_S = DROP\_INTERCEPT_S$ )
- 29       • Private long code mask indicator: If the mobile station is using the private long
- 30        code mask on the Serving Frequency, it shall set  $SF\_PRIVATE\_LCM_S$  to '1';
- 31        otherwise, it shall set  $SF\_PRIVATE\_LCM_S$  to '0'.
- 32       • Private long code mask: If the mobile station is using the private long code
- 33        mask on the Serving Frequency, it shall set  $SF\_PVTLCM\_42_S$  to the
- 34        PVTLCM\_42.
- 35       • Public long code mask type: The mobile station shall set  $SF\_PLCM\_TYPE_S$  to
- 36         $PLCM\_TYPE_S$ . If  $PLCM\_TYPE_S$  equals '0001', the mobile station shall set
- 37         $SF\_PLCM\_39_S$  to  $PLCM\_39_S$ .

- 1       • Service negotiation type  
2       (SF\_SERV\_NEG<sub>S</sub> = SERV\_NEG<sub>S</sub>)
- 3       • Service configuration:  
4       Store the current service configuration (service configuration record and non-  
5       negotiable service configuration record) in SF\_SERVICE\_CONFIG<sub>S</sub>
- 6       • Call Information:  
7       Store the list of current calls (Call Control instances, etc.) in SF\_CALLS<sub>S</sub>
- 8       • Message encryption mode: If message encryption is on, the mobile station shall  
9       set SF\_ENCRYPT\_MODE<sub>S</sub> to '1'; otherwise, the mobile station shall set  
10      SF\_ENCRYPT\_MODE<sub>S</sub> to '0'.
- 11      • Extended nominal power setting of the current cell  
12      (SF\_NOM\_PWR\_EXT<sub>S</sub> = NOM\_PWR\_EXT<sub>S</sub>)
- 13      • Nominal power setting of the current cell  
14      (SF\_NOM\_PWR<sub>S</sub> = NOM\_PWR<sub>S</sub>)
- 15      • Power control step  
16      (SF\_PWR\_CNTL\_STEP<sub>S</sub> = PWR\_CNTL\_STEP<sub>S</sub>)
- 17      • Serving Frequency Active Set (SF Active Set = •For each pilot in the current  
18      Active Set: (PILOT\_PN, PWR\_COMB\_IND) • )
- 19      • Serving Frequency Code Channel List  
20      (SF\_CODE\_CHAN\_LIST<sub>S</sub> = CODE\_CHAN\_LIST<sub>S</sub>)
- 21      When the message takes effect, the mobile station shall perform the following  
22      actions:
- 23      • The mobile station shall send a *Handoff Completion Message* or an *Extended*  
24      *Handoff Completion Message* as specified in 2.6.6.2.5.2.
- 25      • Update the Active Set, Candidate Set, and Neighbor Set in accordance with the  
26      *General Handoff Direction Message* processing (see 2.6.6.2.6.1, 2.6.6.2.6.2, and  
27      2.6.6.2.6.3).
- 28      • The mobile station shall delete all pilots that are not listed in the Active Set  
29      from the Active Set of the Supplemental Channel for the Forward Supplemental  
30      Channel Assignment (if any). If these deleted pilots include all pilots in the  
31      Active Set of the Supplemental Channel, the mobile station shall cancel the  
32      Forward Supplemental Channel Assignment.
- 33      • Discontinue use of all Forward Traffic Channels associated with pilots not listed  
34      in the *General Handoff Direction Message*.
- 35      • If EXTRA\_PARMS is equal to '1', perform the following actions:  
36      – If FRAME\_OFFSET<sub>r</sub> is not equal to FRAME\_OFFSET<sub>S</sub>, change the frame  
37      offset on all of the code channels of the Forward Traffic Channel and of the  
38      Reverse Traffic Channel.

- 1           – If RESET\_L2<sub>r</sub> is equal to '1', and RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> is equal to
- 2           '0', Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset
- 3           the acknowledgment procedures, as specified in [4]. The mobile station
- 4           shall reset the acknowledgment procedures immediately after the action
- 5           time of the *General Handoff Direction Message*.
- 6           – If RESET\_FPC<sub>r</sub> is equal to '1' and RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> is equal to
- 7           '0', initialize the Forward Traffic Channel power control counters, as
- 8           specified in 2.6.4.1.1.1.
- 9           – If SERV\_NEG\_TYPE<sub>r</sub> is equal to '1', set SERV\_NEG<sub>s</sub> to enabled; otherwise
- 10          set SERV\_NEG<sub>s</sub> to disabled.
- 11          – Use the long code mask as follows:
- 12           + If PRIVATE\_LCM<sub>r</sub> equals '1', the mobile station shall use the Private
- 13           Long Code Mask as specified in 2.3.6.
- 14           + If PRIVATE\_LCM<sub>r</sub> equals '0', the mobile station shall use the Public Long
- 15           Code Mask derived from PLCM\_TYPE<sub>s</sub> as specified in 2.3.6
- 16           + The mobile station shall indicate to the user the voice privacy mode
- 17           status.
- 18          – Process the ENCRYPT\_MODE field, as specified in 2.3.12.2.
- 19          – Perform the procedures as specified in 2.6.11.3.
- 20          • If EXTRA\_PARMS is equal to '0', set the following variables to the values
- 21          indicated:
- 22           – Hard handoff traffic channel preamble count required before transmitting a
- 23           *Handoff Completion Message* or an *Extended Handoff Completion Message*
- 24           (NUM\_PREAMBLE<sub>s</sub> = '000')
- 25           – Complete search flag (COMPLETE\_SEARCH<sub>s</sub> = '1')
- 26           – CDMA band class for the Target Frequency
- 27           (TF\_CDMABAND<sub>s</sub> = SF\_CDMABAND<sub>s</sub>)
- 28           – Frequency assignment for the Target Frequency
- 29           (TF\_CDMACH<sub>s</sub> = SF\_CDMACH<sub>s</sub>)
- 30          • Store the following parameters from the *General Handoff Direction Message*:
- 31           – *General Handoff Direction Message* sequence number
- 32           (HDM\_SEQ<sub>s</sub> = HDM\_SEQ<sub>r</sub>)
- 33           – Forward power control subchannel relative gain (FPC\_SUBCHAN\_GAIN<sub>s</sub> =
- 34           FPC\_SUBCHAN\_GAIN<sub>r</sub>).
- 35           – If the mobile station uses FPC\_SUBCHAN\_GAIN<sub>s</sub>, the mobile station shall
- 36           perform the following:

- 1           + If PC\_ACTION\_TIME<sub>r</sub> is received, the mobile station shall apply its usage
- 2           of the FPC\_SUBCHAN\_GAIN<sub>s</sub> at the time specified by
- 3           PC\_ACTION\_TIME<sub>r</sub>.
- 4           + If PC\_ACTION\_TIME is not received and the explicit action time is
- 5           received, the mobile station shall apply its usage of the
- 6           FPC\_SUBCHAN\_GAIN<sub>s</sub> at the action time.
- 7           + If neither PC\_ACTION\_TIME<sub>r</sub> nor explicit action time is received, the
- 8           mobile station shall apply its usage of the FPC\_SUBCHAN\_GAIN<sub>s</sub> at the
- 9           first 80ms boundary occurring at least 80ms after the end of the frame
- 10          containing the last bit of the *General Handoff Direction Message* sent to
- 11          the mobile station.
- 12         – Reverse Eighth Gating Mode (REV\_FCH\_GATING\_MODE<sub>s</sub> =
- 13         REV\_FCH\_GATING\_MODE<sub>r</sub>).
- 14         – Reverse Power Control Delay if REV\_PWR\_CNTL\_DELAY\_INCL<sub>r</sub> is equal to '1'
- 15         (REV\_PWR\_CNTL\_DELAY<sub>s</sub> = REV\_PWR\_CNTL\_DELAY<sub>r</sub>).
- 16         – Concurrent services supported indicator (CS\_SUPPORTED<sub>s</sub> =
- 17         CS\_SUPPORTED<sub>r</sub>).
- 18         – Forward Packet Data Channel supported indicator
- 19         (FOR\_PDCH\_SUPPORTED<sub>s</sub> = FOR\_PDCH\_SUPPORTED<sub>r</sub>).
- 20         – Pilot information request supported indicator
- 21         (PILOT\_INFO\_REQ\_SUPPORTED<sub>s</sub> = PILOT\_INFO\_REQ\_SUPPORTED<sub>r</sub>).
- 22         – If SEARCH\_INCLUDED is equal to '1', store the following:
- 23           + Search window size for the Active Set and Candidate Set
- 24           (SRCH\_WIN\_A<sub>s</sub> = SRCH\_WIN\_A<sub>r</sub>)
- 25           + Pilot detection threshold
- 26           (T\_ADD<sub>s</sub> = T\_ADD<sub>r</sub>)
- 27           + Pilot drop threshold
- 28           (T\_DROP<sub>s</sub> = T\_DROP<sub>r</sub>)
- 29           + Active Set versus Candidate Set comparison threshold
- 30           (T\_COMP<sub>s</sub> = T\_COMP<sub>r</sub>)
- 31           + Drop timer value
- 32           (T\_TDROPS = T\_TDROPR)
- 33           + Drop timer range value (T\_TDROPS\_RANGE<sub>s</sub> = T\_TDROPS\_RANGE<sub>r</sub>) if
- 34           T\_TDROPS\_RANGE\_INCL<sub>r</sub> is equal to '1'; otherwise, (T\_TDROPS\_RANGE<sub>s</sub> =
- 35           '0000')
- 36           + Soft slope for the dynamic add and drop thresholds
- 37           (SOFT\_SLOPE<sub>s</sub> = SOFT\_SLOPE<sub>r</sub>)
- 38           + Intercept for the dynamic add threshold
- 39           (ADD\_INTERCEPT<sub>s</sub> = ADD\_INTERCEPT<sub>r</sub>)

- 1           + Intercept for the dynamic drop threshold
- 2           (DROP\_INTERCEPT<sub>S</sub> = DROP\_INTERCEPT<sub>T</sub>)
- 3       – If EXTRA\_PARMS is equal to '1', store the following:
- 4           + Protocol revision level (P\_REV<sub>S</sub> = P\_REV<sub>T</sub>), and protocol revision level
- 5           currently in use (P\_REV\_IN\_USE<sub>S</sub> = min (P\_REV<sub>S</sub>, MOB\_P\_REV<sub>P</sub> of the
- 6           current band class) )
- 7           + If the mobile station supports packet data service options, the packet
- 8           data services zone identifier (PACKET\_ZONE\_ID<sub>S</sub> = PACKET\_ZONE\_ID<sub>T</sub>)
- 9           + Frame offset (FRAME\_OFFSET<sub>S</sub> = FRAME\_OFFSET<sub>T</sub>)
- 10          + Acknowledgment procedures reset indicator
- 11          (If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '1', set TF\_RESET\_L2<sub>S</sub> to
- 12          RESET\_L2<sub>T</sub>)
- 13          + Indicator to initialize the Forward Traffic Channel power control
- 14          counters (If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '1', set
- 15          TF\_RESET\_FPC<sub>S</sub> to RESET\_FPC<sub>T</sub>)
- 16          + Nominal power setting of the target cell (NOM\_PWR<sub>S</sub> = NOM\_PWR<sub>T</sub>)
- 17          + Extended nominal power setting of the target cell (If CDMABAND<sub>S</sub> =
- 18          '00000' or CDMABAND<sub>S</sub> = '00011', then NOM\_PWR\_EXT<sub>S</sub> = '0';
- 19          otherwise, NOM\_PWR\_EXT<sub>S</sub> = NOM\_PWR\_EXT<sub>T</sub>)
- 20          + Hard handoff traffic channel preamble count required before
- 21          transmitting a *Handoff Completion Message* or an *Extended Handoff*
- 22          *Completion Message* (NUM\_PREAMBLE<sub>S</sub> = NUM\_PREAMBLE<sub>T</sub> )
- 23          + CDMA band class for the Target Frequency
- 24          (TF\_CDMABAND<sub>S</sub> = BAND\_CLASS<sub>T</sub> and CDMABAND<sub>S</sub> = BAND\_CLASS<sub>T</sub>)
- 25          + Frequency assignment for the Target Frequency
- 26          (TF\_CDMACH<sub>S</sub> = CDMA\_FREQ<sub>T</sub> and CDMACH<sub>S</sub> = CDMA\_FREQ<sub>T</sub>)
- 27          + Complete search flag (COMPLETE\_SEARCH<sub>S</sub> = COMPLETE\_SEARCH<sub>T</sub>)
- 28          + Periodic search flag (PERIODIC\_SEARCH<sub>S</sub> = PERIODIC\_SEARCH<sub>T</sub>)
- 29          + Nominal code channel output power offset relative to the Reverse Pilot
- 30          Channel power (RLGAIN\_TRAFFIC\_PILOT<sub>S</sub> = RLGAIN\_TRAFFIC\_PILOT<sub>T</sub>)
- 31       – If EXTRA\_PARMS is equal to '1' and DEFAULT\_RLAG is equal to '1', the
- 32       mobile station shall set each entry of the Reverse Link Attribute Adjustment
- 33       Gain Table and Reverse Channel Adjustment Gain Table (see [2]) to 0.
- 34       – If REV\_PARMS\_INCLUDED is included and is equal to '1', the mobile station
- 35       shall store the following:
- 36           + Neighbor pilot strength measurement threshold offset (T\_MULCHAN<sub>S</sub> =
- 37           T\_MULCHAN<sub>T</sub>)



- 1           + Reverse Supplemental Code Channel beginning of transmission
- 2           preamble length ( $BEGIN\_PREAMBLE_S = BEGIN\_PREAMBLE_R$ )
- 3           + Reverse Supplemental Code Channel resumption of transmission
- 4           preamble length ( $RESUME\_PREAMBLE_S = RESUME\_PREAMBLE_R$ )
- 5       – For each pilot included in the message, the mobile station shall store the
- 6       following:
  - 7           +  $PILOT\_PN$ , the pilot PN sequence offset index
  - 8           +  $PWR\_COMB\_IND$ , the power control symbol combining indicator
- 9       – If  $USE\_PWR\_CNTL\_STEP$  is equal to '1' and  $PWR\_CNTL\_STEP_R$  corresponds
- 10       to a power control step size supported by the mobile station (see [2]), then
- 11       the mobile station shall set  $PWR\_CNTL\_STEP_S$  to  $PWR\_CNTL\_STEP_R$ .
- 12       • Set the pilot detection threshold for the Target Frequency and the Candidate
- 13       Frequency:
  - 14           – Set  $TF\_T\_ADD_S$  to  $T\_ADD_S$ .
  - 15           – If the Target Frequency is the same as the Candidate Frequency
  - 16           ( $TF\_CDMABAND_S$  is equal to  $CF\_CDMABAND_S$  and  $TF\_CDMACH_S$  is equal
  - 17           to  $CF\_CDMACH_S$ ), set  $CF\_T\_ADD_S$  to  $T\_ADD_S$ .
- 18       • If  $FOR\_INCLUDED$  is included and is equal to '0', the mobile station shall
- 19       perform the following:
  - 20           – The mobile station shall update the Code Channel List,  $CODE\_CHAN\_LIST_S$ ,
  - 21           as specified in 2.6.8.
  - 22           – If  $USE\_FOR\_HDM\_SEQ_S$  is equal to '1' and  $FOR\_LINKED\_HDM\_SEQ_S$  is
  - 23           equal to  $HDM\_SEQ_R$  (this indicates that there is pending Forward
  - 24           Supplemental Code Channel assignment information, received in a
  - 25           *Supplemental Channel Assignment Message*, linked to this *General Handoff*
  - 26           *Direction Message*), then the mobile station shall perform the following
  - 27           actions:
    - 28               + The mobile station shall set  $USE\_FOR\_HDM\_SEQ_S$  to '0'.
    - 29               + If  $SCAM\_FOR\_ORDER_S$  is equal to '0', the mobile station shall stop
    - 30               processing all Forward Supplemental Code Channels at the action time
    - 31               of the *General Handoff Direction Message*.
    - 32               + If  $SCAM\_FOR\_ORDER_S$  is equal to '1', the mobile station shall start
    - 33               processing the Forward Supplemental Code Channels specified in
    - 34                $CODE\_CHAN\_LIST_S$  at the action time of the *General Handoff Direction*
    - 35               *Message*, for a period of time determined by the following rules:

- o If SCAM\_FOR\_DURATION\_MODE<sub>S</sub> is equal to '1', the mobile station shall continue processing the Forward Supplemental Code Channels for a period of (FOR\_DURATION<sub>S</sub> × 80) ms, until it receives a subsequent *General Handoff Direction Message* or a *Supplemental Channel Assignment Message* that specifies a different Forward Supplemental Code Channel assignment.
  - o If SCAM\_FOR\_DURATION\_MODE<sub>S</sub> is equal to '0', the mobile station shall continue processing the Forward Supplemental Code Channels until it receives a subsequent *Supplemental Channel Assignment Message* or a *General Handoff Direction Message* that specifies a different Forward Supplemental Code Channel assignment.
- If USE\_FOR\_HDM\_SEQ<sub>S</sub> is equal to '0' or FOR\_LINKED\_HDM\_SEQ<sub>S</sub> is not equal to HDM\_SEQ<sub>R</sub>, and if the mobile station is currently processing Forward Supplemental Code Channels, it shall continue processing the Forward Supplemental Code Channels using the updated Code Channel List, CODE\_CHAN\_LIST<sub>S</sub>.
- If NNSCR\_INCLUDED field is included and set to '1' and SCR\_INCLUDED field is either not included or included but set to '0', the mobile station shall process the received Non-negotiable Service Configuration Record as specified in 2.6.4.1.13 at the action time of this message. If SYNC\_ID\_INCL<sub>R</sub> is set to '1', the mobile station shall perform the following:
  - The mobile station shall store the synchronization identifier received from the base station (SYNC\_ID<sub>S</sub> = SYNC\_ID<sub>R</sub>).
  - The mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.
 Otherwise, the mobile station shall set SYNC\_ID<sub>S</sub> to NULL.
- If FOR\_INCLUDED is included and is equal to '1', then the mobile station shall process the Forward Supplemental Code Channel assignment information as follows:
  - The mobile station shall set USE\_FOR\_HDM\_SEQ<sub>S</sub> to '0'.
  - If FOR\_START\_TIME<sub>S</sub> specifies a time which is after the action time of the *General Handoff Direction Message*, the mobile station shall cancel any pending Forward Supplemental Code Channel assignment and shall set FOR\_START\_TIME<sub>S</sub> to NULL.
  - The mobile station shall update the Code Channel List, CODE\_CHAN\_LIST<sub>S</sub>, in accordance with the value of FOR\_SUP\_CONFIG, as specified in 2.6.8.
  - If FOR\_SUP\_CONFIG is equal to '00' or '10', the mobile station should stop processing Forward Supplemental Code Channels, if any, when the message takes effect.

- 1           – If FOR\_SUP\_CONFIG is equal to '01' or '11', the mobile station shall set  
2           PILOT\_GATING\_USE\_RATE to '0' at the action time of the message and start  
3           processing the Forward Supplemental Code Channels in the updated Code  
4           Channel List, CODE\_CHAN\_LIST<sub>S</sub>, at the action time of the message, for a  
5           period of time determined by the following rules:
  - 6           + If USE\_FOR\_DURATION is equal to '1', the mobile station shall set  
7           FOR\_DURATION<sub>S</sub> to FOR\_DURATION<sub>R</sub>. The mobile station shall  
8           continue processing the Forward Supplemental Code Channels for a  
9           period of (FOR\_DURATION<sub>S</sub> × 80) ms, until it receives a subsequent  
10          *Supplemental Channel Assignment Message* or a *General Handoff*  
11          *Direction Message* that specifies a different Forward Supplemental Code  
12          Channel assignment.
  - 13          + If USE\_FOR\_DURATION is equal to '0', the mobile station shall continue  
14          processing the Forward Supplemental Code Channels until it receives a  
15          subsequent *Supplemental Channel Assignment Message* or a *General*  
16          *Handoff Direction Message* that specifies a different Forward  
17          Supplemental Code Channel assignment.
- 18          • If REV\_INCLUDED is included and is equal to '0', the mobile station shall  
19          perform the following:
  - 20          – If USE\_REV\_HDM\_SEQ<sub>S</sub> is equal to '1' and REV\_LINKED\_HDM\_SEQ<sub>S</sub> is  
21          equal to HDM\_SEQ<sub>R</sub> (this indicates that there is pending Reverse  
22          Supplemental Code Channel assignment information, received in a  
23          *Supplemental Channel Assignment Message*, linked to this *General Handoff*  
24          *Direction Message*), the mobile station shall perform the following actions:
    - 25          + If NUM\_REV\_CODES<sub>S</sub> is equal to '000', the mobile station shall stop  
26          transmitting on all Reverse Supplemental Code Channels at the action  
27          time of the message.
    - 28          + If NUM\_REV\_CODES<sub>S</sub> is not equal to '000', the mobile station may start  
29          transmitting on NUM\_REV\_CODES<sub>S</sub> Reverse Supplemental Code  
30          Channels at the action time of the message, for a duration of time  
31          determined by the following rules:
      - 32          o If SCAM\_REV\_DURATION\_MODE<sub>S</sub> is equal to '1', the mobile station  
33          may continue transmitting on the Reverse Supplemental Code  
34          Channels for a period of (REV\_DURATION<sub>S</sub> × 80) ms, until it receives  
35          a subsequent *General Handoff Direction Message* or a *Supplemental*  
36          *Channel Assignment Message* that specifies a different Reverse  
37          Supplemental Code Channel assignment.

- 1                   o If SCAM\_REV\_DURATION\_MODE<sub>S</sub> is equal to '0', the mobile station  
2                   may continue transmitting on the Reverse Supplemental Code  
3                   Channels until it receives a subsequent *General Handoff Direction*  
4                   *Message* or a *Supplemental Channel Assignment Message* that  
5                   specifies a different Reverse Supplemental Code Channel  
6                   assignment.
- 7                   + The mobile station shall set USE\_REV\_HDM\_SEQ<sub>S</sub> to '0'.
- 8                   – If USE\_REV\_HDM\_SEQ<sub>S</sub> is equal to '0' or REV\_LINKED\_HDM\_SEQ<sub>S</sub> is not  
9                   equal to HDM\_SEQ<sub>R</sub>, and if the previous Reverse Supplemental Code  
10                  Channel assignment is still valid, the mobile station may continue to  
11                  transmit on the Reverse Supplemental Code Channels according to the  
12                  previously specified Reverse Supplemental Code Channel assignment.
- 13                  • If REV\_INCLUDED is included and is equal to '1', then the mobile station shall  
14                  process the Reverse Supplemental Code Channel assignment information as  
15                  follows:
  - 16                  – The mobile station shall set REV\_DTX\_DURATION<sub>S</sub> to  
17                  REV\_DTX\_DURATION<sub>R</sub>.
  - 18                  – The mobile station shall set USE\_REV\_HDM\_SEQ<sub>S</sub> to '0'.
  - 19                  – If REV\_START\_TIME<sub>S</sub> specifies a time which is after the action time of the  
20                  *General Handoff Direction Message*, the mobile station shall cancel any  
21                  pending Reverse Supplemental Code Channel assignment and shall set  
22                  REV\_START\_TIME<sub>S</sub> to NULL.
  - 23                  – If CLEAR\_RETRY\_DELAY is equal to '1', the mobile station shall cancel any  
24                  previously indicated retry delay and shall set RETRY\_DELAY<sub>S</sub><sup>40</sup> to 0;  
25                  otherwise, the mobile station shall continue to honor any previously active  
26                  retry delay stored in RETRY\_DELAY<sub>S</sub>.
  - 27                  – The mobile station shall set NUM\_REV\_CODES<sub>S</sub> to NUM\_REV\_CODES<sub>R</sub>, and  
28                  shall perform the following actions:
    - 29                  + If NUM\_REV\_CODES<sub>S</sub> is equal to '000', the mobile station shall stop  
30                  transmitting on all Reverse Supplemental Code Channels at the action  
31                  time of the message.
    - 32                  + If NUM\_REV\_CODES<sub>S</sub> is not equal to '000', the mobile station shall set  
33                  PILOT\_GATING\_USE\_RATE to '0' at the action time of the message and  
34                  may start transmitting on NUM\_REV\_CODES<sub>S</sub> Reverse Supplemental  
35                  Code Channels at the action time of the message, for a duration of time  
36                  determined by the following rules:

---

<sup>40</sup> The CLEAR\_RETRY\_DELAY field received in *General Handoff Direction Message* does not affect the RETRY\_DELAY<sub>S</sub>[RETRY\_TYPE] values.

- 1                   o If  $USE\_REV\_DURATION_R$  is equal to '1', the mobile station shall set  
2                    $REV\_DURATION_S$  to  $REV\_DURATION_R$ . The mobile station may  
3                   continue transmitting on the Reverse Supplemental Code Channels  
4                   for a period of  $(REV\_DURATION_S \times 80)$  ms, until it receives a  
5                   subsequent *General Handoff Direction Message* or a *Supplemental*  
6                   *Channel Assignment Message* that specifies a different Reverse  
7                   Supplemental Code Channel assignment.
- 8                   o If  $USE\_REV\_DURATION$  is equal to '0', the mobile station may  
9                   continue to transmit on the Reverse Supplemental Code Channels  
10                  until it receives a subsequent *General Handoff Direction Message* or  
11                  a *Supplemental Channel Assignment Message* that specifies a  
12                  different Reverse Supplemental Code Channel assignment.
- 13                – The mobile station shall store  $USE\_T\_ADD\_ABORT_R$ , the Reverse  
14                Supplemental Code Channel assignment T\_ADD abort indicator, as  
15                 $USE\_T\_ADD\_ABORT_S$ .
- 16                • The mobile station shall set  $IGNORE\_SCAM_S$  and  $IGNORE\_ESCAM_S$  to '0'.
- 17                • If  $PERIODIC\_SEARCH_S$  is equal to '0' and a periodic search is in progress, the  
18                mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and  
19                2.6.6.2.10.4).
- 20                • Perform a soft or hard handoff depending on the following conditions:
  - 21                – If any of the following conditions is true, the mobile station shall perform a  
22                hard handoff:
    - 23                +  $EXTRA\_PARMS$  is set to '1' and either  $BAND\_CLASS_R$  is not equal to  
24                 $SF\_CDMABAND_S$ ,  $CDMA\_FREQ_R$  is not equal to  $SF\_CDMACH_S$ , or  
25                 $FRAME\_OFFSET_R$  is not equal to  $SF\_FRAME\_OFFSET_S$ , or
    - 26                + The set of pilots specified by the message is disjoint from the Active  
27                Set prior to the action time of the message.
  - 28                – If the mobile station performs a hard handoff, it shall perform the following:
    - 29                + If a Periodic Serving Frequency Pilot Report Procedure is in progress, the  
30                mobile station shall abort the procedure (see 2.6.6.2.12).
    - 31                + If a Candidate Frequency periodic search is in progress, the mobile station  
32                shall abort the periodic search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).
    - 33                + The mobile station shall cancel the Forward Supplemental Channel  
34                assignment or the Reverse Supplemental Channel assignment (if any).
    - 35                + If  $RETURN\_IF\_HANDOFF\_FAIL_S$  is equal to '0', the mobile station shall  
36                perform actions specified in 2.6.6.2.8.1. If the message specifies more than  
37                one pilot, the mobile station shall also perform actions specified in  
38                2.6.6.2.7.1 and 2.6.6.2.7.2.

- 1                   + If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '1', the mobile station shall  
2                   perform actions specified in 2.6.6.2.8.2. If the message specifies more than  
3                   one pilot, the mobile station shall also perform actions specified in  
4                   2.6.6.2.7.1 and 2.6.6.2.7.2.
- 5                   – Otherwise, the mobile station shall perform a soft handoff as specified in  
6                   2.6.6.2.7.
- 7    10. *Periodic Pilot Measurement Request Order*: The mobile station shall perform the  
8       following:
- 9       • If the PPSMM timer is enabled, disable it.
- 10      • If ORDQ is equal to '11111111', the mobile station shall send a *Periodic Pilot*  
11       *Strength Measurement Message* to the base station within T<sub>56m</sub> seconds.
- 12      • If ORDQ is not equal to '11111111', the mobile station shall perform the  
13       following:
- 14       – Set the MIN\_PILOT\_PWR\_THRESH<sub>S</sub> to MIN\_PILOT\_PWR\_THRESH<sub>R</sub> received  
15       from the *Periodic Pilot Strength Measurement Request Order*.
- 16       – Set the MIN\_PILOT\_EC\_IO\_THRESH<sub>S</sub> to MIN\_PILOT\_EC\_IO\_THRESH<sub>R</sub>  
17       received from the *Periodic Pilot Strength Measurement Request Order*.
- 18       – Set PPSMM\_PERIOD<sub>S</sub> equal to the larger value of ORDQ and the total length  
19       of time, in units of 80 ms, required by the mobile station to update the pilot  
20       strength measurement of each pilot in the Active Set and the Candidate Set.
- 21       – Perform the Periodic Serving Frequency Pilot Report Procedure as specified  
22       in 2.6.6.2.12.
- 23      • If the mobile station sends the *Periodic Pilot Strength Measurement Message* and  
24       if INCL\_SETPT<sub>R</sub> is equal to '1', the mobile station shall include outer loop E<sub>b</sub>/N<sub>t</sub>  
25       setpoint information corresponding to the physical channel specified by  
26       FPC\_PRI\_CHAN<sub>S</sub>, and Supplemental Channel outer loop E<sub>b</sub>/N<sub>t</sub> setpoint  
27       information if one or more Supplemental Channels are assigned, in the *Periodic*  
28       *Pilot Strength Measurement Message*.
- 29    11. *Universal Handoff Direction Message*: The mobile station shall process the message  
30       as follows:
- 31       In addition to the requirements in this section, if the SCR\_INCLUDED field is  
32       included in this message and is set to '1', the mobile station shall also process this  
33       message in accordance with the requirements for the active service subfunction  
34       (see 2.6.4.1.2.2).
- 35       The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set  
36       to the specified value if any of the following conditions is true, and shall not  
37       perform any other action described in this section for processing the *Universal*  
38       *Handoff Direction Message*:
- 39       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field

- 1 set to '00000110' (capability not supported), if the mobile station does not  
 2 support the band class specified in the *Universal Handoff Direction Message*.
- 3 • If the SCR\_INCLUDED field is included in this message and is set to '1', the  
 4 mobile station shall perform the following:
- 5 - The mobile station shall send a *Mobile Station Reject Order* with the ORDQ  
 6 field set to '00000111' (message cannot be handled by the current mobile  
 7 station configuration), if the mobile station does not support the service  
 8 configuration specified in the *Universal Handoff Direction Message*.
- 9 - The mobile station shall send a *Mobile Station Reject Order* (ORDQ =  
 10 '00000111') within  $T_{56m}$  seconds, if the mobile station supports the service  
 11 configuration specified but does not accept the service configuration  
 12 specified in the *Universal Handoff Direction Message*.
- 13 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
 14 set to '00000111' (message cannot be handled by the current mobile station  
 15 configuration), if the NNSCR\_INCLUDED field is included and set to '1' and the  
 16 SCR\_INCLUDED field is either not included or included but set to '0', and the  
 17 mobile station does not support the configuration specified in the non-  
 18 negotiable service configuration information record in the *Universal Handoff*  
 19 *Direction Message*.
- 20 • If the CC\_INFO\_INCL field is included in this message and is set to '1', the  
 21 mobile station shall perform the following for each of the NUM\_CALLS\_ASSIGN  
 22 call assignments included in this message:
- 23 - If there already exists or currently pending instantiation a Call Control  
 24 instance identified by CON\_REF<sub>r</sub>, the mobile station shall send a *Mobile*  
 25 *Station Reject Order* with ORDQ field set to '00010010' (a call control  
 26 instance is already present with the specified identifier), with the CON\_REF  
 27 field of the order set to CON\_REF<sub>r</sub>.
- 28 - If RESPONSE\_IND<sub>r</sub> equals '1' and TAG<sub>r</sub> does not match any of the TAG  
 29 values contained in the list TAG\_OUTSTANDING\_LIST, the mobile station  
 30 shall send a *Mobile Station Reject Order* with ORDQ field set to '00010011'  
 31 (TAG received does not match TAG stored), with the TAG field of the order  
 32 set to TAG<sub>r</sub>, and the CON\_REF field of the order set to CON\_REF<sub>r</sub>.
- 33 - If the mobile station does not accept this call assignment, the mobile station  
 34 shall send a *Mobile Station Reject Order* with ORDQ field set to '00010000'  
 35 (call assignment not accepted), with the CON\_REF field of the order set to  
 36 CON\_REF<sub>r</sub>.
- 37 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
 38 set to '00001010' (search set not specified), if the PERIODIC\_SEARCH field is  
 39 included in the *Universal Handoff Direction Message* and is set to '1' and the

- 1 Candidate Frequency Search Set is empty.
- 2 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
3 set to '00000011' (message structure not acceptable), if the message specifies  
4 the Forward/Reverse Supplemental Channel assignment, the most significant  
5 bit of CH\_IND<sub>r</sub> is equal to '0', and CH\_IND<sub>r</sub> is not equal to '000'.
- 6 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
7 set to '00000111' (message can not be handled by the current mobile station  
8 configuration), if the message includes a reverse Supplemental Channel  
9 assignment, and any of the following conditions are true:
- 10 – any of the mobile station's reverse supplemental channel configuration  
11 parameter for the corresponding Supplemental Channel is NULL, or
- 12 – the message includes a Reverse Packet Data Channel assignment.
- 13 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
14 set to '00000111' (message can not be handled by the current mobile station  
15 configuration), if the message includes a forward Supplemental Channel  
16 assignment and any of the mobile station's forward supplemental channel  
17 configuration parameters for the corresponding Supplemental Channel is NULL.
- 18 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set  
19 to '00001101' (search period too short), if the PERIODIC\_SEARCH field is included  
20 in the *Universal Handoff Direction Message* and is set to '1', and *search\_period* is  
21 less than (max (*fwd\_time*, *rev\_time*) + T<sub>71m</sub> seconds), where
- 22 *search\_period* = time period corresponding to SEARCH\_PERIOD<sub>s</sub> shown in  
23 Table 2.6.6.2.8.3.2-1,
- 24 *fwd\_time* = the mobile station's estimate of the total length of time, in seconds,  
25 for which the mobile station will need to suspend its current  
26 Forward Traffic Channel processing in order to tune to the CDMA  
27 Candidate Frequency, to search the Candidate Frequency Search  
28 Set, and to re-tune to the Serving Frequency; if the mobile station  
29 searches the Candidate Frequency Search Set in multiple visits,  
30 *fwd\_time* is the total time for all visits to the CDMA Candidate  
31 Frequency in a search period (see 2.6.6.2.8.3.2),
- 32 and
- 33 *rev\_time* = the mobile station's estimate of the total length of time, in seconds,  
34 for which the mobile station will need to suspend its current Reverse  
35 Traffic Channel processing in order to tune to the CDMA Candidate  
36 Frequency, to search the Candidate Frequency Search Set, and to re-  
37 tune to the Serving Frequency; if the mobile station searches the  
38 Candidate Frequency Search Set in multiple visits, *rev\_time* is the  
39 total time for all visits to the CDMA Candidate Frequency in a search  
40 period.



- 1 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field  
2 set to '00000111' (message can not be handled by the current mobile station  
3 configuration), if CH\_IND<sub>r</sub> is equal to '000', and EXT\_CH\_IND<sub>r</sub> is not defined in  
4 Table 3.7.2.3.2.4-11.
- 5 • The mobile shall send a *Mobile Station Reject Order* with the ORDQ field set to  
6 '00011100' (PLCM\_TYPE mismatch) if PLCLM\_TYPE<sub>r</sub> equals '0010' and IMSI\_O is  
7 derived from IMSI\_T or if PLCLM\_TYPE<sub>r</sub> equals '0011' and IMSI\_O is derived from  
8 IMSI\_M.

9 If none of the above conditions is true, the mobile station shall perform the actions  
10 described in the remainder of this section to process the *Universal Handoff*  
11 *Direction* Message at the action time of the message.

12 If EXTRA\_PARMS is equal to '1', the mobile station shall store the return on failure  
13 indicator from the *Universal Handoff Direction Message*  
14 (RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> = RETURN\_IF\_HANDOFF\_FAIL<sub>r</sub>); otherwise the  
15 mobile station shall set RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> to '0'.

16 The mobile station shall set RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> to '0' (disable return on  
17 failure) if any of the following conditions is true:

- 18 • If P\_REV\_IN\_USE<sub>s</sub> is less than or equal to four and the mobile station does not  
19 support hard handoff with return on failure, or
- 20 • At least one of the pilots specified by the message is also included in the Active  
21 Set prior to the action time of the message, and one of the following conditions  
22 is true:
  - 23 – EXTRA\_PARMS is equal to '0', or
  - 24 – EXTRA\_PARMS is equal to '1', the message specifies the same Frequency  
25 Assignment as the Serving Frequency (BAND\_CLASS<sub>r</sub> is equal to  
26 CDMA\_BAND<sub>s</sub> and CDMA\_FREQ<sub>r</sub> is equal to CDMA\_FREQ<sub>s</sub>), and  
27 FRAME\_OFFSET<sub>r</sub> is equal to FRAME\_OFFSET<sub>s</sub>.

28 The mobile station shall store the following parameters from its current  
29 configuration:

- 30 • CDMA band class (SF\_CDMA\_BAND<sub>s</sub> = CDMA\_BAND<sub>s</sub>)
- 31 • Frequency assignment (SF\_CDMA\_FREQ<sub>s</sub> = CDMA\_FREQ<sub>s</sub>)
- 32 • Frame Offset (SF\_FRAME\_OFFSET<sub>s</sub> = FRAME\_OFFSET<sub>s</sub>)

33 If RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> is equal to '1', the mobile station shall also store  
34 the following parameters from its current configuration:

- 35 • Protocol revision level (SF\_P\_REV<sub>s</sub> = P\_REV<sub>s</sub>)
- 36 • Protocol revision level in use on the Serving Frequency (SF\_P\_REV\_IN\_USE<sub>s</sub> =  
37 P\_REV\_IN\_USE<sub>s</sub>)
- 38 • Search window size for the Active Set and Candidate Set (SF\_SRCH\_WIN\_A<sub>s</sub> =  
39 SRCH\_WIN\_A<sub>s</sub>)

- 1       • Search window size for the Neighbor Set  
2       (SF\_SRCH\_WIN\_N<sub>S</sub> = SRCH\_WIN\_N<sub>S</sub>),
- 3       • Search window size for the Remainder Set  
4       (SF\_SRCH\_WIN\_R<sub>S</sub> = SRCH\_WIN\_R<sub>S</sub>)
- 5       • Pilot detection threshold (SF\_T\_ADD<sub>S</sub> = T\_ADD<sub>S</sub>)
- 6       • Pilot drop threshold (SF\_T\_DROP<sub>S</sub> = T\_DROP<sub>S</sub>)
- 7       • Active Set versus Candidate Set comparison threshold  
8       (SF\_T\_COMP<sub>S</sub> = T\_COMP<sub>S</sub>)
- 9       • Drop timer value (SF\_T\_TDROPS<sub>S</sub> = T\_TDROPS<sub>S</sub>)
- 10       • Drop timer range value (SF\_T\_TDROPS\_RANGE<sub>S</sub> = T\_TDROPS\_RANGE<sub>S</sub>)
- 11       • Soft slope for the dynamic add and drop thresholds  
12       (SF\_SOFT\_SLOPE<sub>S</sub> = SOFT\_SLOPE<sub>S</sub>)
- 13       • Intercept for the dynamic add threshold  
14       (SF\_ADD\_INTERCEPT<sub>S</sub> = ADD\_INTERCEPT<sub>S</sub>)
- 15       • Intercept for the dynamic drop threshold  
16       (SF\_DROP\_INTERCEPT<sub>S</sub> = DROP\_INTERCEPT<sub>S</sub>)
- 17       • Private long code mask indicator: If the mobile station is using the private long  
18       code mask on the Serving Frequency, it shall set SF\_PRIVATE\_LCM<sub>S</sub> to '1';  
19       otherwise, it shall set SF\_PRIVATE\_LCM<sub>S</sub> to '0'.
- 20       • Private long code mask: If the mobile station is using the private long code  
21       mask on the Serving Frequency, it shall set SF\_PVTLCM\_42<sub>S</sub> to the  
22       PVTLCM\_42.
- 23       • Public long code mask type: The mobile station shall set SF\_PLCM\_TYPE<sub>S</sub> to  
24       PLCM\_TYPE<sub>S</sub>. If PLCM\_TYPE<sub>S</sub> equals '0001', the mobile station shall set  
25       SF\_PLCM\_39<sub>S</sub> to PLCM\_39<sub>S</sub>.
- 26       • Service negotiation type (SF\_SERV\_NEG<sub>S</sub> = SERV\_NEG<sub>S</sub>)
- 27       • Service configuration: Store the current service configuration (service  
28       configuration record and non-negotiable service configuration record) in  
29       SF\_SERVICE\_CONFIG<sub>S</sub>
- 30       • Call Information:  
31       Store the list of current calls (Call Control instances, etc.) in SF\_CALLS<sub>S</sub>
- 32       • Message encryption mode: If message encryption is on, the mobile station shall  
33       set SF\_ENCRYPT\_MODE<sub>S</sub> to '1'; otherwise, the mobile station shall set  
34       SF\_ENCRYPT\_MODE<sub>S</sub> to '0'.
- 35       • Extended nominal power setting of the current cell  
36       (SF\_NOM\_PWR\_EXT<sub>S</sub> = NOM\_PWR\_EXT<sub>S</sub>)
- 37       • Nominal power setting of the current cell (SF\_NOM\_PWR<sub>S</sub> = NOM\_PWR<sub>S</sub>)
- 38       • Power control step (SF\_PWR\_CNTL\_STEP<sub>S</sub> = PWR\_CNTL\_STEP<sub>S</sub>)

- Serving Frequency Active Set (SF Active Set = (For each pilot in the current Active Set: (PILOT\_PN, PWR\_COMB\_IND) ) )

- Serving Frequency Code Channel List  
(SF\_CODE\_CHAN\_LIST<sub>S</sub> = CODE\_CHAN\_LIST<sub>S</sub>)

If NNSCR\_INCLUDED field is included and set to '1' and SCR\_INCLUDED field is either not included or included but set to '0', the mobile station shall process the received Non-negotiable Service Configuration Record as specified in 2.6.4.1.13 at the action time of this message. If SYNC\_ID\_INCL<sub>R</sub> is set to '1', the mobile station shall perform the following:

- The mobile station shall store (if included) the synchronization identifier received from the base station corresponding to this service configuration (SYNC\_ID<sub>S</sub> = SYNC\_ID<sub>R</sub>).
- The mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.

Otherwise, the mobile station shall set SYNC\_ID<sub>S</sub> to NULL.

If SYNC\_ID\_INCL<sub>R</sub> is set to '1', NNSCR\_INCLUDED field is not included or is included and set to '0', and SCR\_INCLUDED is not included or is included and set to '0', the mobile station shall perform the following:

- The mobile station shall store the synchronization identifier received from the base station (SYNC\_ID<sub>S</sub> = SYNC\_ID<sub>R</sub>).
- If the currently used service configuration has a corresponding SYNC\_ID, the mobile station shall perform one of the following:
  - + If the current SID (if SID<sub>R</sub> is included in the message then the current SID is SID<sub>R</sub>; otherwise, the current SID is SID<sub>S</sub>) or current NID (if NID<sub>R</sub> is included in the message then the current NID is NID<sub>R</sub>; otherwise, the current NID is NID<sub>S</sub>) is not equal to the stored SID or NID corresponding to the currently used service configuration, the mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.
  - + Otherwise, the mobile station shall update the stored SYNC\_ID value corresponding to the currently used service configuration with SYNC\_ID<sub>R</sub>.
- If the currently used service configuration does not have a corresponding SYNC\_ID, the mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.

When the message takes effect, the mobile station shall perform the following actions:

- The mobile station shall send a *Handoff Completion Message* or an *Extended Handoff Completion Message* as specified in 2.6.6.2.5.2.

- 1 • Update the Active Set, Candidate Set, and Neighbor Set in accordance with the  
2 *Universal Handoff Direction Message* processing (see 2.6.6.2.6.1, 2.6.6.2.6.2,  
3 and 2.6.6.2.6.3).
- 4 • Discontinue use of all Forward Traffic Channels associated with pilots not in the  
5 updated Active Set.
- 6 • The mobile station shall perform the following to determine the long code mask  
7 to use after the handoff:
  - 8 – If the PRIVATE\_LCM field is not included and PLCM\_TYPE\_INCL<sub>R</sub> equals '0',  
9 the mobile station shall continue to use the long code mask currently in  
10 use.
  - 11 – If the PRIVATE\_LCM field is not included and PLCM\_TYPE\_INCL<sub>R</sub> equals '1',  
12 the mobile station shall perform the following:
    - 13 + The mobile station shall set PLCM\_TYPE<sub>S</sub> to PLCM\_TYPE<sub>R</sub>; if  
14 PLCM\_TYPE<sub>R</sub> equals '0001', the mobile station shall set PLCM\_39<sub>S</sub> to  
15 PLCM\_39<sub>R</sub>.
    - 16 + The mobile station shall use the public long code mask derived from  
17 PLCM\_TYPE<sub>S</sub> as specified in 2.3.6.
  - 18 – If PRIVATE\_LCM<sub>R</sub> equals '1' and PLCM\_TYPE\_INCL<sub>R</sub> equals '0', the mobile  
19 station shall perform the following:
    - 20 + The mobile station shall use the private long code mask.
  - 21 – If PRIVATE\_LCM<sub>R</sub> equals '1' and PLCM\_TYPE\_INCL<sub>R</sub> equals '1', the mobile  
22 station shall perform the following:
    - 23 + The mobile station shall use the private long code mask.
    - 24 + The mobile station shall set PLCM\_TYPE<sub>S</sub> to PLCM\_TYPE<sub>R</sub>; if  
25 PLCM\_TYPE<sub>R</sub> equals '0001', the mobile station shall set PLCM\_39<sub>S</sub> to  
26 PLCM\_39<sub>R</sub>.
  - 27 – If PRIVATE\_LCM<sub>R</sub> equals '0' and PLCM\_TYPE\_INCL<sub>R</sub> equals '0', the mobile  
28 station shall perform the following:
    - 29 + The mobile station shall use the public long code mask derived from  
30 PLCM\_TYPE<sub>S</sub> as specified in 2.3.6.
  - 31 – If PRIVATE\_LCM<sub>R</sub> equals '0' and PLCM\_TYPE\_INCL<sub>R</sub> equals '1', the mobile  
32 station shall perform the following:
    - 33 + The mobile station shall set PLCM\_TYPE<sub>S</sub> to PLCM\_TYPE<sub>R</sub>; if  
34 PLCM\_TYPE<sub>R</sub> equals '0001', the mobile station shall set PLCM\_39<sub>S</sub> to  
35 PLCM\_39<sub>R</sub>.
    - 36 + The mobile station shall use the public long code mask derived from  
37 PLCM\_TYPE<sub>S</sub> as specified in 2.3.6.
  - 38 – The mobile station shall indicate to the user the voice privacy mode status.

- 1       • If PARMS\_INCL is equal to '1', perform the following actions:
  - 2           – Set protocol revision level ( $P\_REV_S = P\_REV_R$ ), and protocol revision level
  - 3           currently in use ( $P\_REV\_IN\_USE_S = \min(P\_REV_S, MOB\_P\_REV_P$  of the
  - 4           current band class)).
  - 5           – If SERV\_NEG\_TYPE<sub>R</sub> is equal to '1', set SERV\_NEG<sub>S</sub> to enabled; otherwise
  - 6           set SERV\_NEG<sub>S</sub> to disabled.
- 7       • If EXTRA\_PARMS is equal to '1', perform the following actions:
  - 8           – If FRAME\_OFFSET<sub>R</sub> is not equal to FRAME\_OFFSET<sub>S</sub>, change the frame
  - 9           offset on all of the code channels of the Forward Traffic Channel and of the
  - 10          Reverse Traffic Channel.
  - 11          – If RESET\_L2<sub>R</sub> is equal to '1', and RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to
  - 12          '0', Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset
  - 13          the acknowledgment procedures, as specified in [4]. The mobile station
  - 14          shall reset the acknowledgment procedures immediately after the action
  - 15          time of the *Universal Handoff Direction Message*.
  - 16          – If RESET\_FPC<sub>R</sub> is equal to '1' and RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to
  - 17          '0', initialize the Forward Traffic Channel power control counters, as
  - 18          specified in 2.6.4.1.1.1.
  - 19          – Process the ENCRYPT\_MODE field, as specified in 2.3.12.2.
  - 20          – Perform the procedures as specified in 2.6.11.3.
- 21       • If EXTRA\_PARMS is equal to '0', set the following variables to the values
- 22       indicated:
  - 23           – Hard handoff traffic channel preamble count required before
  - 24           transmitting a *Handoff Completion Message* or an *Extended Handoff*
  - 25           *Completion Message* (NUM\_PREAMBLE<sub>S</sub> = '000')
  - 26           – Complete search flag (COMPLETE\_SEARCH<sub>S</sub> = '1')
  - 27           – CDMA band class for the Target Frequency
  - 28           (TF\_CDMABAND<sub>S</sub> = SF\_CDMABAND<sub>S</sub>)
  - 29           – Frequency assignment for the Target Frequency
  - 30           (TF\_CDMACH<sub>S</sub> = SF\_CDMACH<sub>S</sub>)
- 31       • Store the following parameters from the *Universal Handoff Direction*
- 32       *Message*:
  - 33           – *Universal Handoff Direction Message* sequence number
  - 34           (HDM\_SEQ<sub>S</sub> = HDM\_SEQ<sub>R</sub>)
  - 35           – Forward power control subchannel relative gain (FPC\_SUBCHAN\_GAIN<sub>S</sub>
  - 36           = FPC\_SUBCHAN\_GAIN<sub>R</sub>).
  - 37           – If the mobile station uses FPC\_SUBCHAN\_GAIN<sub>S</sub>, the mobile station
  - 38           shall perform the following:

- 1           + If PC\_ACTION\_TIME<sub>r</sub> is received, the mobile station shall apply its
- 2           usage of the FPC\_SUBCHAN\_GAIN<sub>s</sub> at the time specified by
- 3           PC\_ACTION\_TIME<sub>r</sub>.
- 4           + If PC\_ACTION\_TIME is not received and the explicit action time is
- 5           received, the mobile station shall apply its usage of the
- 6           FPC\_SUBCHAN\_GAIN<sub>s</sub> at the action time.
- 7           + If neither PC\_ACTION\_TIME<sub>r</sub> nor explicit action time is received, the
- 8           mobile station shall apply its usage of the FPC\_SUBCHAN\_GAIN<sub>s</sub> at
- 9           the first 80ms boundary occurring at least 80ms after the end of the
- 10          frame containing the last bit of the *Universal Handoff Direction*
- 11          Message sent to the mobile station.
- 12          – Reverse Eighth Gating Mode (REV\_FCH\_GATING\_MODE<sub>s</sub> =
- 13          REV\_FCH\_GATING\_MODE<sub>r</sub>).
- 14          – Reverse Power Control Delay if REV\_PWR\_CNTL\_DELAY\_INCL<sub>r</sub> is equal
- 15          to '1' (REV\_PWR\_CNTL\_DELAY<sub>s</sub> = REV\_PWR\_CNTL\_DELAY<sub>r</sub>).
- 16          – Concurrent services supported indicator (CS\_SUPPORTED<sub>s</sub> =
- 17          CS\_SUPPORTED<sub>r</sub>).
- 18          – Maximum number of additional service reference identifiers allowed in
- 19          origination (MAX\_ADD\_SERV\_INSTANCE<sub>s</sub> =
- 20          MAX\_ADD\_SERV\_INSTANCE<sub>r</sub>), if included; otherwise, the mobile station
- 21          shall set MAX\_ADD\_SERV\_INSTANCE<sub>s</sub> to 0.
- 22          – Control Hold Mode supported indicator (CHM\_SUPPORTED<sub>s</sub> =
- 23          CHM\_SUPPORTED<sub>r</sub>) if included; otherwise, the mobile station shall
- 24          perform the following:
- 25           + If P\_REV\_IN\_USE<sub>s</sub> is less than 6, set CHM\_SUPPORTED<sub>s</sub> to '0'.
- 26           + Otherwise, set CHM\_SUPPORTED<sub>s</sub> to '1'
- 27          – CDMA off time report supported indicator
- 28          (CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>s</sub> = CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>r</sub>)
- 29          .
- 30          – If CDMA\_OFF\_TIME\_REP\_SUP\_IND<sub>r</sub> is equal to '1', the mobile station
- 31          shall store CDMA off time report threshold
- 32          (CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>s</sub> =
- 33          CDMA\_OFF\_TIME\_REP\_THRESHOLD<sub>r</sub> in units specified by
- 34          CDMA\_OFF\_TIME\_REP\_UNIT<sub>r</sub>).
- 35          – Forward Packet Data Channel supported indicator
- 36          (FOR\_PDCH\_SUPPORTED<sub>s</sub> = FOR\_PDCH\_SUPPORTED<sub>r</sub>).
- 37          – PDCH Control Hold Mode supported indicator
- 38          (PDCH\_CHM\_SUPPORTED<sub>s</sub> = PDCH\_CHM\_SUPPORTED<sub>r</sub>) if included;
- 39          otherwise, set PDCH\_CHM\_SUPPORTED<sub>s</sub> to '0'.

- 1                   - Reverse Packet Data Channel supported indicator  
2                    (REV\_PDCH\_SUPPORTED<sub>S</sub> = REV\_PDCH\_SUPPORTED<sub>T</sub>) if included;  
3                    otherwise, set REV\_PDCH\_SUPPORTED<sub>S</sub> to '0'.
- 4                   - Short Data Burst supported indicator (SDB\_SUPPORTED<sub>S</sub> =  
5                    SDB\_SUPPORTED<sub>T</sub>).
- 6                   - Pilot information request supported indicator  
7                    (PILOT\_INFO\_REQ\_SUPPORTED<sub>S</sub> = PILOT\_INFO\_REQ\_SUPPORTED<sub>T</sub>).
- 8                   - Release to Idle State allowed indicator (RELEASE\_TO\_IDLE\_IND<sub>S</sub> =  
9                    RELEASE\_TO\_IDLE\_IND<sub>T</sub>).
- 10                  - If SEARCH\_INCLUDED is equal to '1', store the following:
  - 11                   + Search window size for the Active Set and Candidate Set  
12                    (SRCH\_WIN\_A<sub>S</sub> = SRCH\_WIN\_A<sub>T</sub>)
  - 13                   + Pilot detection threshold (T\_ADD<sub>S</sub> = T\_ADD<sub>T</sub>)
  - 14                   + Pilot drop threshold (T\_DROP<sub>S</sub> = T\_DROP<sub>T</sub>)
  - 15                   + Active Set versus Candidate Set comparison threshold  
16                    (T\_COMP<sub>S</sub> = T\_COMP<sub>T</sub>)
  - 17                   + Drop timer value (T\_TDROPS<sub>S</sub> = T\_TDROPT<sub>T</sub>)
  - 18                   + Drop timer range value (T\_TDROPS\_RANGE<sub>S</sub> = T\_TDROPS\_RANGE<sub>T</sub>) if  
19                    T\_TDROPS\_RANGE\_INCL<sub>T</sub> is equal to '1'; otherwise,  
20                    (T\_TDROPS\_RANGE<sub>S</sub> = '0000')
  - 21                   + Soft slope for the dynamic add and drop thresholds  
22                    (SOFT\_SLOPE<sub>S</sub> = SOFT\_SLOPE<sub>T</sub>)
  - 23                   + Intercept for the dynamic add threshold  
24                    (ADD\_INTERCEPT<sub>S</sub> = ADD\_INTERCEPT<sub>T</sub>)
  - 25                   + Intercept for the dynamic drop threshold  
26                    (DROP\_INTERCEPT<sub>S</sub> = DROP\_INTERCEPT<sub>T</sub>)
- 27                  - If EXTRA\_PARMS is equal to '1', store the following:
  - 28                   + If the mobile station supports packet data service options, the packet  
29                    data services zone identifier (PACKET\_ZONE\_ID<sub>S</sub> =  
30                    PACKET\_ZONE\_ID<sub>T</sub>).
  - 31                   + If the mobile station supports packet data service options and the  
32                    PZ\_HYST\_ENABLED field is included, the mobile station shall store  
33                    the packet zone hysteresis enabled indicator (PZ\_HYST\_ENABLED<sub>S</sub> =  
34                    PZ\_HYST\_ENABLED<sub>T</sub>); otherwise, the mobile station shall set  
35                    PZ\_HYST\_ENABLED<sub>S</sub> to '1'.
  - 36                   + If the PZ\_HYST\_LIST\_LEN field is included, the mobile station shall  
37                    store the packet zone hysteresis list length (PZ\_HYST\_LIST\_LEN<sub>S</sub> =  
38                    PZ\_HYST\_LIST\_LEN<sub>T</sub>); otherwise, the mobile station shall set  
39                    PZ\_HYST\_LIST\_LEN<sub>S</sub> to 4.

- 1                   + If the PZ\_HYST\_ACT\_TIMER field is included, the mobile station
- 2                   shall store the packet zone hysteresis activation timer
- 3                   (PZ\_HYST\_ACT\_TIMER<sub>S</sub> = PZ\_HYST\_ACT\_TIMER<sub>R</sub>); otherwise, the
- 4                   mobile station shall set PZ\_HYST\_ACT\_TIMER<sub>S</sub> to 30 seconds.
  
- 5                   + If the PZ\_HYST\_TIMER\_MUL field and the PZ\_HYST\_TIMER\_EXP field
- 6                   are included, the mobile station shall store the packet zone
- 7                   hysteresis timer (PZ\_HYST\_TIMER<sub>S</sub> = PZ\_HYST\_TIMER\_MUL<sub>R</sub> × 8 ^
- 8                   PZ\_HYST\_TIMER\_EXP<sub>R</sub>); otherwise, the mobile station shall set
- 9                   PZ\_HYST\_TIMER<sub>S</sub> to 60 seconds.
  
- 10                  + Frame offset (FRAME\_OFFSET<sub>S</sub> = FRAME\_OFFSET<sub>R</sub>)
  
- 11                  + Acknowledgment procedures reset indicator
- 12                  (If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '1', set TF\_RESET\_L2<sub>S</sub> to
- 13                  RESET\_L2<sub>R</sub>)
  
- 14                  + Indicator to initialize the Forward Traffic Channel power control
- 15                  counters (If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '1', set
- 16                  TF\_RESET\_FPC<sub>S</sub> to RESET\_FPC<sub>R</sub>)
  
- 17                  + Nominal power setting of the target cell (NOM\_PWR<sub>S</sub> = NOM\_PWR<sub>R</sub>)
  
- 18                  + Extended nominal power setting of the target cell (If CDMABAND<sub>S</sub> =
- 19                  '00000' or CDMABAND<sub>S</sub> = '00011', then NOM\_PWR\_EXT<sub>S</sub> = '0';
- 20                  otherwise, NOM\_PWR\_EXT<sub>S</sub> = NOM\_PWR\_EXT<sub>R</sub>)
  
- 21                  + Hard handoff traffic channel preamble count required before
- 22                  transmitting a *Handoff Completion Message* or an *Extended Handoff*
- 23                  *Completion Message* (NUM\_PREAMBLE<sub>S</sub> = NUM\_PREAMBLE<sub>R</sub>)
  
- 24                  + CDMA band class for the Target Frequency
- 25                  (TF\_CDMABAND<sub>S</sub> = BAND\_CLASS<sub>R</sub> and CDMABAND<sub>S</sub> =
- 26                  BAND\_CLASS<sub>R</sub>)
  
- 27                  + Frequency assignment for the Target Frequency
- 28                  (TF\_CDMACH<sub>S</sub> = CDMA\_FREQ<sub>R</sub> and CDMACH<sub>S</sub> = CDMA\_FREQ<sub>R</sub>)
  
- 29                  + Complete search flag (COMPLETE\_SEARCH<sub>S</sub> =
- 30                  COMPLETE\_SEARCH<sub>R</sub>)
  
- 31                  + Periodic search flag (PERIODIC\_SEARCH<sub>S</sub> = PERIODIC\_SEARCH<sub>R</sub>)
  
- 32                  + Nominal code channel output power offset relative to the Reverse
- 33                  Pilot Channel power (RLGAIN\_TRAFFIC\_PILOT<sub>S</sub> =
- 34                  RLGAIN\_TRAFFIC\_PILOT<sub>R</sub>)
  
- 35                  - If EXTRA\_PARMS is equal to '1' and DEFAULT\_RLAG is equal to '1', the
- 36                  mobile station shall set each entry of the Reverse Link Attribute
- 37                  Adjustment Gain Table and Reverse Channel Adjustment Gain Table
- 38                  (see [2]) to 0.



- 1                   – If USE\_PWR\_CNTL\_STEP is equal to '1' and PWR\_CNTL\_STEP<sub>r</sub>
- 2                   corresponds to a power control step size supported by the mobile station
- 3                   (see [2]), then the mobile station shall set PWR\_CNTL\_STEP<sub>s</sub> to
- 4                   PWR\_CNTL\_STEP<sub>r</sub>.
- 5                   – If CLEAR\_RETRY\_DELAY<sub>r</sub> is equal to '1', the mobile station shall cancel
- 6                   any previously indicated retry delay and shall set
- 7                   RETRY\_DELAY<sub>s</sub>[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to '001',
- 8                   '010', '011', '100', or '101'; otherwise, the mobile station shall continue to
- 9                   honor any previously active retry delay stored in RETRY\_DELAY<sub>s</sub>.
- 10                  – If 3XFL\_1XRL\_INCL<sub>r</sub> is equal to '1', the mobile station shall set
- 11                  1XRL\_FREQ\_OFFSET<sub>s</sub> to 1XRL\_FREQ\_OFFSET<sub>r</sub>.
- 12                  – If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_FOR\_ASSIGN<sub>r</sub> is not equal to '00',
- 13                  the mobile station shall store the following information for each
- 14                  occurrence of the record and process the Forward Supplemental Burst
- 15                  as specified in 2.6.6.2.5.1.1:
- 16                  + FOR\_SCH\_START\_TIME\_INCL<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] =
- 17                  FOR\_SCH\_START\_TIME\_INCL<sub>r</sub>
- 18                  + If FOR\_SCH\_START\_TIME\_INCL<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is equal to '1', set
- 19                  FOR\_SCH\_START\_TIME<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = FOR\_SCH\_START\_TIME<sub>r</sub>
- 20                  + FOR\_SCH\_DURATION<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = FOR\_SCH\_DURATION<sub>r</sub>
- 21                  + SCCL\_INDEX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = SCCL\_INDEX<sub>r</sub>
- 22                  + If SCH\_BCMC\_IND field is included the mobile station shall perform
- 23                  the following:
- 24                  o If SCH\_BCMC\_IND<sub>r</sub> equals '1' and USE\_ADD\_PLCM\_FOR\_SCH<sub>r</sub>
- 25                  equals '1', set corresponding SCH\_BCMC\_IND[FOR\_SCH\_ID<sub>r</sub>] to
- 26                  '1'; otherwise, set SCH\_BCMC\_IND[FOR\_SCH\_ID<sub>r</sub>] = '0'
- 27                  + If SCH\_BCMC\_IND<sub>r</sub> is included and equals '1' and
- 28                  ADD\_PLCM\_FOR\_SCH\_INCL<sub>r</sub> is included and is set to '1', the mobile
- 29                  station shall store following fields:
- 30                  o Set ADD\_PLCM\_FOR\_SCH\_TYPE<sub>s</sub> to
- 31                  ADD\_PLCM\_FOR\_SCH\_TYPE<sub>r</sub>.
- 32                  o Set ADD\_PLCM\_FOR\_SCH\_35<sub>s</sub> to ADD\_PLCM\_FOR\_SCH\_35<sub>r</sub> if
- 33                  ADD\_PLCM\_FOR\_SCH\_TYPE<sub>r</sub> is equal to '1'.
- 34                  + If SCH\_BCMC\_IND<sub>r</sub> is included and equals '1', the mobile station
- 35                  shall store following fields:
- 36                  o USE\_ADD\_PLCM\_FOR\_SCH<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] =
- 37                  USE\_ADD\_PLCM\_FOR\_SCH<sub>r</sub>
- 38                  o FSCH\_OUTERCODE\_INCL<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] =
- 39                  FSCH\_OUTERCODE\_INCL<sub>r</sub>

- 1                   o If FSCH\_OUTERCODE\_INCL<sub>r</sub> equals '1', the mobile station shall
- 2                   store following fields:
- 3                    ◊ FSCH\_OUTERCODE\_RATE<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] =
- 4                    FSCH\_OUTERCODE\_RATE<sub>r</sub>
- 5                    ◊ FSCH\_OUTERCODE\_OFFSET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] =
- 6                    FSCH\_OUTERCODE\_OFFSET<sub>r</sub>
- 7                - If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_REV\_ASSIGN<sub>r</sub> is not equal to '00',
- 8                the mobile station shall store the following information for each
- 9                occurrence of the record and process the Reverse Supplemental Burst as
- 10               specified in 2.6.6.2.5.1.2:
- 11                + REV\_SCH\_START\_TIME\_INCL<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] =
- 12                REV\_SCH\_START\_TIME\_INCL<sub>r</sub>
- 13                + If REV\_SCH\_START\_TIME\_INCL<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] is equal to '1', set
- 14                REV\_SCH\_START\_TIME<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_START\_TIME<sub>r</sub>
- 15                + REV\_SCH\_DURATION<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_DURATION<sub>r</sub>
- 16                + REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] =
- 17                REV\_SCH\_NUM\_BITS\_IDX<sub>r</sub>
- 18                - The mobile station shall set BCMC\_ON\_TRAFFIC\_SUP<sub>s</sub> to
- 19                BCMC\_ON\_TRAFFIC\_SUP<sub>r</sub>. If BCMC\_ON\_TRAFFIC\_SUP<sub>r</sub> is set to '1', the
- 20                mobile station shall store AUTO\_REQ\_TRAF\_ALLOWED\_IND<sub>s</sub> =
- 21                AUTO\_REQ\_TRAF\_ALLOWED\_IND<sub>r</sub>
- 22                - If SID\_INCL<sub>r</sub> is equal to '1', the mobile station shall store the following:
- 23                + System identification (SID<sub>s</sub> = SID<sub>r</sub>)
- 24                - If NID\_INCL<sub>r</sub> is equal to '1', the mobile station shall store the following:
- 25                + Network identification (NID<sub>s</sub> = NID<sub>r</sub>)
- 26                - If ENC\_SUPPORTED<sub>r</sub> is equal to '1', the mobile station shall store:
- 27                + Signaling encryption supported indicator (SIG\_ENCRYPT\_SUP<sub>s</sub> =
- 28                SIG\_ENCRYPT\_SUP<sub>r</sub>)
- 29                + User information encryption supported indicator (UI\_ENCRYPT\_SUP<sub>s</sub>
- 30                = UI\_ENCRYPT\_SUP<sub>r</sub>)
- 31                - Sync ID supported indicator (USE\_SYNC\_ID<sub>s</sub> = USE\_SYNC\_ID<sub>r</sub>) if
- 32                included.
- 33                - Channel configuration request allowed indicator (USE\_CH\_CFG\_RRM<sub>s</sub> =
- 34                USE\_CH\_CFG\_RRM<sub>r</sub>) if included; otherwise, set USE\_CH\_CFG\_RRM<sub>s</sub> to
- 35                '0'.
- 36                - If TX\_PWR\_LIMIT\_DEFAULT<sub>r</sub> is included and set to '0', the mobile
- 37                station shall perform the following:

- 1                   + If the mobile station is being assigned to operate in the 1915MHz –
- 2                   1920MHz block of the PCS band, the mobile station shall store the
- 3                   transmit power limit  $TX\_PWR\_LIMIT_S = (TX\_PWR\_LIMIT_R - 30dB)$ ;
- 4                   + Otherwise, the mobile station shall set  $TX\_PWR\_LIMIT_S$  to the limit
- 5                   defined in [11] for the target base station.
- 6                   – If  $TX\_PWR\_LIMIT\_DEFAULT_R$  is included and set to '1', the mobile
- 7                   station shall store  $TX\_PWR\_LIMIT_S$  to the limit defined in [11] for the
- 8                   target base station.
- 9                   – Permission for the mobile station to request QoS settings in the
- 10                  *Origination Message, Origination Continuation Message, or Enhanced*
- 11                  *Origination Message* ( $MOB\_QOS_S = MOB\_QOS_R$ ) if included.
- 12                  – The mobile station initiated position location determination supported
- 13                  indicator ( $MS\_INIT\_POS\_LOC\_SUP\_IND_S =$
- 14                   $MS\_INIT\_POS\_LOC\_SUP\_IND_R$ ).
- 15                  – If  $CH\_IND_R$  is equal to '101', the mobile station shall perform the
- 16                  following:
- 17                  + The mobile station shall set  $CH\_IND_S = '01'$ .
- 18                  + If  $SCH\_INCL_R$  is equal to '1' and  $NUM\_FOR\_SCH$  is not equal to
- 19                  '00000', for all the  $NUM\_FOR\_SCH$  occurrences, the mobile station
- 20                  shall perform the following:
- 21                  o The mobile station shall determine,
- 22                   $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , the number
- 23                  of information bits per Forward Supplemental Channel frame
- 24                  identified by  $FOR\_SCH\_ID$  and corresponding to the index
- 25                   $SCCL\_INDEX$  according to the following rules:
- 26                  ◇ If  $FSCH\_VAR\_TABLE\_ID_S[FOR\_SCH\_ID_R]$  is equal to '000',
- 27                  then:
- 28                  – If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '0' or if
- 29                   $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and
- 30                   $FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]$  is equal to '0000',
- 31                  then the mobile station shall set the number of
- 32                  information bits per frame,
- 33                   $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  and
- 34                  number of CRC bits per frame,
- 35                   $FSCH\_CRC\_LEN\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ ,
- 36                  according to Table 3.7.3.3.2.37-2 using
- 37                   $FOR\_SCH\_NUM\_BITS\_IDX_R$  as the index to the table.

- 1                   - If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and
- 2                     $FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]$  is not equal to
- 3                    '0000', then the mobile station shall set the number of
- 4                    CRC bits per frame,
- 5                     $FSCH\_CRC\_LEN\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ ,
- 6                    using Table 3.7.5.20-1 and
- 7                     $CRC\_LEN\_IDX_S[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]][FOR\_SCH\_NUM\_BITS\_IDX_R]$  as the index to the table.
- 8                    The mobile station shall also set the number of
- 9                    information bits per frame corresponding to
- 10                    $SCCL\_INDEX_R$ ,
- 11                     $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , to
- 12                     $NUM\_BITS_S[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]][FOR\_SCH\_NUM\_BITS\_IDX_R]$ .
- 13
- 14
- 15               ◇ If  $FSCH\_VAR\_TABLE\_IDS[FOR\_SCH\_ID_R]$  is not equal to '000',
- 16               then:
- 17               - The mobile station shall set
- 18                 $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$ , the set of
- 19                indices to the number of information bits per frame as
- 20                follows:
- 21                + If  $FOR\_SCH\_NUM\_BITS\_IDX_R$  is equal to '0000', then
- 22                 $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R] = \{$
- 23                 $FOR\_SCH\_NUM\_BITS\_IDX_R \}$ ,
- 24                + otherwise the mobile station shall set (initialize)
- 25                 $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R] =$
- 26                 $\{FOR\_SCH\_NUM\_BITS\_IDX_R\}$  and for  $i=1, \dots,$
- 27                 $FOR\_SCH\_NUM\_BITS\_IDX_R$  the mobile station shall
- 28                add  $FOR\_SCH\_NUM\_BITS\_IDX_R -$
- 29                 $VAR\_FSCH\_RATE\_OFFSET_S[FOR\_SCH\_ID_R][FOR\_SCH\_NUM\_BITS\_IDX_R][i]$  to the set specified by
- 30                 $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$
- 31
- 32
- 33               - If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '0' or if
- 34                 $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and
- 35                 $FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]$  is equal to '0000',
- 36                then the mobile station shall set
- 37                 $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , the
- 38                set of number of information bits per frame as follows.
- 39                The  $i^{th}$  member of the set
- 40                 $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  is
- 41                obtained using Table 3.7.3.3.2.37-2 and the  $i^{th}$  member of
- 42                the set  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$  as the
- 43                index to the table.

- If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>] is not equal to '0000', then
        - + the mobile station shall set N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the set of number of information bits per frame as follows.  
The  $i^{th}$  member of the set N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] is equal to NUM\_BITS<sub>s</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>]][N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i]], where N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i] denotes the  $i^{th}$  member of the set N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] and,
        - + the mobile station shall set FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the set of number CRC bits per frame as follows.  
The  $i^{th}$  member of the set FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] using Table 3.7.5.20-1 and CRC\_LEN\_IDX<sub>s</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>]][N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i]] as the index to the table, where N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i] denotes the  $i^{th}$  member of the set N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>].
    - + If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_REV\_SCH is not equal to '00000', for all the NUM\_REV\_SCH occurrences, the mobile station shall perform the following:
      - o Set REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to REV\_SCH\_NUM\_BITS\_IDX<sub>r</sub>.
      - o Set REV\_WALSH\_IDS[REV\_SCH\_ID<sub>r</sub>][REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>] to REV\_WALSH\_ID<sub>r</sub>.
    - + For each member of the Active Set included in the message, the mobile station shall perform the following:
      - o Set PILOT\_PN to PILOT\_PN<sub>r</sub>.
      - o If SRCH\_OFFSET\_INCL<sub>r</sub> equals '1', set the SRCH\_OFFSET field of PILOT\_REC to SRCH\_OFFSET<sub>r</sub>; otherwise, set the SRCH\_OFFSET field of PILOT\_REC to '000'.
      - o Set ADD\_PILOT\_REC\_INCL to ADD\_PILOT\_REC\_INCL<sub>r</sub>.

- 1                   o If ADD\_PILOT\_REC\_INCL<sub>r</sub> equals '1', the mobile station shall also
- 2                   perform the following:
- 3                   ◇ Set the PILOT\_REC\_TYPE field of PILOT\_REC to
- 4                   PILOT\_REC\_TYPE<sub>r</sub>.
- 5                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '000', the mobile station shall
- 6                   set the TD\_POWER\_LEVEL field of PILOT\_REC to
- 7                   TD\_POWER\_LEVEL<sub>r</sub> and set the TD\_MODE field of
- 8                   NGHBR\_PILOT\_REC to TD\_MODE<sub>r</sub>.
- 9                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station
- 10                  shall:
- 11                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 12                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 13                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 14                  specified by WALSH\_LENGTH<sub>r</sub>.
- 15                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station
- 16                  shall:
- 17                  – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 18                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 19                  AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 20                  WALSH\_LENGTH<sub>r</sub>.
- 21                  – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to
- 22                  AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 23                  – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 24                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station
- 25                  shall:
- 26                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 27                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 28                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 29                  SR3\_PILOT\_POWER1<sub>r</sub>.
- 30                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 31                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 32                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station
- 33                  shall:
- 34                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 35                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 36                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 37                  SR3\_PILOT\_POWER1<sub>r</sub>.

- 1                                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 2                                   SR3\_PILOT\_POWER2<sub>r</sub>.
- 3                                   – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 4                                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 5                                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 6                                   specified by WALSH\_LENGTH<sub>r</sub>.
- 7                                   – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the
- 8                                   AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF1<sub>r</sub> and set
- 9                                   the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 10                                  AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length
- 11                                  specified by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the
- 12                                  AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF<sub>r</sub> and set
- 13                                  the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 14                                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 15                                  specified by WALSH\_LENGTH<sub>r</sub>.
- 16                                  – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the
- 17                                  AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF2<sub>r</sub> and set
- 18                                  the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 19                                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length
- 20                                  specified by WALSH\_LENGTH2<sub>r</sub>; otherwise, set the
- 21                                  AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>r</sub> and set
- 22                                  the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 23                                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 24                                  specified by WALSH\_LENGTH<sub>r</sub>.
- 25                                  o Store PWR\_COMB\_IND, CODE\_CHAN\_FCH and
- 26                                  QOF\_MASK\_ID\_FCH.
- 27                                  o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is equal to '00000',
- 28                                  the mobile station shall delete the corresponding pilot from the
- 29                                  all entries of the corresponding Supplemental Channel.
- 30                                  o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is not equal to
- 31                                  '00000', for each Supplemental Channel included in this record,
- 32                                  the mobile station shall:
- 33                                   ◇ If PILOT\_INCL is equal to '0', then the mobile station shall
- 34                                   delete the corresponding pilot from the Active Set of
- 35                                   Supplemental Channel for the corresponding SCCL\_INDEX<sub>r</sub>.
- 36                                   ◇ If PILOT\_INCL is equal to '1', then for each Supplemental
- 37                                   Channel included in this record, the mobile station shall set
- 38                                   PILOT\_PN<sub>s</sub> [FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to PILOT\_PN<sub>r</sub>,
- 39                                   QOF\_ID<sub>s</sub> [FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to
- 40                                   QOF\_MASK\_ID\_SCH<sub>r</sub>, and
- 41                                   FOR\_SCH\_CC\_INDEX<sub>s</sub> [FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to
- 42                                   CODE\_CHAN\_SCH<sub>r</sub>.

- 1                   ◇ If PILOT\_INCL is equal to '1' and CCSH\_INCLUDED is set to
- 2                   '1', then for each Supplemental Channel included in this
- 3                   record, the mobile station shall set
- 4                   CCSH\_ENCODER\_TYPE<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 5                   CCSH\_ENCODER\_TYPE<sub>R</sub>.
- 6                   ◇ If PILOT\_INCL is equal to '1' and CCSH\_INCLUDED is set to
- 7                   '0', then for each Supplemental Channel included in this
- 8                   record, the mobile station shall set
- 9                   CCSH\_ENCODER\_TYPE<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 10                  '0' (default Turbo Encoder type).
- 11                  ◇ The mobile station shall delete all pilots that are not included
- 12                  in the list specified by the NUM\_PILOTS field from the Active
- 13                  Set of Supplemental Channel for the corresponding
- 14                  SCCL\_INDEX<sub>R</sub>.
- 15                  + If CCSH\_INCLUDED is equal to '1', the mobile station shall perform
- 16                  the following:
- 17                   o If CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub> is received, then the mobile
- 18                   station shall set CCSH\_ENCODER\_ACTION\_TIME<sub>S</sub> to
- 19                   CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub>, and the mobile station shall
- 20                   apply each CCSH\_ENCODER\_TYPE<sub>S</sub> at the time specified by
- 21                   CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub>.
- 22                   o If CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub> is not received, the mobile
- 23                   station shall apply each CCSH\_ENCODER\_TYPE<sub>S</sub> at the action
- 24                   time of the message.
- 25                  + If 3X\_FCH\_INFO\_INCL<sub>R</sub> equals '1', for each included member of the
- 26                  Active Set, the mobile station store the following:
- 27                   o If 3X\_FCH\_LOW\_INCL<sub>R</sub> equals '1', set the
- 28                   QOF\_MASK\_ID\_FCH\_LOW field to QOF\_MASK\_ID\_FCH\_LOW<sub>R</sub>
- 29                   and the CODE\_CHAN\_FCH\_LOW field to
- 30                   CODE\_CHAN\_FCH\_LOW<sub>R</sub>. Otherwise, set the
- 31                   QOF\_MASK\_ID\_FCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>R</sub> and the
- 32                   CODE\_CHAN\_FCH\_LOW to CODE\_CHAN\_FCH<sub>R</sub>.
- 33                   o If 3X\_FCH\_HIGH\_INCL<sub>R</sub> equals '1', set the
- 34                   QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH\_HIGH<sub>R</sub>
- 35                   and the CODE\_CHAN\_FCH\_HIGH field to
- 36                   CODE\_CHAN\_FCH\_HIGH<sub>R</sub>. Otherwise, set the
- 37                   QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH<sub>R</sub> and the
- 38                   CODE\_CHAN\_FCH\_HIGH to CODE\_CHAN\_FCH<sub>R</sub>.
- 39                   o If 3X\_SCH\_INFO\_INCL<sub>R</sub> equals '1', for each Supplemental
- 40                   Channel included, the mobile station store the following:



- 1                   ◇ If 3X\_SCH\_LOW\_INCL<sub>r</sub> equals '1', set the QOF\_ID\_SCH\_LOW<sub>s</sub>  
2                   [FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
3                   QOF\_MASK\_ID\_SCH\_LOW<sub>r</sub> and the  
4                   FOR\_SCH\_CC\_INDEX\_LOW[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
5                   field to CODE\_CHAN\_SCH\_LOW<sub>r</sub>. Otherwise, set  
6                   QOF\_ID\_SCH\_LOW<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
7                   QOF\_MASK\_ID\_SCH<sub>r</sub>, and  
8                   FOR\_SCH\_CC\_INDEX\_LOW<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
9                   to CODE\_CHAN\_SCH<sub>r</sub>.
- 10                  ◇ If 3X\_SCH\_HIGH\_INCL<sub>r</sub> equals '1', set the  
11                  QOF\_ID\_SCH\_HIGH<sub>s</sub> [FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
12                  QOF\_MASK\_ID\_SCH\_HIGH<sub>r</sub> and the  
13                  FOR\_SCH\_CC\_INDEX\_HIGH[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
14                  field to CODE\_CHAN\_SCH\_HIGH<sub>r</sub>. Otherwise, set  
15                  QOF\_ID\_SCH\_HIGH<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
16                  QOF\_MASK\_ID\_SCH<sub>r</sub>, and  
17                  FOR\_SCH\_CC\_INDEX\_HIGH<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
18                  ] to CODE\_CHAN\_SCH<sub>r</sub>.
- 19                  + The mobile station shall delete all pilots that are not listed in the  
20                  NUM\_PILOTS field from the Active Set.
- 21                  + The mobile station shall delete all pilots that are not listed in the  
22                  Active Set from the Active Set of the Supplemental Channel for the  
23                  Forward Supplemental Channel Assignment (if any). If these deleted  
24                  pilots include all pilots in the Active Set of the Supplemental  
25                  Channel, the mobile station shall cancel the Forward Supplemental  
26                  Channel Assignment.
- 27                  – If CH\_IND<sub>r</sub> is equal to '010' or '110', the mobile station shall perform the  
28                  following:  
29                  + The mobile station shall set CH\_IND<sub>s</sub> = '10'.
- 30                  + If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_FOR\_SCH is not equal to  
31                  '00000', for all the NUM\_FOR\_SCH occurrences, the mobile station  
32                  shall perform the following:
- 33                   o The mobile station shall determine,  
34                   N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the number  
35                   of information bits per Forward Supplemental Channel frame  
36                   identified by FOR\_SCH\_ID and corresponding to the index  
37                   SCCL\_INDEX according to the following rules:
- 38                   ◇ If FSCH\_VAR\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is equal to '000',  
39                   then:

- If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '0' or if  $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and  $FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]$  is equal to '0000', then the mobile station shall set the number of information bits per frame,  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  and number of CRC bits per frame,  $FSCH\_CRC\_LEN\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , according to Table 3.7.3.3.2.37-2 using  $FOR\_SCH\_NUM\_BITS\_IDX_R$  as the index to the table.
  - If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and  $FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]$  is not equal to '0000', then the mobile station shall set the number of CRC bits per frame,  $FSCH\_CRC\_LEN\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , using Table 3.7.5.20-1 and  $CRC\_LEN\_IDX_S[FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]][FOR\_SCH\_NUM\_BITS\_IDX_R]$  as the index to the table. The mobile station shall also set the number of information bits per frame corresponding to  $SCCL\_INDEX_R$ ,  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , to  $NUM\_BITS_S[FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]][FOR\_SCH\_NUM\_BITS\_IDX_R]$ .
- ◇ If  $FSCH\_VAR\_TABLE\_ID_S[FOR\_SCH\_ID_R]$  is not equal to '000', then:
- The mobile station shall set  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$ , the set of indices to the number of information bits per frame as follows:
    - + If  $FOR\_SCH\_NUM\_BITS\_IDX_R$  is equal to '0000', then  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R] = \{FOR\_SCH\_NUM\_BITS\_IDX_R\}$ ,
    - + otherwise the mobile station shall set (initialize)  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R] = \{FOR\_SCH\_NUM\_BITS\_IDX_R\}$  and for  $i=1, \dots, FOR\_SCH\_NUM\_BITS\_IDX_R$  the mobile station shall add  $FOR\_SCH\_NUM\_BITS\_IDX_R - VAR\_FSCH\_RATE\_OFFSET_S[FOR\_SCH\_ID_R][FOR\_SCH\_NUM\_BITS\_IDX_R][i]$  to the set specified by  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$

- If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '0' or if  $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and  $FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]$  is equal to '0000', then the mobile station shall set  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , the set of number of information bits per frame as follows. The  $i^{th}$  member of the set  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  is obtained using Table 3.7.3.3.2.37-2 and the  $i^{th}$  member of the set  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$  as the index to the table.
- If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and  $FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]$  is not equal to '0000', then
  - + the mobile station shall set  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , the set of number of information bits per frame as follows. The  $i^{th}$  member of the set  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  is equal to  $NUM\_BITS_S[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]][N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R][i]]$ , where  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R][i]$  denotes the  $i^{th}$  member of the set  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$  and,
  - + the mobile station shall set  $FSCH\_CRC\_LEN\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , the set of number CRC bits per frame as follows. The  $i^{th}$  member of the set  $FSCH\_CRC\_LEN\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  using Table 3.7.5.20-1 and  $CRC\_LEN\_IDX_S[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID_R]][N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R][i]]$  as the index to the table, where  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R][i]$  denotes the  $i^{th}$  member of the set  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$ .
- + If  $SCH\_INCL_R$  is equal to '1' and  $NUM\_REV\_SCH$  is not equal to '00000', for all the  $NUM\_REV\_SCH$  occurrences, the mobile station shall perform the following:
  - o Set  $REV\_SCH\_NUM\_BITS\_IDX_S[REV\_SCH\_ID_R]$  to  $REV\_SCH\_NUM\_BITS\_IDX_R$ .

- 1                   o Set REV\_WALSH\_ID<sub>S</sub>
- 2                   [REV\_SCH\_ID<sub>r</sub>][REV\_SCH\_NUM\_BITS\_IDX<sub>S</sub>] to REV\_WALSH\_ID<sub>r</sub>.
- 3           + For each member of the Active Set included in the message, the
- 4           mobile station shall perform the followings:
- 5                   o Set PILOT\_PN to PILOT\_PN<sub>r</sub>.
- 6                   o If SRCH\_OFFSET\_INCL<sub>r</sub> equals '1', set the SRCH\_OFFSET field of
- 7                   PILOT\_REC to SRCH\_OFFSET<sub>r</sub>; otherwise, set the
- 8                   SRCH\_OFFSET field of PILOT\_REC to '000'.
- 9                   o Set ADD\_PILOT\_REC\_INCL to ADD\_PILOT\_REC\_INCL<sub>r</sub>.
- 10                  o If ADD\_PILOT\_REC\_INCL<sub>r</sub> equals '1', the mobile station shall also
- 11                  perform the following:
- 12                   ◇ Set the PILOT\_REC\_TYPE field of PILOT\_REC to
- 13                   PILOT\_REC\_TYPE<sub>r</sub>.
- 14                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '000', the mobile station shall
- 15                   set the TD\_POWER\_LEVEL field of PILOT\_REC to
- 16                   TD\_POWER\_LEVEL<sub>r</sub> and set the TD\_MODE field of
- 17                   PILOT\_REC to TD\_MODE<sub>r</sub>.
- 18                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station
- 19                   shall:
- 20                   – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 21                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 22                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 23                   specified by WALSH\_LENGTH<sub>r</sub>.
- 24                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station
- 25                   shall:
- 26                   – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 27                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 28                   AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 29                   WALSH\_LENGTH<sub>r</sub>.
- 30                   – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to
- 31                   AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 32                   – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 33                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station
- 34                   shall:
- 35                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 36                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 37                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 38                   SR3\_PILOT\_POWER1<sub>r</sub>.

- 1                                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 2                                   SR3\_PILOT\_POWER2<sub>r</sub>.
- 3                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station
- 4                   shall:
- 5                                   – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 6                                   SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 7                                   – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 8                                   SR3\_PILOT\_POWER1<sub>r</sub>.
- 9                                   – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 10                                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 11                                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 12                                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 13                                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 14                                  specified by WALSH\_LENGTH<sub>r</sub>.
- 15                                  – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the
- 16                                  AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF1<sub>r</sub> and set
- 17                                  the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 18                                  AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length
- 19                                  specified by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the
- 20                                  AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF<sub>r</sub> and set
- 21                                  the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to
- 22                                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 23                                  specified by WALSH\_LENGTH<sub>r</sub>.
- 24                                  – If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the
- 25                                  AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF2<sub>r</sub> and set
- 26                                  the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 27                                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length
- 28                                  specified by WALSH\_LENGTH2<sub>r</sub>; otherwise, set the
- 29                                  AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>r</sub> and set
- 30                                  the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to
- 31                                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length
- 32                                  specified by WALSH\_LENGTH<sub>r</sub>.
- 33                   o Store PWR\_COMB\_IND, CODE\_CHAN\_DCCH and
- 34                   QOF\_MASK\_ID\_DCCH.
- 35                   o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is equal to '00000',
- 36                   the mobile station shall delete the corresponding pilot from all
- 37                   entries of the corresponding Supplemental Channel.
- 38                   o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is not equal to
- 39                   '00000', the mobile station shall:

- 1                   ◇ If PILOT\_INCL is equal to '0', then the mobile station shall  
2 delete the corresponding pilot from the Active Set of  
3 Supplemental Channel for the corresponding SCCL\_INDEX<sub>R</sub>.
- 4                   ◇ If PILOT\_INCL is equal to '1', then for each Supplemental  
5 Channel included in this record, the mobile station shall set  
6 PILOT\_PN<sub>S</sub> [FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>S</sub>][i] to PILOT\_PN<sub>R</sub>,  
7 QOF\_ID<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>S</sub>][i] to  
8 QOF\_MASK\_ID\_SCH<sub>R</sub>, and FOR\_SCH\_CC\_INDEX<sub>S</sub>  
9 [FOR\_SCH\_ID<sub>S</sub>][SCCL\_INDEX<sub>S</sub>][i] to CODE\_CHAN\_SCH<sub>R</sub>.
- 10                  ◇ If PILOT\_INCL is equal to '1' and CCSH\_INCLUDED is set to  
11 '1', then for each Supplemental Channel included in this  
12 record, the mobile station shall set  
13 CCSH\_ENCODER\_TYPE<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to  
14 CCSH\_ENCODER\_TYPE<sub>R</sub>.
- 15                  ◇ If PILOT\_INCL is equal to '1' and CCSH\_INCLUDED is set to  
16 '0', then for each Supplemental Channel included in this  
17 record, the mobile station shall set  
18 CCSH\_ENCODER\_TYPE<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to  
19 '0' (default Turbo Encoder type).
- 20                  ◇ The mobile station shall delete all pilots that are not included  
21 in the list specified by the NUM\_PILOTS field from the Active  
22 Set of Supplemental Channel for the corresponding  
23 SCCL\_INDEX<sub>R</sub>.
- 24                  + If CCSH\_INCLUDED is equal to '1', the mobile station shall perform  
25 the following:
- 26                   o If CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub> is received, then the mobile  
27 station shall set CCSH\_ENCODER\_ACTION\_TIME<sub>S</sub> to  
28 CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub>, and the mobile station shall  
29 apply each CCSH\_ENCODER\_TYPE<sub>S</sub> at the time specified by  
30 CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub>.
- 31                   o If CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub> is not received, the mobile  
32 station shall apply each CCSH\_ENCODER\_TYPE<sub>S</sub> at the action  
33 time of the message.
- 34                  + If 3X\_DCCH\_INFO\_INCL<sub>R</sub> equals '1', for each included member of the  
35 Active Set, the mobile station store the following:
- 36                   o If 3X\_DCCH\_LOW\_INCL<sub>R</sub> equals '1', set the  
37 QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_DCCH\_LOW<sub>R</sub>  
38 and the CODE\_CHAN\_DCCH\_LOW field to  
39 CODE\_CHAN\_DCCH\_LOW<sub>R</sub>. Otherwise, set the  
40 QOF\_MASK\_ID\_DCCH\_LOW field to QOF\_MASK\_ID\_FCH<sub>R</sub> and  
41 the CODE\_CHAN\_DCCH\_LOW to CODE\_CHAN\_FCH<sub>R</sub>.

- 1                   o If  $3X\_DCCH\_HIGH\_INCL_R$  equals '1', set the
- 2                   QOF\_MASK\_ID\_DCCH\_HIGH field to
- 3                   QOF\_MASK\_ID\_DCCH\_HIGH<sub>R</sub> and the
- 4                   CODE\_CHAN\_DCCH\_HIGH field to CODE\_CHAN\_DCCH\_HIGH<sub>R</sub>.
- 5                   Otherwise, set the QOF\_MASK\_ID\_DCCH\_HIGH field to
- 6                   QOF\_MASK\_ID\_FCH<sub>R</sub> and the CODE\_CHAN\_DCCH\_HIGH to
- 7                   CODE\_CHAN\_FCH<sub>R</sub>.
- 8                   o If  $3X\_SCH\_INFO\_INCL_R$  equals '1', for each Supplemental
- 9                   Channel included, the mobile station store the following:
- 10                  ◇ If  $3X\_SCH\_LOW\_INCL_R$  equals '1', set
- 11                  QOF\_ID\_SCH\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 12                  QOF\_MASK\_ID\_SCH\_LOW<sub>R</sub> and
- 13                  FOR\_SCH\_CC\_INDEX\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i]
- 14                  field to CODE\_CHAN\_SCH\_LOW<sub>R</sub>. Otherwise, set
- 15                  QOF\_ID\_SCH\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 16                  QOF\_MASK\_ID\_SCH<sub>R</sub>, and
- 17                  FOR\_SCH\_CC\_INDEX\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i]
- 18                  to CODE\_CHAN\_SCH<sub>R</sub>.
- 19                  ◇ If  $3X\_SCH\_HIGH\_INCL_R$  equals '1', set
- 20                  QOF\_ID\_SCH\_HIGH[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 21                  QOF\_MASK\_ID\_SCH\_HIGH<sub>R</sub> and the
- 22                  FOR\_SCH\_CC\_INDEX\_HIGH[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i]
- 23                  field to CODE\_CHAN\_SCH\_HIGH<sub>R</sub>. Otherwise, set
- 24                  QOF\_ID\_SCH\_HIGH[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 25                  QOF\_MASK\_ID\_SCH<sub>R</sub>, and
- 26                  FOR\_SCH\_CC\_INDEX\_HIGH[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i]
- 27                  to CODE\_CHAN\_SCH<sub>R</sub>.
- 28                  + The mobile station shall set FUNDICATED\_BCMC\_IND<sub>S</sub> to
- 29                  FUNDICATED\_BCMC\_IND<sub>R</sub>.
- 30                  + If FUNDICATED\_BCMC\_IND<sub>R</sub> equals '1', for each included member of
- 31                  the Active Set, the mobile station shall store the following:
- 32                  o Set FOR\_CPCCH\_WALSH<sub>S</sub> to FOR\_CPCCH\_WALSH<sub>R</sub>.
- 33                  o Set FOR\_CPCSCH<sub>S</sub> to FOR\_CPCSCH<sub>R</sub>.
- 34                  + The mobile station shall delete all pilots that are not listed in the
- 35                  NUM\_PILOTS field from the Active Set.
- 36                  + The mobile station shall delete all pilots that are not listed in the
- 37                  Active Set from the Active Set of the Supplemental Channel for the
- 38                  Forward Supplemental Channel Assignment (if any). If these deleted
- 39                  pilots include all pilots in the Active Set of the Supplemental
- 40                  Channel, the mobile station shall cancel the Forward Supplemental
- 41                  Channel Assignment.

- 1           - If CH\_IND<sub>r</sub> is equal to '111', the mobile station shall perform the
- 2           following:
- 3           + The mobile station shall set CH\_IND<sub>s</sub> = '11'.
- 4           + If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_FOR\_SCH is not equal to
- 5           '00000', for all the NUM\_FOR\_SCH occurrences, the mobile station
- 6           shall perform the following:
- 7           o The mobile station shall determine,
- 8           N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the number
- 9           of information bits per Forward Supplemental Channel frame
- 10          identified by FOR\_SCH\_ID and corresponding to the index
- 11          SCCL\_INDEX according to the following rules:
- 12          ◇ If FSCH\_VAR\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is equal to '000',
- 13          then:
- 14           - If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '0' or if
- 15           USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and
- 16           FSCH\_NBIT\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is equal to '0000',
- 17           then the mobile station shall set the number of
- 18           information bits per frame,
- 19           N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] and
- 20           number of CRC bits per frame,
- 21           FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>],
- 22           according to Table 3.7.3.3.2.37-2 using
- 23           FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub> as the index to the table.
- 24           - If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and
- 25           FSCH\_NBIT\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is not equal to
- 26           '0000', then the mobile station shall set the number of
- 27           CRC bits per frame,
- 28           FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>],
- 29           using Table 3.7.5.20-1 and
- 30           CRC\_LEN\_IDX<sub>s</sub>[FSCH\_NBIT\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>]][F
- 31           OR\_SCH\_NUM\_BITS\_IDX<sub>r</sub>] as the index to the table.
- 32           The mobile station shall also set the number of
- 33           information bits per frame corresponding to
- 34           SCCL\_INDEX<sub>r</sub>,
- 35           N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], to
- 36           NUM\_BITS<sub>s</sub>[FSCH\_NBIT\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>]][F
- 37           OR\_SCH\_NUM\_BITS\_IDX<sub>r</sub>].
- 38          ◇ If FSCH\_VAR\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is not equal to
- 39          '000', then:



- 1                   - The mobile station shall set
- 2                     $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$ , the set of
- 3                    indices to the number of information bits per frame as
- 4                    follows:
- 5                    + If  $FOR\_SCH\_NUM\_BITS\_IDX_R$  is equal to '0000', then
- 6                     $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R] = \{$
- 7                     $FOR\_SCH\_NUM\_BITS\_IDX_R \}$ ,
- 8                    + otherwise the mobile station shall set (initialize)
- 9                     $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R] =$
- 10                     $\{FOR\_SCH\_NUM\_BITS\_IDX_R\}$  and for  $i=1, \dots,$
- 11                     $FOR\_SCH\_NUM\_BITS\_IDX_R$  the mobile station shall
- 12                    add  $FOR\_SCH\_NUM\_BITS\_IDX_R -$
- 13                     $VAR\_FSCH\_RATE\_OFFSET_S[FOR\_SCH\_ID_R][FOR\_SCH$
- 14                     $\_NUM\_BITS\_IDX_R][i]$  to the set specified by
- 15                     $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$
- 16                   - If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '0' or if
- 17                     $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and
- 18                     $FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]$  is equal to '0000',
- 19                    then the mobile station shall set
- 20                     $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ , the
- 21                    set of number of information bits per frame as follows.
- 22                    The  $i^{th}$  member of the set
- 23                     $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  is
- 24                    obtained using Table 3.7.3.3.2.37-2 and the  $i^{th}$  member of
- 25                    the set  $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$  as the
- 26                    index to the table.
- 27                   - If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and
- 28                     $FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]$  is not equal to
- 29                    '0000', then
- 30                    + the mobile station shall set
- 31                     $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$ ,
- 32                    the set of number of information bits per frame as
- 33                    follows.
- 34                    The  $i^{th}$  member of the set
- 35                     $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_R][SCCL\_INDEX_R]$  is
- 36                    equal to
- 37                     $NUM\_BITS_S[FSCH\_NBIT\_TABLE\_ID_S[FOR\_SCH\_ID_R]]$
- 38                     $[N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R][i]]$ , where
- 39                     $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R][i]$  denotes the
- 40                     $i^{th}$  member of the set
- 41                     $N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID_R]$  and,

- 1 + the mobile station shall set  
2 FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>],  
3 the set of number CRC bits per frame as follows.  
4 The  $i^{\text{th}}$  member of the set  
5 FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>]  
6 using Table 3.7.5.20-1 and  
7 CRC\_LEN\_IDX<sub>s</sub>[FSCH\_NBIT\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID  
8 <sub>r</sub>]][N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i]] as the  
9 index to the table, where  
10 N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i] denotes the  
11  $i^{\text{th}}$  member of the set  
12 N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>].
  - 13 + If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_REV\_SCH is not equal to  
14 '00000', for all the NUM\_REV\_SCH occurrences, the mobile station  
15 shall perform the following:  
16 o Set REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to  
17 REV\_SCH\_NUM\_BITS\_IDX<sub>r</sub>.  
18 o Set REV\_WALSH\_ID<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>][REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>]  
19 to REV\_WALSH\_ID<sub>r</sub>.
  - 20 + For each member in the Active Set included in the message, the  
21 mobile station shall perform the followings:  
22 o Set PILOT\_PN to PILOT\_PN<sub>r</sub>.  
23 o If SRCH\_OFFSET\_INCL<sub>r</sub> equals '1', set the SRCH\_OFFSET field of  
24 PILOT\_REC to SRCH\_OFFSET<sub>r</sub>; otherwise, set the  
25 SRCH\_OFFSET field of PILOT\_REC to '000'.  
26 o Set ADD\_PILOT\_REC\_INCL to ADD\_PILOT\_REC\_INCL<sub>r</sub>.  
27 o If ADD\_PILOT\_REC\_INCL<sub>r</sub> equals '1', the mobile station shall also  
28 perform the following:  
29 o Set the PILOT\_REC\_TYPE field of PILOT\_REC to  
30 PILOT\_REC\_TYPE<sub>r</sub>.  
31 o If PILOT\_REC\_TYPE<sub>r</sub> is equal to '000', the mobile station shall  
32 set the TD\_POWER\_LEVEL field of PILOT\_REC to  
33 TD\_POWER\_LEVEL<sub>r</sub> and set the TD\_MODE field of  
34 PILOT\_REC to TD\_MODE<sub>r</sub>.  
35 o If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station  
36 shall:  
37 o Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.  
38 o Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
39 AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length  
40 specified by WALSH\_LENGTH<sub>r</sub>.

- 1                   ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station  
2 shall:
- 3                   – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 4                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
5 AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by  
6 WALSH\_LENGTH<sub>r</sub>.
- 7                   – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to  
8 AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 9                   – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 10                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station  
11 shall:
- 12                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to  
13 SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 14                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to  
15 SR3\_PILOT\_POWER1<sub>r</sub>.
- 16                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to  
17 SR3\_PILOT\_POWER2<sub>r</sub>.
- 18                  ◇ If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station  
19 shall:
- 20                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to  
21 SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 22                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to  
23 SR3\_PILOT\_POWER1<sub>r</sub>.
- 24                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to  
25 SR3\_PILOT\_POWER2<sub>r</sub>.
- 26                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 27                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to  
28 AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length  
29 specified by WALSH\_LENGTH<sub>r</sub>.
- 30                  – If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the  
31 AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF1<sub>r</sub> and set  
32 the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to  
33 AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length  
34 specified by WALSH\_LENGTH1<sub>r</sub>; otherwise, set the  
35 AUX\_PILOT\_QOF1 field of PILOT\_REC to QOF<sub>r</sub> and set  
36 the AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to  
37 AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length  
38 specified by WALSH\_LENGTH<sub>r</sub>.

- If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF2<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length specified by WALSH\_LENGTH2<sub>r</sub>; otherwise, set the AUX\_PILOT\_QOF2 field of PILOT\_REC to QOF<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by WALSH\_LENGTH<sub>r</sub>.
  - o Store PWR\_COMB\_IND, CODE\_CHAN\_FCH, QOF\_MASK\_ID\_FCH, CODE\_CHAN\_DCCH and QOF\_MASK\_ID\_DCCH.
  - o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is equal to '00000', the mobile station shall delete the corresponding pilot from all entries of the corresponding Supplemental Channel.
  - o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is not equal to '00000', the mobile station shall:
    - ◊ If PILOT\_INCL is equal to '0', then the mobile station shall delete the corresponding pilot from the Active Set of Supplemental Channel for the corresponding SCCL\_INDEX<sub>r</sub>.
    - ◊ If PILOT\_INCL is equal to '1', then for each Supplemental Channel included in this record, the mobile station shall set PILOT\_PN<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to PILOT\_PN<sub>r</sub>, QOF\_IDS[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to QOF\_MASK\_ID\_SCH<sub>r</sub>, and FOR\_SCH\_CC\_INDEX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to CODE\_CHAN\_SCH<sub>r</sub>.
    - ◊ If PILOT\_INCL is equal to '1' and CASH\_INCLUDED is set to '1', then for each Supplemental Channel included in this record, the mobile station shall set CASH\_ENCODER\_TYPE<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to CASH\_ENCODER\_TYPE<sub>r</sub>.
    - ◊ If PILOT\_INCL is equal to '1' and CASH\_INCLUDED is set to '0', then for each Supplemental Channel included in this record, the mobile station shall set CASH\_ENCODER\_TYPE<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to '0' (default Turbo Encoder type).
    - ◊ The mobile station shall delete all pilots that are not included in the list specified by the NUM\_PILOTS field from the Active Set of Supplemental Channel for the corresponding SCCL\_INDEX<sub>r</sub>.
  - + If CASH\_INCLUDED is equal to '1', the mobile station shall perform the following:

- 1                   o If `CCSH_ENCODER_ACTION_TIMEr` is received, then the mobile  
2                   station shall set `CCSH_ENCODER_ACTION_TIMEs` to  
3                   `CCSH_ENCODER_ACTION_TIMEr`, and the mobile station shall  
4                   apply each `CCSH_ENCODER_TYPEs` at the time specified by  
5                   `CCSH_ENCODER_ACTION_TIMEr`.
- 6                   o If `CCSH_ENCODER_ACTION_TIMEr` is not received, the mobile  
7                   station shall apply each `CCSH_ENCODER_TYPEs` at the action  
8                   time of the message.
- 9                   + If `3X_FCH_INFO_INCLr` equals '1', for each included member of the  
10                  Active Set, the mobile station store the following:
  - 11               o If `3X_FCH_LOW_INCLr` equals '1', set the  
12               `QOF_MASK_ID_FCH_LOW` field to `QOF_MASK_ID_FCH_LOWr`  
13               and the `CODE_CHAN_FCH_LOW` field to  
14               `CODE_CHAN_FCH_LOWr`. Otherwise, set the  
15               `QOF_MASK_ID_FCH_LOW` field to `QOF_MASK_ID_FCHr` and the  
16               `CODE_CHAN_FCH_LOW` to `CODE_CHAN_FCHr`.
  - 17               o If `3X_FCH_HIGH_INCLr` equals '1', set the  
18               `QOF_MASK_ID_FCH_HIGH` field to `QOF_MASK_ID_FCH_HIGHr`  
19               and the `CODE_CHAN_FCH_HIGH` field to  
20               `CODE_CHAN_FCH_HIGHr`. Otherwise, set the  
21               `QOF_MASK_ID_FCH_HIGH` field to `QOF_MASK_ID_FCHr` and the  
22               `CODE_CHAN_FCH_HIGH` to `CODE_CHAN_FCHr`.
- 23                  + If `3X_DCCH_INFO_INCLr` equals '1', for each included member of the  
24                  Active Set, the mobile station store the following:
  - 25               o If `3X_DCCH_LOW_INCLr` equals '1', set the  
26               `QOF_MASK_ID_DCCH_LOW` field to `QOF_MASK_ID_DCCH_LOWr`  
27               and the `CODE_CHAN_DCCH_LOW` field to  
28               `CODE_CHAN_DCCH_LOWr`. Otherwise, set the  
29               `QOF_MASK_ID_DCCH_LOW` field to `QOF_MASK_ID_FCHr` and  
30               the `CODE_CHAN_DCCH_LOW` to `CODE_CHAN_FCHr`.
  - 31               o If `3X_DCCH_HIGH_INCLr` equals '1', set the  
32               `QOF_MASK_ID_DCCH_HIGH` field to  
33               `QOF_MASK_ID_DCCH_HIGHr` and the  
34               `CODE_CHAN_DCCH_HIGH` field to `CODE_CHAN_DCCH_HIGHr`.  
35               Otherwise, set the `QOF_MASK_ID_DCCH_HIGH` field to  
36               `QOF_MASK_ID_FCHr` and the `CODE_CHAN_DCCH_HIGH` to  
37               `CODE_CHAN_FCHr`.
- 38                  + If `3X_FCH_INFO_INCLr` or `3X_DCCH_INFO_INCLr` equals '1', for each  
39                  included member of the Active Set, the mobile station store the  
40                  following:
  - 41               o If `3X_SCH_INFO_INCLr` equals '1', for each Supplemental  
42               Channel included, the mobile station store the following:

- 1                   ◇ If 3X\_SCH\_LOW\_INCL<sub>r</sub> equals '1', set  
2                   QOF\_ID\_SCH\_LOW[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
3                   QOF\_MASK\_ID\_SCH\_LOW<sub>r</sub> and the  
4                   FOR\_SCH\_CC\_INDEX\_LOW[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
5                   field to CODE\_CHAN\_SCH\_LOW<sub>r</sub>. Otherwise, set  
6                   QOF\_ID\_SCH\_LOW[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
7                   QOF\_MASK\_ID\_SCH<sub>r</sub>, and  
8                   FOR\_SCH\_CC\_INDEX\_LOW[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
9                   to CODE\_CHAN\_SCH<sub>r</sub>.
- 10                  ◇ If 3X\_SCH\_HIGH\_INCL<sub>r</sub> equals '1', set  
11                  QOF\_ID\_SCH\_HIGH[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
12                  QOF\_MASK\_ID\_SCH\_HIGH<sub>r</sub> and the  
13                  FOR\_SCH\_CC\_INDEX\_HIGH[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
14                  field to CODE\_CHAN\_SCH\_HIGH<sub>r</sub>. Otherwise, set  
15                  QOF\_ID\_SCH\_HIGH[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
16                  QOF\_MASK\_ID\_SCH<sub>r</sub>, and  
17                  FOR\_SCH\_CC\_INDEX\_HIGH[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]  
18                  to CODE\_CHAN\_SCH<sub>r</sub>.
- 19                  + The mobile station shall set FUNDICATED\_BCNC\_IND<sub>s</sub> to  
20                  FUNDICATED\_BCNC\_IND<sub>r</sub>.
- 21                  + If FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1', the mobile station shall  
22                  store the following:
- 23                   o Set REV\_FCH\_ASSIGNED<sub>s</sub> to REV\_FCH\_ASSIGNED<sub>r</sub>.
- 24                  + If FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1', the mobile station shall set  
25                  FCH\_BCNC\_IND to '1'; otherwise, the mobile station shall set  
26                  FCH\_BCNC\_IND to '0'.
- 27                  + If FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1' and FOR\_CPCCH\_INFO\_INCL<sub>r</sub>  
28                  is included and is set to '1', for each included member of the Active  
29                  Set, the mobile station shall store the following:
- 30                   o Set FOR\_CPCCH\_WALSH<sub>s</sub> to FOR\_CPCCH\_WALSH<sub>r</sub>.
- 31                   o Set FOR\_CPCSCH<sub>s</sub> to FOR\_CPCSCH<sub>r</sub>.
- 32                  + If FUNDICATED\_BCNC\_IND<sub>r</sub> equals '1' and  
33                  ADD\_PLCM\_FOR\_FCH\_INCL<sub>r</sub> is included and is set to '1', the mobile  
34                  station shall store the following:
- 35                   o Set ADD\_PLCM\_FOR\_FCH\_TYPE<sub>s</sub> to  
36                   ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub>.
- 37                   o Set ADD\_PLCM\_FOR\_FCH\_39<sub>s</sub> to ADD\_PLCM\_FOR\_FCH\_39<sub>r</sub> if  
38                   ADD\_PLCM\_FOR\_FCH\_TYPE<sub>r</sub> is equal to '1'.
- 39                  + The mobile station shall delete all pilots that are not listed in the  
40                  NUM\_PILOTS field from the Active Set.

- 1                   + The mobile station shall delete all pilots that are not listed in the
- 2                   Active Set from the Active Set of the Supplemental Channel for the
- 3                   Forward Supplemental Channel Assignment (if any). If these deleted
- 4                   pilots include all pilots in the Active Set of the Supplemental
- 5                   Channel, the mobile station shall cancel the Forward Supplemental
- 6                   Channel Assignment.
- 7                   - If CH\_IND<sub>r</sub> is equal to '000', the mobile station shall perform the
- 8                   following:
- 9                   + If this message assigns a Forward Packet Data Channel or Reverse
- 10                  Packet Data Channel which was not assigned prior to the action time
- 11                  of this message, Layer 3 shall send SIG-HandoffPDCH.Indication
- 12                  (handoff\_type = HANDOFF) to the MAC layer; otherwise, Layer 3
- 13                  shall send SIG-HandoffPDCH.Indication (handoff\_type = ASSIGN) to
- 14                  the MAC layer.
- 15                  + If the message includes a Reverse Packet Data Channel assignment,
- 16                  the mobile station shall cancel the Reverse Supplemental Channel
- 17                  assignment, if any, at the action time of the message.
- 18                  + The mobile station shall set CH\_IND<sub>s</sub> to '000'.
- 19                  + The mobile station shall set EXT\_CH\_IND<sub>s</sub> to EXT\_CH\_IND<sub>r</sub>.
- 20                  + If PDCH\_CONTROL\_HOLD<sub>r</sub> is equal to '0' and
- 21                  PILOT\_GATING\_USE\_RATE is equal to '1', the mobile station shall
- 22                  set PILOT\_GATING\_USE\_RATE to '0' and shall start the continuous
- 23                  reverse pilot at the specified action time of the message and, if a F-
- 24                  PDCH is assigned, the mobile station shall start the continuous R-
- 25                  CQICH as defined in [3].
- 26                  + If PDCH\_CONTROL\_HOLD<sub>r</sub> is equal to '1', the mobile station may
- 27                  perform the following:
- 28                   o Set PILOT\_GATING\_USE\_RATE equal to '1' and start the reverse
- 29                   pilot gating and Reverse CQI Channel gating at
- 30                   PILOT\_GATING\_RATE<sub>s</sub> at the action time of the message.
- 31                   o The mobile station shall cancel the forward and reverse
- 32                   supplemental channel assignment, if any.
- 33                  + The mobile station shall set FULL\_CI\_FEEDBACK\_IND<sub>s</sub> to
- 34                  FULL\_CI\_FEEDBACK\_IND<sub>r</sub>.

- 1                   + If EXT\_CH\_IND<sub>r</sub> equals '01000', the mobile station shall set  
2                   FOR\_CPCCH\_RATE<sub>s</sub> to FOR\_CPCCH\_RATE<sub>r</sub>, and  
3                   FOR\_CPCCH\_UPDATE\_RATE<sub>s</sub> to FOR\_CPCCH\_UPDATE\_RATE<sub>r</sub>;  
4                   otherwise, the mobile station shall set FOR\_CPCCH\_RATE<sub>s</sub> to '00',  
5                   and FOR\_CPCCH\_UPDATE\_RATE<sub>s</sub> to '00'.
- 6                   + The mobile station shall set REV\_CQICH\_FRAME\_OFFSET<sub>s</sub> to  
7                   REV\_CQICH\_FRAME\_OFFSET<sub>r</sub>.
- 8                   + The mobile station shall set REV\_CQICH\_REPS<sub>s</sub> to  
9                   REV\_CQICH\_REPS<sub>r</sub>.
- 10                  + The mobile station shall set REV\_ACKCH\_REPS<sub>s</sub> to  
11                  REV\_ACKCH\_REPS<sub>r</sub>.
- 12                  + If SCH\_INCL<sub>r</sub> is equal to '1', and EXT\_CH\_IND<sub>r</sub> signals the allocation  
13                  of a F-FCH or a F-DCCH, and NUM\_FOR\_SCH is not equal to  
14                  '00000', for all the NUM\_FOR\_SCH occurrences, the mobile station  
15                  shall perform the following:
- 16                  o The mobile station shall determine,  
17                  N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the number  
18                  of information bits per Forward Supplemental Channel frame  
19                  identified by FOR\_SCH\_ID and corresponding to the index  
20                  SCCL\_INDEX according to the following rules:
- 21                  ◇ If FSCH\_VAR\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is equal to '000',  
22                  then:
- 23                  - If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '0' or if  
24                  USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and  
25                  FSCH\_NBIT\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is equal to '0000',  
26                  then the mobile station shall set the number of  
27                  information bits per frame,  
28                  N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] and  
29                  number of CRC bits per frame,  
30                  FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>],  
31                  according to Table 3.7.3.3.2.37-2 using  
32                  FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub> as the index to the table.



- If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '1' and FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>] is not equal to '0000', then the mobile station shall set the number of CRC bits per frame, FSCH\_CRC\_LEN\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], using Table 3.7.5.20-1 and CRC\_LEN\_IDX<sub>S</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>]][FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub>] as the index to the table. The mobile station shall also set the number of information bits per frame corresponding to SCCL\_INDEX<sub>r</sub>, N\_FSCH\_BITS\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], to NUM\_BITS<sub>S</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>]][FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub>].
- ◇ If FSCH\_VAR\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>] is not equal to '000', then:
  - The mobile station shall set N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>], the set of indices to the number of information bits per frame as follows:
    - + If FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub> is equal to '0000', then N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>] = { FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub> },
    - + otherwise, the mobile station shall set (initialize) N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>] = {FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub>} and for i=1, ..., FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub> the mobile station shall add FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub> - VAR\_FSCH\_RATE\_OFFSET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>][FOR\_SCH\_NUM\_BITS\_IDX<sub>r</sub>][i] to the set specified by N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>]
  - If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '0' or if USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '1' and FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>] is equal to '0000', then the mobile station shall set N\_FSCH\_BITS\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the set of number of information bits per frame as follows. The *i*<sup>th</sup> member of the set N\_FSCH\_BITS\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] is obtained using Table 3.7.3.3.2.37-2 and the *i*<sup>th</sup> member of the set N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>r</sub>] as the index to the table.

- If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>] is not equal to '0000', then
        - + the mobile station shall set N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the set of number of information bits per frame as follows.  
The  $i^{\text{th}}$  member of the set N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] is equal to NUM\_BITS<sub>s</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>]][N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i]], where N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i] denotes the  $i^{\text{th}}$  member of the set N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] and,
        - + the mobile station shall set FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], the set of number CRC bits per frame as follows.  
The  $i^{\text{th}}$  member of the set FSCH\_CRC\_LEN\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] using Table 3.7.5.20-1 and CRC\_LEN\_IDX<sub>s</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>]][N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i]] as the index to the table, where N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][i] denotes the  $i^{\text{th}}$  member of the set N\_FSCH\_BITS\_IDX\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>].
    - + If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_REV\_SCH is not equal to '00000', for all the NUM\_REV\_SCH occurrences, the mobile station shall perform the following:
      - o Set REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to REV\_SCH\_NUM\_BITS\_IDX<sub>r</sub>.
      - o Set REV\_WALSH\_IDS[REV\_SCH\_ID<sub>r</sub>][REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>] to REV\_WALSH\_ID<sub>r</sub>.
    - + If FOR\_PDCH\_RLGAIN\_INCL<sub>r</sub> is included and equal to '1', the mobile station shall set RLGAIN\_ACKCH\_PILOT<sub>s</sub> to RLGAIN\_ACKCH\_PILOT<sub>r</sub>, and RLGAIN\_CQICH\_PILOT<sub>s</sub> to RLGAIN\_CQICH\_PILOT<sub>r</sub>.
    - + If FOR\_PDCH\_PARMES\_INCL<sub>r</sub> is equal to '1', the mobile station shall set NUM\_SOFT\_SWITCHING\_FRAMES<sub>s</sub> to NUM\_SOFT\_SWITCHING\_FRAMES<sub>r</sub> + 1, and NUM\_SOFTER\_SWITCHING\_FRAMES<sub>s</sub> to NUM\_SOFTER\_SWITCHING\_FRAMES<sub>r</sub> + 1.

- 1                   + If CHM\_SWITCHING\_PARMs\_INCL<sub>r</sub> is included and equal to '1', the
- 2                   mobile station shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to
- 3                   NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>r</sub> + 1, and
- 4                   NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to
- 5                   NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>r</sub> + 1.
- 6                   + If CHM\_SWITCHING\_PARMs\_INCL<sub>r</sub> is included and equal to '0', the
- 7                   mobile station shall set NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to
- 8                   NUM\_SOFT\_SWITCHING\_FRAMES<sub>r</sub> + 1, and
- 9                   NUM\_SOFT\_SWITCHING\_FRAMES\_CHM<sub>s</sub> to
- 10                  NUM\_SOFT\_SWITCHING\_FRAMES<sub>r</sub> + 1.
- 11                 + If FOR\_PDCH\_PARMs\_INCL<sub>r</sub> is equal to '1', the mobile station shall
- 12                 set NUM\_SOFT\_SWITCHING\_SLOTS<sub>s</sub> according to Table
- 13                 3.7.2.3.2.21-9 based on the value of
- 14                 NUM\_SOFT\_SWITCHING\_SLOTS<sub>r</sub>.
- 15                 + If FOR\_PDCH\_PARMs\_INCL<sub>r</sub> is equal to '1', the mobile station shall
- 16                 set NUM\_SOFT\_SWITCHING\_SLOTS<sub>s</sub> according to Table
- 17                 3.7.2.3.2.21-9 based on the value of
- 18                 NUM\_SOFT\_SWITCHING\_SLOTS<sub>r</sub>.
- 19                 + If CHM\_SWITCHING\_PARMs\_INCL<sub>r</sub> is included and equal to '1', the
- 20                 mobile station shall:
- 21                   o Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table
- 22                   3.7.2.3.2.21-9 based on the value of
- 23                   NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>r</sub>.
- 24                   o Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table
- 25                   3.7.2.3.2.21-9 based on the value of
- 26                   NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>r</sub>.
- 27                 + If CHM\_SWITCHING\_PARMs\_INCL<sub>r</sub> is included and equal to '0', the
- 28                 mobile station shall:
- 29                   o Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table
- 30                   3.7.2.3.2.21-9 based on the value of
- 31                   NUM\_SOFT\_SWITCHING\_SLOTS<sub>r</sub>.
- 32                   o Set NUM\_SOFT\_SWITCHING\_SLOTS\_CHM<sub>s</sub> according to Table
- 33                   3.7.2.3.2.21-9 based on the value of
- 34                   NUM\_SOFT\_SWITCHING\_SLOTS<sub>r</sub>.
- 35                 + If FOR\_PDCH\_PARMs\_INCL<sub>r</sub> is equal to '1', the mobile station shall
- 36                 set PDCH\_SOFT\_SWITCHING\_DELAY<sub>s</sub> to
- 37                 PDCH\_SOFT\_SWITCHING\_DELAY<sub>r</sub> + 1, and
- 38                 PDCH\_SOFT\_SWITCHING\_DELAY<sub>s</sub> to
- 39                 PDCH\_SOFT\_SWITCHING\_DELAY<sub>r</sub> + 1.

- 1                   + If FOR\_PDCH\_PARMS\_INCL<sub>r</sub> is equal to '1', and
- 2                   FOR\_PDCH\_COMMON\_PARMS<sub>r</sub> is equal to '1', the mobile station
- 3                   shall store the following parameters that are common to all pilots in
- 4                   the Active Set:
- 5                   o The mobile station shall set FOR\_PDCH\_COMMON\_PARMS<sub>s</sub> to
- 6                   '1'.
- 7                   o The mobile station shall set WALSH\_TABLE\_ID<sub>s</sub> to
- 8                   WALSH\_TABLE\_ID<sub>r</sub>.
- 9                   o The mobile station shall set NUM\_PDCCH<sub>s</sub> to NUM\_PDCCH<sub>r</sub>.
- 10                  o The mobile station shall set FOR\_PDCCH\_WALSH<sub>s</sub>[i] to the i<sup>th</sup>
- 11                  occurrence of FOR\_PDCCH\_WALSH<sub>r</sub>.
- 12                  o The mobile station shall set TX\_DISABLED\_TIMER<sub>s</sub> to
- 13                  TX\_DISABLED\_TIMER<sub>r</sub>.
- 14                  + If FOR\_PDCH\_PARMS\_INCL<sub>r</sub> is equal to '0', and
- 15                  FOR\_PDCH\_COMMON\_PARMS<sub>s</sub> is equal to '0', the mobile station
- 16                  shall send a *Mobile Station Reject Order* with ORDQ equal to
- 17                  '00000011' (message structure not acceptable) and remain in the
- 18                  current state.
- 19                  + If EXT\_CH\_IND<sub>r</sub> signals the allocation of a R-PDCH, the mobile
- 20                  station shall:
- 21                  o Set FOR\_GCH\_ASSIGNED<sub>s</sub> to FOR\_GCH\_ASSIGNED<sub>r</sub>.
- 22                  o Set FOR\_RCCH\_ASSIGNED<sub>s</sub> to FOR\_RCCH\_ASSIGNED<sub>r</sub>.
- 23                  o If FOR\_RCCH\_ASSIGNED<sub>s</sub> is equal to '1', the mobile station
- 24                  shall:
- 25                   ◇ Set FOR\_RCCH\_DRC\_MODE<sub>s</sub> to FOR\_RCCH\_DRC\_MODE<sub>r</sub>.
- 26                   ◇ Set FOR\_RCCH\_REPETITION<sub>s</sub> to FOR\_RCCH\_REPETITION<sub>r</sub>.
- 27                   ◇ Set FOR\_RCCH\_UPDATE\_RATE<sub>s</sub> to
- 28                   FOR\_RCCH\_UPDATE\_RATE<sub>r</sub>.
- 29                  o If FOR\_ACKCH\_ASSIGNED<sub>r</sub> is equal to '1', the mobile station
- 30                  shall set FOR\_ACKCH\_MODE<sub>s</sub> to FOR\_ACKCH\_MODE<sub>r</sub>.
- 31                  o If FOR\_ACKCH\_COMB\_SEL<sub>r</sub> is included, the mobile station shall
- 32                  set FOR\_ACKCH\_COMB\_SEL<sub>s</sub> to FOR\_ACKCH\_COMB\_SEL<sub>r</sub>;
- 33                  otherwise, the mobile station shall set FOR\_ACKCH\_COMB\_SEL<sub>s</sub>
- 34                  to '0'.
- 35                  o If REV\_PDCH\_RLGAIN\_INCL<sub>r</sub> is included and equal to '1', the
- 36                  mobile station shall perform the following:
- 37                   ◇ The mobile station shall set RLGAIN\_SPICH\_PILOT<sub>s</sub> to
- 38                   RLGAIN\_SPICH\_PILOT<sub>r</sub>.

- 1                   ◇ The mobile station shall set `RLGAIN_REQCH_PILOTS` to
- 2                   `RLGAIN_REQCH_PILOTR`.
- 3                   ◇ The mobile station shall set `RLGAIN_PDCCH_PILOTS` to
- 4                   `RLGAIN_PDCCH_PILOTR`.
- 5                   o If `REV_PDCH_PARMS_1_INCLR` is included and equal to '1', the
- 6                   mobile station shall perform the following:
- 7                   ◇ The mobile station shall set `REV_PDCH_TABLE_SELS` to
- 8                   `REV_PDCH_TABLE_SELR`.
- 9                   ◇ The mobile station shall set `REV_PDCH_MAX_AUTO_TPRS` to
- 10                  `REV_PDCH_MAX_AUTO_TPRR`.
- 11                  + Otherwise, the mobile station shall:
- 12                   o Set `FOR_GCH_ASSIGNEDS` to NULL.
- 13                   o Set `FOR_RCCH_ASSIGNEDS` to NULL.
- 14                  + For each member of the Active Set included in the message, the
- 15                  mobile station shall perform the following:
- 16                   o Set `PILOT_PN` to `PILOT_PNR`.
- 17                   o If `SRCH_OFFSET_INCLR` equals '1', set the `SRCH_OFFSET` field of
- 18                   `PILOT_REC` to `SRCH_OFFSETR`; otherwise, set the
- 19                   `SRCH_OFFSET` field of `PILOT_REC` to '000'.
- 20                   o Set `ADD_PILOT_REC_INCL` to `ADD_PILOT_REC_INCLR`.
- 21                   o If `ADD_PILOT_REC_INCLR` equals '1', the mobile station shall also
- 22                   perform the following:
- 23                   ◇ Set the `PILOT_REC_TYPE` field of `PILOT_REC` to
- 24                   `PILOT_REC_TYPER`.
- 25                   ◇ If `PILOT_REC_TYPER` is equal to '000', the mobile station shall
- 26                   set the `TD_POWER_LEVEL` field of `PILOT_REC` to
- 27                   `TD_POWER_LEVELR` and set the `TD_MODE` field of
- 28                   `NGHBR_PILOT_REC` to `TD_MODER`.
- 29                   ◇ If `PILOT_REC_TYPER` is equal to '001', the mobile station
- 30                   shall:
- 31                   – Set the `AUX_PILOT_QOF` field of `PILOT_REC` to `QOFR`.
- 32                   – Set the `AUX_PILOT_WALSH_CODE` field of `PILOT_REC` to
- 33                   `AUX_PILOT_WALSHR` with the Walsh Code length
- 34                   specified by `WALSH_LENGTHR`.
- 35                   ◇ If `PILOT_REC_TYPER` is equal to '010', the mobile station
- 36                   shall:
- 37                   – Set the `AUX_PILOT_TD_QOF` field of `PILOT_REC` to `QOFR`.

- 1                                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 2                                   AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 3                                   WALSH\_LENGTH<sub>r</sub>.
- 4                                   – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to
- 5                                   AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 6                                   – Set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 7                   o Set FOR\_PDCH\_INCL<sub>s</sub> to FOR\_PDCH\_INCL<sub>r</sub>.
- 8                   o If FOR\_PDCH\_INCL<sub>r</sub> is equal to '1', the mobile station shall
- 9                   perform the following:
- 10                    ◇ If FOR\_PDCH\_PARMS\_INCL<sub>r</sub> is equal to '1', and
- 11                    FOR\_PDCH\_COMMON\_PARMS<sub>r</sub> is equal to '0', the mobile
- 12                    station shall store the following parameters:
- 13                    – The mobile station shall set
- 14                    FOR\_PDCH\_COMMON\_PARMS<sub>s</sub> to '0'.– The mobile
- 15                    station shall set WALSH\_TABLE\_ID<sub>s</sub> to
- 16                    WALSH\_TABLE\_ID<sub>r</sub>.
- 17                    – The mobile station shall set NUM\_PDCCH<sub>s</sub> to
- 18                    NUM\_PDCCH<sub>r</sub>.
- 19                    – The mobile station shall set FOR\_PDCCH\_WALSH<sub>s</sub>[i] to
- 20                    the i<sup>th</sup> occurrence of FOR\_PDCCH\_WALSH<sub>r</sub>.
- 21                    ◇ The mobile station shall set MAC\_ID<sub>s</sub> to MAC\_ID<sub>r</sub>.
- 22                    ◇ The mobile station shall set REV\_CQICH\_COVER<sub>s</sub> to
- 23                    REV\_CQICH\_COVER<sub>r</sub>.
- 24                    ◇ If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-CPCCH, the
- 25                    mobile station shall set FOR\_CPCCH\_WALSH<sub>s</sub> to
- 26                    FOR\_CPCCH\_WALSH<sub>r</sub>, and FOR\_CPCSCH<sub>s</sub> to
- 27                    FOR\_CPCSCH<sub>r</sub>.
- 28                    ◇ The mobile station shall store FOR\_PDCCH\_WALSH<sub>s</sub>[i] to the
- 29                    i<sup>th</sup> occurrence of FOR\_PDCCH\_WALSH<sub>r</sub>.
- 30                   o The mobile station shall set PWR\_COMB\_IND<sub>s</sub> to
- 31                   PWR\_COMB\_IND<sub>r</sub>.
- 32                   o If PDCH\_GROUP\_IND\_INCL<sub>r</sub> is equal to '1', the mobile station
- 33                   shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> as follows:
- 34                    ◇ If this is the first pilot in the list that has a F-PDCH
- 35                    assignment, the mobile station shall perform the following:
- 36                    – The mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub>
- 37                    to '000';
- 38                    ◇ Otherwise, the mobile station shall perform the following:

- 1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39
- If PDCH\_GROUP\_IND<sub>r</sub> is set to '1', the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the same value as that of the previous pilot in the list that has a F-PDCH assigned; otherwise, the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the value one greater than that of the previous pilot in the list that has a F-PDCH assigned.
  - o Otherwise, the mobile station shall perform the following:
    - ◇ If this is the first pilot in the list that has a F-PDCH assignment, the mobile station shall perform the following:
      - The mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to '000';
    - ◇ Otherwise, the mobile station shall perform the following:
      - If F-PDCH is assigned for this pilot, the mobile station shall perform the following:
        - + If PWR\_COMB\_IND<sub>r</sub> is set to '1', and there are no pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned, the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the same value as that of the previous pilot in the list that has a F-PDCH assigned.
        - + If PWR\_COMB\_IND<sub>r</sub> is set to '1', and all pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned have PWR\_COMB\_IND set to '1', the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the same value as that of the previous pilot in the list that has a F-PDCH assigned.
        - + Otherwise, the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to the value one greater than that of the previous pilot in the list.
      - Otherwise, the mobile station shall set PDCH\_GROUP\_IDENTIFIER<sub>s</sub> to NULL.
  - o If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-FCH, the mobile station shall set CODE\_CHAN\_FCH<sub>s</sub> to CODE\_CHAN\_FCH<sub>r</sub>, and QOF\_MASK\_ID\_FCH<sub>s</sub> to QOF\_MASK\_ID\_FCH<sub>r</sub>.
  - o If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-DCCH, the mobile station shall set CODE\_CHAN\_DCCH<sub>s</sub> to CODE\_CHAN\_DCCH<sub>r</sub>, and QOF\_MASK\_ID\_DCCH<sub>s</sub> to QOF\_MASK\_ID\_DCCH<sub>r</sub>.

- 1                   o If EXT\_CH\_IND<sub>r</sub> signals the allocation of a F-DCCH, the mobile  
2                   station shall set CODE\_CHAN\_DCCH<sub>s</sub> to CODE\_CHAN\_DCCH<sub>r</sub>,  
3                   and QOF\_MASK\_ID\_DCCH<sub>s</sub> to QOF\_MASK\_ID\_DCCH<sub>r</sub>.
- 4                   o If FOR\_PDCH\_INCL<sub>r</sub> is equal to '1', EXT\_CH\_IND<sub>r</sub> signals the  
5                   allocation of a R-PDCH, and if FOR\_ACKCH\_ASSIGNED<sub>r</sub> is equal  
6                   to '1', the mobile station shall set FOR\_ACKCH\_WALSH\_INDEX<sub>s</sub>  
7                   to FOR\_ACKCH\_WALSH\_INDEX<sub>r</sub>, and FOR\_ACKSCH\_INDEX<sub>s</sub> to  
8                   FOR\_ACKSCH\_INDEX<sub>r</sub>.
- 9                   o If FOR\_RCCH\_INCL<sub>r</sub> is included and set to '1', the mobile station  
10                  shall do the following:
  - 11                  ◇ set FOR\_RCCH\_WALSH\_INDEX<sub>s</sub> to  
12                  FOR\_RCCH\_WALSH\_INDEX<sub>s</sub>.
  - 13                  ◇ set FOR\_RCSCH\_INDEX<sub>s</sub> to FOR\_RCSCH\_INDEX<sub>r</sub>.
- 14                  o If FOR\_PDCH\_INCL<sub>r</sub> is equal to '1', and if FOR\_GCH\_ASSIGNED<sub>r</sub>  
15                  is included and set to '1', the mobile station shall perform the  
16                  following:
  - 17                  ◇ set NUM\_FOR\_GCH<sub>s</sub> to NUM\_FOR\_GCH<sub>r</sub>, and
  - 18                  ◇ for each of the NUM\_FOR\_GCH<sub>s</sub> occurrences of  
19                  FOR\_GCH\_WALSH\_INDEX<sub>r</sub>, the mobile station shall set  
20                  FOR\_GCH\_WALSH\_INDEX<sub>s</sub>[j] to  
21                  FOR\_GCH\_WALSH\_INDEX<sub>r</sub>[j].
- 22                  o Otherwise, the mobile station shall perform the following:
  - 23                  ◇ set NUM\_FOR\_GCH<sub>s</sub> to 0, and
  - 24                  ◇ set FOR\_GCH\_WALSH\_INDEX<sub>s</sub> to NULL.
- 25                  o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is equal to '00000',  
26                  the mobile station shall delete the corresponding pilot from the  
27                  all entries of the corresponding Supplemental Channel.
- 28                  o If SCH\_INCL<sub>r</sub> is equal to '1' and NUM\_SCH is not equal to  
29                  '00000', for each Supplemental Channel included in this record,  
30                  the mobile station shall:
  - 31                  ◇ If PILOT\_INCL is equal to '0', then the mobile station shall  
32                  delete the corresponding pilot from the Active Set of  
33                  Supplemental Channel for the corresponding SCCL\_INDEX<sub>r</sub>.
  - 34                  ◇ If PILOT\_INCL is equal to '1', then for each Supplemental  
35                  Channel included in this record, the mobile station shall set  
36                  PILOT\_PN<sub>s</sub> [FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to PILOT\_PN<sub>r</sub>,  
37                  QOF\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
38                  QOF\_MASK\_ID\_SCH<sub>r</sub>, and  
39                  FOR\_SCH\_CC\_INDEX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] to  
40                  CODE\_CHAN\_SCH<sub>r</sub>.



- 1                   ◇ If PILOT\_INCL is equal to '1' and CCSH\_INCLUDED is set to
- 2                   '1', then for each Supplemental Channel included in this
- 3                   record, the mobile station shall set
- 4                   CCSH\_ENCODER\_TYPE<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 5                   CCSH\_ENCODER\_TYPE<sub>R</sub>.
- 6                   ◇ If PILOT\_INCL is equal to '1' and CCSH\_INCLUDED is set to
- 7                   '0', then for each Supplemental Channel included in this
- 8                   record, the mobile station shall set
- 9                   CCSH\_ENCODER\_TYPE<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
- 10                  '0' (default Turbo Encoder type).
- 11                  ◇ The mobile station shall delete all pilots that are not included
- 12                  in the list specified by the NUM\_PILOTS field from the Active
- 13                  Set of Supplemental Channel for the corresponding
- 14                  SCCL\_INDEX<sub>R</sub>.
- 15                  + If CCSH\_INCLUDED is equal to '1', the mobile station shall perform
- 16                  the following:
- 17                   o If CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub> is received, then the mobile
- 18                   station shall set CCSH\_ENCODER\_ACTION\_TIME<sub>S</sub> to
- 19                   CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub>, and the mobile station shall
- 20                   apply each CCSH\_ENCODER\_TYPE<sub>S</sub> at the time specified by
- 21                   CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub>.
- 22                   o If CCSH\_ENCODER\_ACTION\_TIME<sub>R</sub> is not received, the mobile
- 23                   station shall apply each CCSH\_ENCODER\_TYPE<sub>S</sub> at the action
- 24                   time of the message.
- 25                  + The mobile station shall set FUNDICATED\_BCMC\_IND<sub>S</sub> to
- 26                  FUNDICATED\_BCMC\_IND<sub>R</sub>. If FUNDICATED\_BCMC\_IND<sub>R</sub> equals '1'
- 27                  and the EXT\_CH\_IND<sub>R</sub> signals the allocation of a F-FCH, the mobile
- 28                  station shall set FCH\_BCMC\_IND to '1'; otherwise, the mobile station
- 29                  shall set FCH\_BCMC\_IND to '0'.
- 30                  + If FUNDICATED\_BCMC\_IND<sub>R</sub> equals '1' and
- 31                  ADD\_PLCM\_FOR\_FCH\_INCL<sub>R</sub> is included and is set to '1', the mobile
- 32                  station shall store the following:
- 33                   o Set ADD\_PLCM\_FOR\_FCH\_TYPE<sub>S</sub> to
- 34                   ADD\_PLCM\_FOR\_FCH\_TYPE<sub>R</sub>.
- 35                   o Set ADD\_PLCM\_FOR\_FCH\_39<sub>S</sub> to ADD\_PLCM\_FOR\_FCH\_39<sub>R</sub> if
- 36                   ADD\_PLCM\_FOR\_FCH\_TYPE<sub>R</sub> is equal to '1'.
- 37                  + The mobile station shall delete all pilots that are not listed in the
- 38                  NUM\_PILOTS field from the Active Set.

- 1                   +   The mobile station shall delete all pilots that are not listed in the
- 2                   Active Set from the Active Set of the Supplemental Channel for the
- 3                   Forward Supplemental Channel Assignment (if any). If these deleted
- 4                   pilots include all pilots in the Active Set of the Supplemental
- 5                   Channel, the mobile station shall cancel the Forward Supplemental
- 6                   Channel Assignment.
- 7                   •   If the CH\_IND<sub>r</sub> is set to '111' and FUNDICATED\_BCMC\_IND<sub>r</sub> equals '1', the
- 8                   mobile station shall change the R-FCH assignment as specified in
- 9                   REV\_FCH\_ASSIGNED<sub>r</sub>, at the specified action time.
- 10                  •   If the most significant bit of CH\_IND<sub>r</sub> is set to '1' and
- 11                  PILOT\_GATING\_USE\_RATE is equal to '1', the mobile station shall set
- 12                  PILOT\_GATING\_USE\_RATE to '0' and shall start the continuous reverse
- 13                  pilot at the specified action time. If the most significant bit of CH\_IND<sub>r</sub> is
- 14                  set to '0', CH\_IND<sub>r</sub> is not equal to '000', and PILOT\_GATING\_USE\_RATE is
- 15                  equal to '0', the mobile station shall perform the following:
- 16                  –   The mobile station shall set PILOT\_GATING\_USE\_RATE to '1' and shall
- 17                  start the reverse pilot gating at the specified action time.
- 18                  –   If the Fundamental Channel is also being released, the mobile station
- 19                  shall store the configuration used for the Fundamental Channel.
- 20                  –   The mobile station shall cancel the forward and reverse supplemental
- 21                  channel assignment, if any.
- 22                  •   The mobile station shall set IGNORE\_ESCAM<sub>s</sub> and IGNORE\_SCAM<sub>s</sub> to '0'.
- 23                  •   Set the pilot detection threshold for the Target Frequency and the Candidate
- 24                  Frequency:
- 25                  –   Set TF\_T\_ADD<sub>s</sub> to T\_ADD<sub>s</sub>.
- 26                  –   If the Target Frequency is the same as the Candidate Frequency
- 27                  (TF\_CDMABAND<sub>s</sub> is equal to CF\_CDMABAND<sub>s</sub> and TF\_CDMACH<sub>s</sub> is
- 28                  equal to CF\_CDMACH<sub>s</sub>), set CF\_T\_ADD<sub>s</sub> to T\_ADD<sub>s</sub>.
- 29                  •   If PERIODIC\_SEARCH<sub>s</sub> is equal to '0' and a periodic search is in progress,
- 30                  the mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and
- 31                  2.6.6.2.10.4).
- 32                  •   The mobile station shall determine its roaming status (see 2.6.5.3). The
- 33                  mobile station should indicate to the user whether the mobile station is
- 34                  roaming.
- 35                  •   Perform a soft or hard handoff depending on the following conditions:
- 36                  –   If any of the following conditions is true, the mobile station shall perform a
- 37                  hard handoff:
- 38                  +   EXTRA\_PARMS is set to '1' and either BAND\_CLASS<sub>r</sub> is not equal to
- 39                  SF\_CDMABAND<sub>s</sub>, CDMA\_FREQ<sub>r</sub> is not equal to SF\_CDMACH<sub>s</sub>, or
- 40                  FRAME\_OFFSET<sub>r</sub> is not equal to SF\_FRAME\_OFFSET<sub>s</sub>, or

- 1                   + The set of pilots specified by the message is disjoint from the Active Set
- 2                   prior to the action time of the message.
- 3                   – If the mobile station performs a hard handoff, it shall perform the following:
- 4                   + If a Periodic Serving Frequency Pilot Report Procedure is in progress, the
- 5                   mobile station shall abort the procedure (see 2.6.6.2.12).
- 6                   + If a Candidate Frequency periodic search is in progress, the mobile
- 7                   station shall abort the periodic search (see 2.6.6.2.8.3.4 and
- 8                   2.6.6.2.10.4).
- 9                   + If a Forward Supplemental Channel assignment or a Reverse
- 10                  Supplemental Channel assignment is in progress, the mobile station
- 11                  shall abort it.
- 12                  + The mobile station shall cancel any outstanding Forward
- 13                  Supplemental Channel assignment or Reverse Supplemental
- 14                  Channel assignment that is not specified by this message.
- 15                  + The mobile station shall cancel the current Forward Supplemental
- 16                  Channel assignment or the Reverse Supplemental Channel assignment,
- 17                  if it is in progress. If the message does not specify another Forward
- 18                  Supplemental Channel assignment or Reverse Supplemental Channel
- 19                  assignment, the mobile station shall cancel the outstanding Forward
- 20                  Supplemental Channel assignment or Reverse Supplemental Channel
- 21                  assignment, if any.
- 22                  + If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '0', the mobile station shall
- 23                  perform actions specified in 2.6.6.2.8.1. If the message specifies more
- 24                  than one pilot, the mobile station shall also perform actions specified in
- 25                  2.6.6.2.7.1 and 2.6.6.2.7.2.
- 26                  + If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '1', the mobile station shall
- 27                  perform actions specified in 2.6.6.2.8.2. If the message specifies more
- 28                  than one pilot, the mobile station shall also perform actions specified in
- 29                  2.6.6.2.7.1 and 2.6.6.2.7.2.
- 30                  – Otherwise, the mobile station shall perform a soft handoff as specified in
- 31                  2.6.6.2.7.
- 32                  12. *Mobile Assisted Burst Operation Parameters Message:* The mobile station shall
- 33                  process this message as follows:
- 34                  • The mobile station shall set ORDER\_FLAG<sub>S</sub> to ORDER\_FLAG<sub>r</sub>.
- 35                  • If ORDER\_FLAG<sub>r</sub> is equal to '1', the mobile station shall perform the
- 36                  following:
- 37                  – The mobile station shall set PS\_MIN\_DELTA<sub>S</sub> to PS\_MIN\_DELTA<sub>r</sub> + 1.
- 38                  – The mobile station shall set ORDER\_INTERVAL<sub>S</sub> to ORDER\_INTERVAL<sub>r</sub>.

- 1           • If ORDER\_FLAG<sub>r</sub> is equal to '0', the mobile station shall perform the
- 2           following:
- 3           – The mobile station shall set PS\_MIN\_DELTA<sub>s</sub> to 0.
- 4           – The mobile station shall set ORDER\_INTERVAL<sub>s</sub> to 0.
- 5           • The mobile station shall set PERIODIC\_FLAG<sub>s</sub> to PERIODIC\_FLAG<sub>r</sub>.
- 6           • If PERIODIC\_FLAG<sub>r</sub> is equal to '1', the mobile station shall perform the
- 7           following:
- 8           – The mobile station shall set NUM\_PILOTS<sub>s</sub> to NUM\_PILOTS<sub>r</sub>.
- 9           – The mobile station shall set PERIODIC\_INTERVAL<sub>s</sub> to
- 10          PERIODIC\_INTERVAL<sub>r</sub>.
- 11          • If PERIODIC\_FLAG<sub>r</sub> is equal to '0', the mobile station shall perform the
- 12          following:
- 13          – The mobile station shall set NUM\_PILOTS<sub>s</sub> to 0.
- 14          – The mobile station shall set PERIODIC\_INTERVAL<sub>s</sub> to 0.
- 15          • The mobile station shall set THRESHOLD\_FLAG<sub>s</sub> to THRESHOLD\_FLAG<sub>r</sub>.
- 16          • If THRESHOLD\_FLAG<sub>r</sub> is equal to '1', the mobile station shall perform the
- 17          following:
- 18          – The mobile station shall set PS\_FLOOR\_LOW<sub>s</sub> to PS\_FLOOR\_LOW<sub>r</sub>.
- 19          – The mobile station shall set PS\_FLOOR\_HIGH<sub>s</sub> to PS\_FLOOR\_HIGH<sub>r</sub>.
- 20          – The mobile station shall set PS\_CEILING\_LOW<sub>s</sub> to PS\_CEILING\_LOW<sub>r</sub>.
- 21          – The mobile station shall set PS\_CEILING\_HIGH<sub>s</sub> to PS\_CEILING\_HIGH<sub>r</sub>.
- 22          • If THRESHOLD\_FLAG<sub>r</sub> is equal to '0', the mobile station shall perform the
- 23          following:
- 24          – The mobile station shall set PS\_FLOOR\_LOW<sub>s</sub> to '0'.
- 25          – The mobile station shall set PS\_FLOOR\_HIGH<sub>s</sub> to '0'.
- 26          – The mobile station shall set PS\_CEILING\_LOW<sub>s</sub> to '0'.
- 27          – The mobile station shall set PS\_CEILING\_HIGH<sub>s</sub> to '0'.
- 28          13. *Extended Supplemental Channel Assignment Message*: The mobile station shall
- 29          process this message as follows:
- 30          The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
- 31          set to the specified value if any of the following conditions is true, and shall not
- 32          perform any other action described in this section for processing the *Extended*
- 33          *Supplemental Channel Assignment Message*:

- 1       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ  
2       field set to '00000110' (capability not supported), if the number of forward or  
3       reverse Supplemental Channels specified in the *Extended Supplemental*  
4       *Channel Assignment Message* is greater than the maximum number of  
5       Supplemental Channels supported by the mobile station.
- 6       • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ  
7       field set to '00000100' (message field not in valid range), if PILOT\_PN  
8       specified in the *Extended Supplemental Channel Assignment Message* is not  
9       in the Active Set.
- 10      • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ  
11      field set to '00000111' (message can not be handled by the current mobile  
12      station configuration), if the message includes a reverse Supplemental  
13      Channel assignment, and any of the following conditions is true:
  - 14          – any of the mobile station's reverse supplemental channel configuration  
15          parameter for the corresponding Supplemental Channel is NULL, or,
  - 16          – the Reverse Packet Data Channel is assigned.
- 17      • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ  
18      field set to '00000111' (message can not be handled by the current mobile  
19      station configuration), if the message includes a forward Supplemental  
20      Channel assignment and any of the mobile station's forward supplemental  
21      channel configuration parameter for the corresponding Supplemental  
22      Channel is NULL.

23      If none of the above conditions is true, the mobile station shall perform the  
24      following:

- 25      • The mobile station shall store REV\_SCH\_DTX\_DURATION<sub>r</sub>, Reverse  
26      Supplemental Channel Discontinuous Transmission Duration, as  
27      REV\_SCH\_DTX\_DURATION<sub>s</sub> at the action time of the message.
- 28      • The mobile station shall store the unit for START\_TIME\_UNIT<sub>s</sub> =  
29      START\_TIME\_UNIT<sub>r</sub>.
- 30      • The mobile station shall store USE\_T\_ADD\_ABORT<sub>r</sub>, Reverse Supplemental  
31      Channel assignment T\_ADD abort indicator, as USE\_T\_ADD\_ABORT<sub>s</sub>.
- 32      • If IGNORE\_ESCAM<sub>s</sub> is equal to '1' and SCRM\_SEQ\_NUM<sub>r</sub> is not present or  
33      is present and is not equal to SCRM\_SEQ\_NUM<sub>s</sub>, then the mobile station  
34      shall not process the remaining Reverse Supplemental Channel assignment  
35      information in this message.
- 36      • If IGNORE\_ESCAM<sub>s</sub> is equal to '1' and SCRM\_SEQ\_NUM<sub>r</sub> is present and is  
37      equal to SCRM\_SEQ\_NUM<sub>s</sub>, then the mobile station shall set  
38      IGNORE\_ESCAM<sub>s</sub> to '0'.

- 1       • If ADD\_INFO\_INCL<sub>r</sub> is equal to '1', the message includes a Supplemental  
2       Channel assignment (that is, NUM\_FOR\_SCH<sub>r</sub> is not equal to '00' and/or  
3       NUM\_REV\_SCH<sub>r</sub> is not equal to '00'), and PILOT\_GATING\_USE\_RATE is  
4       equal to '1', the mobile station shall process the following information of the  
5       *Extended Supplemental Channel Assignment Message* as follows:  
6       – The mobile station shall set FPC\_PRI\_CHAN<sub>s</sub> = FPC\_PRI\_CHAN<sub>r</sub> at the  
7       action time of the message.
- 8       • If REV\_CFG\_INCLUDED is equal to '1', for all the (NUM\_REV\_CFG\_RECS +  
9       1) occurrences of the reverse configuration record, the mobile station shall  
10      store the REV\_WALSH\_ID matrix as follows:  
11      – REV\_WALSH\_ID<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>][REV\_SCH\_NUM\_BITS\_IDX<sub>r</sub>] =  
12      REV\_WALSH\_ID<sub>r</sub>
- 13      • If NUM\_REV\_SCH<sub>r</sub> is not equal to '00', then the mobile station shall store  
14      the following information for each occurrence of the record and process the  
15      Reverse Supplemental Burst as specified in 2.6.6.2.5.1.2:  
16      – REV\_SCH\_START\_TIME\_INCL<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] =  
17      REV\_SCH\_START\_TIME\_INCL<sub>r</sub>  
18      – If REV\_SCH\_START\_TIME\_INCL<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] is set to '1', set  
19      REV\_SCH\_START\_TIME<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_START\_TIME<sub>r</sub>  
20      – REV\_SCH\_DURATION<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_DURATION<sub>r</sub>  
21      – REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_NUM\_BITS\_IDX<sub>r</sub>
- 22      • If NUM\_FOR\_SCH<sub>r</sub> is not equal to '00', then the mobile station shall store  
23      the following information for each occurrence of the record and process the  
24      Forward Supplemental Burst as specified in 2.6.6.2.5.1.1:  
25      – FOR\_SCH\_START\_TIME\_INCL<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] =  
26      FOR\_SCH\_START\_TIME\_INCL<sub>r</sub>  
27      – If FOR\_SCH\_START\_TIME\_INCL<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is set to '1', set  
28      FOR\_SCH\_START\_TIME<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = FOR\_SCH\_START\_TIME<sub>r</sub>  
29      – FOR\_SCH\_DURATION<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = FOR\_SCH\_DURATION<sub>r</sub>  
30      – FOR\_SCH\_FER\_REP<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = FOR\_SCH\_FER\_REP<sub>r</sub>  
31      – SCCL\_INDEX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = SCCL\_INDEX<sub>r</sub>  
32      – If SCH\_BCMC\_IND field is included the mobile station shall perform the  
33      following:  
34      + If SCH\_BCMC\_IND<sub>r</sub> equals '1' and USE\_ADD\_PLCM\_FOR\_SCH<sub>r</sub>  
35      equals '1', set corresponding SCH\_BCMC\_IND[FOR\_SCH\_ID<sub>r</sub>] to '1';  
36      otherwise, set SCH\_BCMC\_IND[FOR\_SCH\_ID<sub>r</sub>] = '0'.  
37      – If SCH\_BCMC\_IND<sub>r</sub> is included and equals '1' and  
38      ADD\_PLCM\_FOR\_SCH\_INCL<sub>r</sub> is included and is set to '1', the mobile  
39      station shall store following fields:

- 1                   + Set ADD\_PLCM\_FOR\_SCH\_TYPE<sub>S</sub> to ADD\_PLCM\_FOR\_SCH\_TYPE<sub>R</sub>.
- 2                   + Set ADD\_PLCM\_FOR\_SCH\_35<sub>S</sub> to ADD\_PLCM\_FOR\_SCH\_35<sub>R</sub> if
- 3                   ADD\_PLCM\_FOR\_SCH\_TYPE<sub>R</sub> is equal to '1'.
- 4                   - If SCH\_BCMC\_IND<sub>R</sub> is included and equals '1', the mobile station shall
- 5                   store following fields:
- 6                   + USE\_ADD\_PLCM\_FOR\_SCH<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] =
- 7                   USE\_ADD\_PLCM\_FOR\_SCH<sub>R</sub>
- 8                   + FSCH\_OUTERCODE\_INCL<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] =
- 9                   FSCH\_OUTERCODE\_INCL<sub>R</sub>
- 10                  + If FSCH\_OUTERCODE\_INCL<sub>R</sub> equals '1', the mobile station shall
- 11                  store following fields:
- 12                   o FSCH\_OUTERCODE\_RATE<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] =
- 13                   FSCH\_OUTERCODE\_RATE<sub>R</sub>
- 14                   o FSCH\_OUTERCODE\_OFFSET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] =
- 15                   FSCH\_OUTERCODE\_OFFSET<sub>R</sub>
- 16                  • If FOR\_CFG\_INCLUDED is equal to '1', the mobile station shall perform the
- 17                  following:
- 18                   - Set FOR\_SCH\_FER\_REP<sub>S</sub> to FOR\_SCH\_FER\_REP<sub>R</sub>.
- 19                   - If FOR\_SCH\_FER\_REP<sub>R</sub> is equal to '0', set SCH\_TOT\_FRAMES<sub>S</sub> and
- 20                   SCH\_BAD\_FRAMES<sub>S</sub> to 0.
- 21                   - Store NUM\_FOR\_CFG\_RECS occurrences of Forward Supplemental
- 22                   Channel Configuration associated with the identification of Forward
- 23                   Supplemental Channel.
- 24                  • For each record of the Forward Supplemental Channel Code list the mobile
- 25                  station shall store the Forward Supplemental Channel Code list associated
- 26                  with the FOR\_SCH\_ID<sub>R</sub> as follows:
- 27                   - NUM\_SUP\_SHO<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>] = NUM\_SUP\_SHO<sub>R</sub>.
- 28                   - The mobile station shall determine,
- 29                   N\_FSCH\_BITS\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>], the number of
- 30                   information bits per Forward Supplemental Channel frame identified by
- 31                   FOR\_SCH\_ID and corresponding to the index SCCL\_INDEX according to
- 32                   the following rules:
- 33                   + If FSCH\_VAR\_TABLE\_IDS<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] is equal to '000', then:

- 1                   o If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '0' or if  
2                   USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '1' and  
3                   FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>R</sub>] is equal to '0000', then  
4                   the mobile station shall set the number of information bits per  
5                   frame, N\_FSCH\_BITS\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>] and  
6                   number of CRC bits per frame,  
7                   FSCH\_CRC\_LEN\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>], according  
8                   to Table 3.7.3.3.2.37-2 using FOR\_SCH\_NUM\_BITS\_IDX<sub>R</sub> as the  
9                   index to the table.
- 10                  o If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '1' and  
11                  FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>R</sub>] is not equal to '0000',  
12                  then the mobile station shall set the number of CRC bits per  
13                  frame, FSCH\_CRC\_LEN\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>],  
14                  using Table 3.7.5.20-1 and  
15                  CRC\_LEN\_IDX<sub>S</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>R</sub>]][FOR\_SC  
16                  H\_NUM\_BITS\_IDX<sub>R</sub>] as the index to the table.  
17                  The mobile station shall also set the number of information bits  
18                  per frame corresponding to SCCL\_INDEX<sub>R</sub>,  
19                  N\_FSCH\_BITS\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>], to  
20                  NUM\_BITS<sub>S</sub>[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID<sub>R</sub>]][FOR\_SCH\_N  
21                  UM\_BITS\_IDX<sub>R</sub>].
- 22                  + If FSCH\_VAR\_TABLE\_IDS[FOR\_SCH\_ID<sub>R</sub>] is not equal to '000', then:
- 23                  o The mobile station shall set  
24                  N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>], the set of indices to the  
25                  number of information bits per frame as follows:
- 26                  ◇ If FOR\_SCH\_NUM\_BITS\_IDX<sub>R</sub> is equal to '0000', then  
27                  N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] = {  
28                  FOR\_SCH\_NUM\_BITS\_IDX<sub>R</sub> },
- 29                  ◇ otherwise the mobile station shall set (initialize)  
30                  N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] =  
31                  {FOR\_SCH\_NUM\_BITS\_IDX<sub>R</sub>} and for i=1, ...,  
32                  FOR\_SCH\_NUM\_BITS\_IDX<sub>R</sub> the mobile station shall add  
33                  FOR\_SCH\_NUM\_BITS\_IDX<sub>R</sub> -  
34                  VAR\_FSCH\_RATE\_OFFSET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>][FOR\_SCH\_NUM\_  
35                  BITS\_IDX<sub>R</sub>][i] to the set specified by  
36                  N\_FSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>]



- 1                   o If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '0' or if  
2                   USE\_FLEX\_NUM\_BITS\_S is equal to '1' and  
3                   FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID\_R] is equal to '0000', then  
4                   the mobile station shall set  
5                   N\_FSCH\_BITS\_SET\_S[FOR\_SCH\_ID\_R][SCCL\_INDEX\_R], the set of  
6                   number of information bits per frame as follows.  
7                   The  $i^{th}$  member of the set  
8                   N\_FSCH\_BITS\_SET\_S[FOR\_SCH\_ID\_R][SCCL\_INDEX\_R] is obtained  
9                   using Table 3.7.3.3.2.37-2 and the  $i^{th}$  member of the set  
10                  N\_FSCH\_BITS\_IDX\_SET\_S[FOR\_SCH\_ID\_R] as the index to the  
11                  table.
- 12               o If  $USE\_FLEX\_NUM\_BITS_S$  is equal to '1' and  
13                  FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID\_R] is not equal to '0000',  
14                  then
- 15               ◇ the mobile station shall set  
16                  N\_FSCH\_BITS\_SET\_S[FOR\_SCH\_ID\_R][SCCL\_INDEX\_R], the set of  
17                  number of information bits per frame as follows.  
18                  The  $i^{th}$  member of the set  
19                  N\_FSCH\_BITS\_SET\_S[FOR\_SCH\_ID\_R][SCCL\_INDEX\_R] is equal  
20                  to  $NUM\_BITS_S[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID\_R]]$   
21                   $[N\_FSCH\_BITS\_IDX\_SET_S[FOR\_SCH\_ID\_R][i]]$ , where  
22                  N\_FSCH\_BITS\_IDX\_SET\_S[FOR\_SCH\_ID\_R][i] denotes the  $i^{th}$   
23                  member of the set N\_FSCH\_BITS\_IDX\_SET\_S[FOR\_SCH\_ID\_R]  
24                  and,
- 25               ◇ the mobile station shall set  
26                  FSCH\_CRC\_LEN\_SET\_S[FOR\_SCH\_ID\_R][SCCL\_INDEX\_R], the set  
27                  of number CRC bits per frame as follows.  
28                  The  $i^{th}$  member of the set  
29                  FSCH\_CRC\_LEN\_SET\_S[FOR\_SCH\_ID\_R][SCCL\_INDEX\_R] using  
30                  Table 3.7.5.20-1 and  
31                  CRC\_LEN\_IDX\_S[FSCH\_NBIT\_TABLE\_IDS[FOR\_SCH\_ID\_R]][N\_FS  
32                  CH\_BITS\_IDX\_SET\_S[FOR\_SCH\_ID\_R][i]] as the index to the  
33                  table, where N\_FSCH\_BITS\_IDX\_SET\_S[FOR\_SCH\_ID\_R][i]  
34                  denotes the  $i^{th}$  member of the set  
35                  N\_FSCH\_BITS\_IDX\_SET\_S[FOR\_SCH\_ID\_R].
- 36               – For the  $i^{th}$  record of the Forward Supplemental Channel Active Set (for all  
37                  values of i between 1 and NUM\_SUP\_SHO+1) specified in this message,  
38                  the mobile station shall store the following entries corresponding to the  
39                  SCCL\_INDEX\_R as follows:
- 40               + PILOT\_PN\_S[FOR\_SCH\_ID\_R][SCCL\_INDEX\_R][i] = PILOT\_PN\_R,
- 41               + Set the ADD\_PILOT\_REC\_INCL field to ADD\_PILOT\_REC\_INCL\_R. If  
42                  ADD\_PILOT\_REC\_INCL\_R equals '1', the mobile station shall store the  
43                  following:

- 1                   o Set the PILOT\_REC\_TYPE field of PILOT\_REC to
- 2                   PILOT\_REC\_TYPE<sub>r</sub>.
- 3                   o If PILOT\_REC\_TYPE<sub>r</sub> equals '000', the mobile station shall set the
- 4                   TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL<sub>r</sub>
- 5                   and set the TD\_MODE field of PILOT\_REC to TD\_MODE<sub>r</sub>.
- 6                   o If PILOT\_REC\_TYPE<sub>r</sub> is equal to '001', the mobile station shall.
- 7                   – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 8                   – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 9                   AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 10                  WALSH\_LENGTH<sub>r</sub>.
- 11                  o If NGHBR\_PILOT\_REC\_TYPE<sub>r</sub> is equal to '010', the mobile station
- 12                  shall:
- 13                  – Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 14                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 15                  AUX\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 16                  WALSH\_LENGTH<sub>r</sub>.
- 17                  – Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to
- 18                  AUX\_TD\_POWER\_LEVEL<sub>r</sub>.
- 19                  – Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE<sub>r</sub>.
- 20                  o If PILOT\_REC\_TYPE<sub>r</sub> is equal to '011', the mobile station shall:
- 21                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 22                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 23                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 24                  SR3\_PILOT\_POWER1<sub>r</sub>.
- 25                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 26                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 27                  o If PILOT\_REC\_TYPE<sub>r</sub> is equal to '100', the mobile station shall:
- 28                  – Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to
- 29                  SR3\_PRIMARY\_PILOT<sub>r</sub>.
- 30                  – Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to
- 31                  SR3\_PILOT\_POWER1<sub>r</sub>.
- 32                  – Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to
- 33                  SR3\_PILOT\_POWER2<sub>r</sub>.
- 34                  – Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF<sub>r</sub>.
- 35                  – Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to
- 36                  AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code length specified by
- 37                  WALSH\_LENGTH<sub>r</sub>.

- 1                                   - If ADD\_INFO\_INCL1<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF1  
2                                   field of PILOT\_REC to QOF1<sub>r</sub> and set the  
3                                   AUX\_PILOT\_WALSH\_CODE1 field of PILOT\_REC to  
4                                   AUX\_PILOT\_WALSH1<sub>r</sub> with the Walsh Code length specified  
5                                   by WALSH\_LENGTH1<sub>r</sub>.
- 6                                   - Otherwise, set the AUX\_PILOT\_QOF1 field of PILOT\_REC to  
7                                   QOF<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE1 field of  
8                                   PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code  
9                                   length specified by WALSH\_LENGTH<sub>r</sub>.
- 10                                  - If ADD\_INFO\_INCL2<sub>r</sub> is equal to '1', set the AUX\_PILOT\_QOF2  
11                                  field of PILOT\_REC to QOF2<sub>r</sub> and set the  
12                                  AUX\_PILOT\_WALSH\_CODE2 field of PILOT\_REC to  
13                                  AUX\_PILOT\_WALSH2<sub>r</sub> with the Walsh Code length specified  
14                                  by WALSH\_LENGTH2<sub>r</sub>.
- 15                                  - Otherwise, set the AUX\_PILOT\_QOF2 field of PILOT\_REC to  
16                                  QOF<sub>r</sub> and set the AUX\_PILOT\_WALSH\_CODE2 field of  
17                                  PILOT\_REC to AUX\_PILOT\_WALSH<sub>r</sub> with the Walsh Code  
18                                  length specified by WALSH\_LENGTH<sub>r</sub>.
- 19                                  + QOF\_MASK\_ID\_SCH<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i] =  
20                                  QOF\_MASK\_ID\_SCH<sub>r</sub>.
- 21                                  + FOR\_SCH\_CC\_INDEX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]=  
22                                  CODE\_CHAN\_SCH<sub>r</sub>.
- 23                                  + If the mobile station supports Code Combining Soft Handoff, and  
24                                  CCSH\_INCLUDED is set to '1', set  
25                                  CCSH\_ENCODER\_TYPE<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]=  
26                                  CCSH\_ENCODER\_TYPE<sub>r</sub>.
- 27                                  + If the mobile station supports Code Combining Soft Handoff, and  
28                                  CCSH\_INCLUDED is set to '0', set  
29                                  CCSH\_ENCODER\_TYPE<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>][i]= 0 (default  
30                                  Turbo Encoder type)
- 31                                  • The mobile station may soft-combine the Forward Supplemental Channel  
32                                  frames received on the Forward Supplemental Channels in the same  
33                                  Forward Supplemental Channel Active Set.
- 34                                  • If the mobile station supports any Radio Configuration greater than 2, the  
35                                  mobile station shall perform the following:
  - 36                                   - If FPC\_INCL<sub>r</sub> is equal to '1', the mobile station shall:
    - 37                                   + Set FPC\_MODE\_SCH<sub>s</sub> to FPC\_MODE\_SCH<sub>r</sub>.
  - 38                                   - If FPC\_INCL is equal to '1' and FPC\_MODE\_SCH is equal to '001', '010',  
39                                   '101', or '110', the mobile station shall:
    - 40                                   + Set FPC\_SEC\_CHAN<sub>s</sub> to FPC\_SEC\_CHAN<sub>r</sub>.

- 1           + Set FPC\_BCMC\_CHAN<sub>S</sub> to FPC\_BCMC\_CHAN<sub>R</sub>.
- 2           - If NUM\_SUP<sub>R</sub> is included and not equal to '00', for each Supplemental
- 3           Channel included in the message, the mobile station shall:
- 4           + Set SCH\_ID<sub>S</sub> to SCH\_ID<sub>R</sub>.
- 5           + Set FPC\_SCH\_FER<sub>S</sub> to FPC\_SCH\_FER<sub>R</sub>.
- 6           + Set FPC\_SCH\_INIT\_SETPT<sub>S</sub> as follows:
  - 7           o If FPC\_SCH\_INIT\_SETPT\_OP<sub>R</sub> is set to '0', set
  - 8           FPC\_SCH\_INIT\_SETPT<sub>S</sub> to FPC\_SCH\_INIT\_SETPT<sub>R</sub>.
  - 9           o If FPC\_SCH\_INIT\_SETPT\_OP<sub>R</sub> is set to '1':
    - 10           ◇ If FPC\_PRI\_CHAN<sub>R</sub> is equal to '0', set FPC\_SCH\_INIT\_SETPT<sub>S</sub>
    - 11           to (FPC\_FCH\_CURR\_SETPT<sub>S</sub> + FPC\_SCH\_INIT\_SETPT<sub>R</sub>).
    - 12           ◇ Otherwise, set FPC\_SCH\_INIT\_SETPT<sub>S</sub> to
    - 13           (FPC\_DCCH\_CURR\_SETPT<sub>S</sub> + FPC\_SCH\_INIT\_SETPT<sub>R</sub>).
- 14           + Set FPC\_SCH\_MIN\_SETPT<sub>S</sub> to FPC\_SCH\_MIN\_SETPT<sub>R</sub>.
- 15           + Set FPC\_SCH\_MAX\_SETPT<sub>S</sub> to FPC\_SCH\_MAX\_SETPT<sub>R</sub>.
- 16           - If FPC\_THRESH\_SCH\_INCL is included and equal to '1', the mobile
- 17           station shall set FPC\_SETPT\_THRESH\_SCH<sub>S</sub> to SETPT\_THRESH\_SCH<sub>R</sub>.
- 18           • If RPC\_INCL is equal to '1', the mobile station shall set RLGAIN\_SCH\_PILOT<sub>S</sub>
- 19           to RLGAIN\_SCH\_PILOT<sub>R</sub>.
- 20           • If NUM\_3X\_CFG<sub>R</sub> is not equal to '00', the mobile station shall store the
- 21           Forward 3X Supplemental Channel Configuration associated with the
- 22           identification of Forward Supplemental Channel (NUM\_3X\_CFG<sub>S</sub> =
- 23           NUM\_3X\_CFG<sub>R</sub>).
- 24           • For each 3X SCH record included in this message, the mobile station shall
- 25           update the Forward Supplemental Channel Code list associated with the
- 26           FOR\_SCH\_ID<sub>R</sub> as follows:
  - 27           - For the i<sup>th</sup> record of the Forward Supplemental Channel Active Set (for all
  - 28           values of i between 1 and NUM\_SUP\_SHO+1) specified in this message,
  - 29           the mobile station shall store the following three entries corresponding
  - 30           to the SCCL\_INDEX<sub>R</sub> as follows:
    - 31           + If 3X\_SCH\_LOW\_INCL<sub>R</sub> equals '1', set
    - 32           QOF\_MASK\_ID\_SCH\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
    - 33           QOF\_MASK\_ID\_SCH\_LOW<sub>R</sub> and
    - 34           FOR\_SCH\_CC\_INDEX\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
    - 35           CODE\_CHAN\_SCH\_LOW<sub>R</sub>. Otherwise, set
    - 36           QOF\_MASK\_ID\_SCH\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
    - 37           QOF\_MASK\_ID\_SCH[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] and
    - 38           FOR\_SCH\_CC\_INDEX\_LOW[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i] to
    - 39           CODE\_CHAN\_SCH[FOR\_SCH\_ID<sub>R</sub>][SCCL\_INDEX<sub>R</sub>][i].

- 1                   + If  $3X\_SCH\_HIGH\_INCL_r$  equals '1', set  
 2                    $QOF\_MASK\_ID\_SCH\_HIGH[FOR\_SCH\_ID_r][SCCL\_INDEX_r][i]$  to  
 3                    $QOF\_MASK\_ID\_SCH\_HIGH_r$  and  
 4                    $FOR\_SCH\_CC\_INDEX\_HIGH[FOR\_SCH\_ID_r][SCCL\_INDEX_r][i]$  to  
 5                    $CODE\_CHAN\_SCH\_HIGH_r$ . Otherwise, set  
 6                    $QOF\_MASK\_ID\_SCH\_HIGH[FOR\_SCH\_ID_r][SCCL\_INDEX_r][i]$  to  
 7                    $QOF\_MASK\_ID\_SCH[FOR\_SCH\_ID_r][SCCL\_INDEX_r][i]$  and  
 8                    $FOR\_SCH\_CC\_INDEX\_HIGH[FOR\_SCH\_ID_r][SCCL\_INDEX_r][i]$  to  
 9                    $CODE\_CHAN\_SCH[FOR\_SCH\_ID_r][SCCL\_INDEX_r][i]$ .
- 10           • If  $PILOT\_GATING\_USE\_RATE$  is set to '1' and if  $NUM\_REV\_SCH_r$  or  
 11            $NUM\_FOR\_SCH_r$  is not equal to '00', the mobile station shall perform the  
 12           following:
- 13           – The mobile station shall set  $PILOT\_GATING\_USE\_RATE$  to '0' and shall  
 14           start the continuous reverse pilot at the specified action time and, if a F-  
 15           PDCH is assigned, the mobile station shall start the continuous R-  
 16           CQICH as defined in [3].
- 17           – If a F-PDCH is not assigned and the Fundamental Channel was  
 18           previously established prior to transitioning to the *Control Hold Mode*,  
 19           the mobile station shall start processing F-FCH and start transmitting  
 20           on R-FCH at the action time of the message. The mobile station shall  
 21           establish the Fundamental Channel with the same configuration as  
 22           previously used.
- 23           • If  $FOR\_SCH\_CC\_INCL_r$  equals '1', the mobile station shall store the  
 24            $NUM\_FOR\_SCH_r$  occurrences of the Forward Supplemental Channel  
 25           channel configuration records as follows:
- 26           – The mobile station shall store the Forward Supplemental Channel  
 27           Identification ( $FOR\_SCH\_ID[FOR\_SCH\_ID_r]_s = FOR\_SCH\_ID_r$ ).
- 28           – The mobile station shall store the Forward Supplemental Channel  
 29           Multiplex Option ( $FOR\_SCH\_MUX[FOR\_SCH\_ID_r]_s = FOR\_SCH\_MUX_r$ ).
- 30           – The mobile station shall store the Forward Supplemental Channel Radio  
 31           Configuration ( $FOR\_SCH\_RC[FOR\_SCH\_ID_r]_s = SCH\_RC_r$ ).
- 32           – The mobile station shall store the Forward Supplemental Channel  
 33           Coding Type ( $FOR\_SCH\_CODING[FOR\_SCH\_ID_r]_s = CODING_r$ ).
- 34           – If  $FRAME\_40\_USED_r$  and  $FRAME\_80\_USED_r$  are both equal to '0', the  
 35           mobile station shall set  $FOR\_SCH\_FRAME\_LENGTH_s[FOR\_SCH\_ID_r]$  to  
 36           '00' (i.e., 20 ms frame length).
- 37           – If  $FRAME\_40\_USED_r$  is equal to '1', the mobile station shall set  
 38            $FOR\_SCH\_FRAME\_LENGTH_s[FOR\_SCH\_ID_r]$  to '01' (i.e., 40 ms frame  
 39           length).

- 1           - If FRAME\_80\_USED<sub>r</sub> is equal to '1', the mobile station shall set
- 2           FOR\_SCH\_FRAME\_LENGTH<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] to '10' (i.e., 80 ms frame
- 3           length).
- 4           - F\_MAX\_RATE\_IDX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = MAX\_RATE<sub>r</sub>.
- 5       • If REV\_SCH\_CC\_INCL<sub>r</sub> equals '1', the mobile station shall store the
- 6       NUM\_REV\_SCH<sub>r</sub> occurrences of the Reverse Supplemental Channel channel
- 7       configuration records as follows:
- 8           - The mobile station shall store the Reverse Supplemental Channel
- 9           Identification (REV\_SCH\_ID[REV\_SCH\_ID<sub>r</sub>]<sub>s</sub> = REV\_SCH\_ID<sub>r</sub>).
- 10          - The mobile station shall store the Reverse Supplemental Channel
- 11          Multiplex Option (REV\_SCH\_MUX[REV\_SCH\_ID<sub>r</sub>]<sub>s</sub> = REV\_SCH\_MUX<sub>r</sub>).
- 12          - The mobile station shall store the Reverse Supplemental Channel Radio
- 13          Configuration (REV\_SCH\_RC[REV\_SCH\_ID<sub>r</sub>]<sub>s</sub> = SCH\_RC<sub>r</sub>).
- 14          - The mobile station shall store the Reverse Supplemental Channel
- 15          Coding Type (REV\_SCH\_CODING[REV\_SCH\_ID<sub>r</sub>]<sub>s</sub> = CODING<sub>r</sub>).
- 16          - If FRAME\_40\_USED<sub>r</sub> and FRAME\_80\_USED<sub>r</sub> are both equal to '0', the
- 17          mobile station shall set REV\_SCH\_FRAME\_LENGTH<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to
- 18          '00' (i.e., 20 ms frame length).
- 19          - If FRAME\_40\_USED<sub>r</sub> is equal to '1', the mobile station shall set
- 20          REV\_SCH\_FRAME\_LENGTH<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to '01' (i.e., 40 ms frame
- 21          length).
- 22          - If FRAME\_80\_USED<sub>r</sub> is equal to '1', the mobile station shall set
- 23          REV\_SCH\_FRAME\_LENGTH<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to '10' (i.e., 80 ms frame
- 24          length).
- 25          - R\_MAX\_RATE\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = MAX\_RATE<sub>r</sub>.
- 26       14. *Forward Supplemental Channel Assignment Mini Message*: The mobile station
- 27       shall process this message as follows:
- 28       The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
- 29       set to '00000111' (message can not be handled by the current mobile station
- 30       configuration), if any of the mobile station's forward supplemental channel
- 31       configuration parameters for the corresponding Supplemental Channel is NULL.
- 32       Otherwise, the mobile station shall store the following information and process
- 33       the Forward Supplemental Burst as specified in 2.6.6.2.5.1.1:
- 34       • Set FOR\_SCH\_START\_TIME\_INCL<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] to '1'
- 35       • FOR\_SCH\_START\_TIME<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = FOR\_SCH\_START\_TIME<sub>r</sub>
- 36       • FOR\_SCH\_DURATION<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = FOR\_SCH\_DURATION<sub>r</sub>
- 37       • SCCL\_INDEX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] = SCCL\_INDEX<sub>r</sub>

- If PILOT\_GATING\_USE\_RATE is set to '1', the mobile station shall perform the following:
  - The mobile station shall set PILOT\_GATING\_USE\_RATE to '0' and shall start the continuous reverse pilot at the specified action time and, if a F-PDCH is assigned, the mobile station shall start the continuous R-CQICH as defined in [3].
  - If a F-PDCH is not assigned and the Fundamental Channel was previously established prior to transitioning to the *Control Hold Mode*, the mobile station shall start processing F-FCH and start transmitting on R-FCH at the action time of the message. The mobile station shall establish the Fundamental Channel with the same configuration as previously used.

15. *Reverse Supplemental Channel Assignment Mini Message*: The mobile station shall process this message as follows:

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000111' (message can not be handled by the current mobile station configuration), if any of the mobile station's reverse supplemental channel configuration parameters for the corresponding Supplemental Channel is NULL, or if the Reverse Packet Data Channel is assigned.

If IGNORE\_ESCAM<sub>s</sub> is equal to '1', the mobile station shall not process the Reverse Supplemental Channel assignment information in this message.

Otherwise, the mobile station shall store the following information and process the Reverse Supplemental Burst as specified in 2.6.6.2.5.1.2:

- Set REV\_SCH\_START\_TIME\_INCL<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] to '1'
- REV\_SCH\_START\_TIME<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_START\_TIME<sub>r</sub>
- REV\_SCH\_DURATION<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_DURATION<sub>r</sub>
- REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] = REV\_SCH\_NUM\_BITS\_IDX<sub>r</sub>
- If PILOT\_GATING\_USE\_RATE is set to '1', the mobile station shall perform the following:
  - The mobile station shall set PILOT\_GATING\_USE\_RATE to '0' and shall start the continuous reverse pilot at the specified action time and, if a F-PDCH is assigned, the mobile station shall start the continuous R-CQICH as defined in [3].
  - If a F-PDCH is not assigned and the Fundamental Channel was previously established prior to transitioning to the *Control Hold Mode*, the mobile station shall start processing F-FCH and start transmitting on R-FCH at the action time of the message. The mobile station shall establish the Fundamental Channel with the same configuration as previously used.

#### 2.6.6.2.5.1.1 Processing of the Forward Supplemental Burst Assignment

A Forward Supplemental Assignment specifies the explicit start time identified by FOR\_SCH\_START\_TIME or the implicit start time (if FOR\_SCH\_START\_TIME\_INCL is set to '0'), FOR\_SCH\_DURATION, and SCCL\_INDEX of a forward burst assignment. The time interval of duration is specified by FOR\_SCH\_DURATION (see Table 3.7.3.3.2.37-3) and starts at the time specified by the explicit start time FOR\_SCH\_START\_TIME or the implicit start time (if FOR\_SCH\_START\_TIME\_INCL is set to '0'). This time interval for a Forward Supplemental Assignment is called the Forward Supplemental Assignment Interval. A value of FOR\_SCH\_DURATION equal to '1111' indicates infinite duration. The variable SCCL\_INDEX<sub>s</sub>[FOR\_SCH\_ID] specifies the rate, QOF index and the Active Set for the Forward Supplemental Channel identified by FOR\_SCH\_ID for a given Forward Supplemental Assignment. A value of FOR\_SCH\_DURATION equal to '0000' indicates that the mobile station should stop processing the forward Supplemental Channels at the explicit start time specified by FOR\_SCH\_START\_TIME or the implicit start time (if FOR\_SCH\_START\_TIME\_INCL is set to '0'). The implicit start time is the time occurring no later than the first 80 ms boundary (relative to System Time) which occurs at least 80 ms after the end of the frame containing the last bit of the *Extended Supplemental Channel Assignment Message* or the action time of the *Universal Handoff Direction Message*.

If the mobile station receives an *Extended Supplemental Channel Assignment Message* with FOR\_SCH\_CC\_INCL set to '1', the mobile station shall begin to use the Forward Supplemental Channel configuration specified by this message at the start time of this Forward Supplemental Assignment.

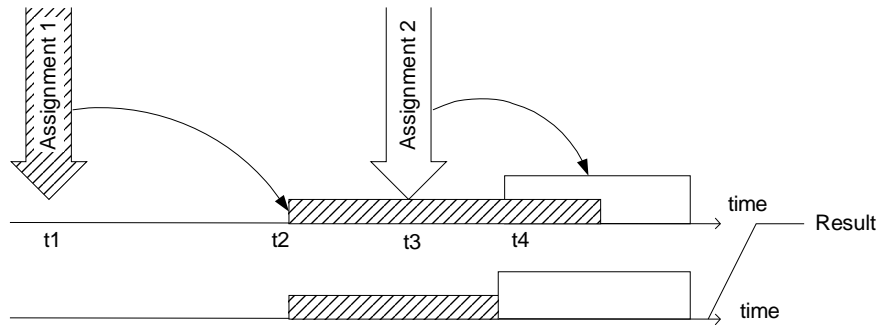
For each Forward Supplemental Assignment the mobile station shall determine the start time for processing forward supplemental channel as the time for which the following equation holds:

$$(\lfloor t / (\text{START\_TIME\_UNIT}_s + 1) \rfloor - \text{FOR\_SCH\_START\_TIME}_r) \bmod 32 = 0,$$

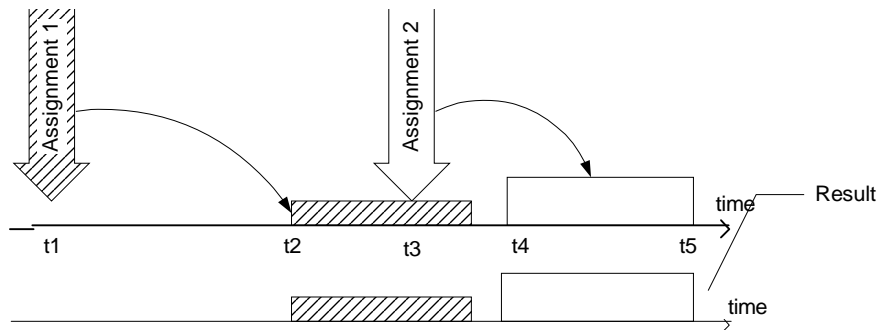
where t is the System Time in units of 20 ms.

Figure 2.6.6.2.5.1.1-1 illustrates the scenario in which a second Forward Supplemental Assignment is received while the mobile station is processing the forward supplemental channel according to a previously received assignment. Two cases are displayed in Figure 2.6.6.2.5.1.1-1: Case a) where the first assignment extends beyond the start time of the second assignment and Case b) where the first assignment ends before the second one starts.





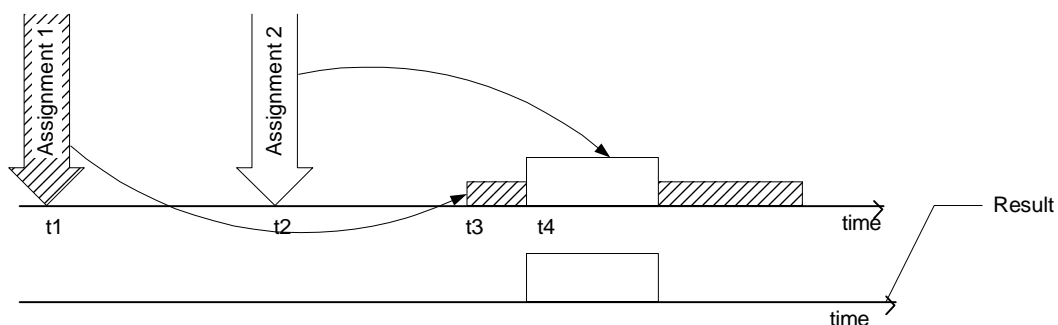
a) "Assignment 1" extends beyond the start time for "Assignment 2"



b) "Assignment 1" ends prior to the start time of "Assignment 2"

**Figure 2.6.6.2.5.1.1-1. New Supplemental Channel Assignment Received while a Previous Supplemental Channel Assignment is in Progress**

Figure 2.6.6.2.5.1.1-2 shows an example scenario in which the mobile station receives a second Forward Supplemental Assignment before it starts processing the supplemental channel according to the first assignment. In this case, the second assignment simply replaces the first assignment.



**Figure 2.6.6.2.5.1.1-2. New Supplemental Channel Assignment Received before a Previous Supplemental Channel Assignment starts**

The mobile station shall set  $FPC\_MODE_S$  to  $FPC\_MODE\_SCH_S$  at the  $FOR\_SCH\_START\_TIME_S$  of the forward Supplemental Channel assignment. The mobile station shall set  $FPC\_MODE_S$  to  $FPC\_MODE\_NO\_SCH_S$  at the end of the forward Supplemental Channel assignment.

For each Forward Supplemental Channel assignment corresponding to each Forward Supplemental Channel (identified by FOR\_SCH\_ID), the mobile station should perform the following:

- If FOR\_SCH\_DURATION<sub>s</sub>[FOR\_SCH\_ID] is not equal to '0000', then
  - If the mobile station is currently processing the Forward Supplemental Channel identified by FOR\_SCH\_ID, then the mobile station should continue processing the Forward Supplemental Channel identified by FOR\_SCH\_ID according to the Forward Supplemental Assignment previously received for the Forward Supplemental Channel identified by FOR\_SCH\_ID up to the time specified by the FOR\_SCH\_START\_TIME<sub>s</sub>[FOR\_SCH\_ID] (i.e., the mobile station should stop processing the forward supplemental channel identified by FOR\_SCH\_ID at either the time specified by the start time of the new assignment, or at the time the previously received assignment ends, whichever time is earlier).

At the time specified by FOR\_SCH\_START\_TIME<sub>s</sub>[FOR\_SCH\_ID], the mobile station should start processing the Forward Supplemental Channel identified by FOR\_SCH\_ID for a duration of time specified by FOR\_SCH\_DURATION[FOR\_SCH\_ID]<sub>s</sub> with FOR\_SCH\_MUX<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>], FOR\_SCH\_RC<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>], FOR\_SCH\_CODING<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>], FOR\_SCH\_FRAME\_LENGTH<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>], the QOF index, the Supplemental Channel Active Set indexed by SCCL\_INDEX<sub>s</sub>[FOR\_SCH\_ID], and number of information bits per frame (or set of number of bits per frame if FSCH\_VAR\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is not equal to '000') specified by N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>].

If the set of number of bits per frame, N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>], has more than one member and F\_INC\_RATE\_ALLOWED<sub>s</sub> is equal to '0', then the following rule applies for the duration of this assignment:

- + Once the mobile station determines the forward Supplemental Channel number of bits per frame, the number of bits per frame in the subsequent Forward Supplemental Channel frames may be any member of the set N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>] which is smaller or equal to the number of bits in the current frame.
- Otherwise, if the mobile station is not currently processing the Forward Supplemental Channel identified by FOR\_SCH\_ID, then at the time specified by FOR\_SCH\_START\_TIME<sub>s</sub>[FOR\_SCH\_ID], the mobile station should start processing the Forward Supplemental Channel identified by FOR\_SCH\_ID for a duration of time specified by FOR\_SCH\_DURATION<sub>s</sub>[FOR\_SCH\_ID] with the QOF index, the Supplemental Channel Active Set indexed by SCCL\_INDEX<sub>s</sub>[FOR\_SCH\_ID], and number of bits per frame (or set of number of information bits per frame if FSCH\_VAR\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is not equal to '000') specified by N\_FSCH\_BITS\_SET<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>][SCCL\_INDEX<sub>r</sub>].

If the set of number of bits per frame,  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_I][SCCL\_INDEX_I]$  and  $F\_INC\_RATE\_ALLOWED_S$  is equal to '0', has more than one member, then the following rule applies for the duration of this assignment:

- + Once the mobile station determines the forward Supplemental Channel number of bits per frame, the number of bits per frame in the subsequent Forward Supplemental Channel frames may be any member of the set  $N\_FSCH\_BITS\_SET_S[FOR\_SCH\_ID_I][SCCL\_INDEX_I]$  which is smaller or equal to the number of bits in the current frame.

- If  $FOR\_SCH\_DURATION_S[FOR\_SCH\_ID]$  is equal to '0000', the mobile station should perform the following:

- If the mobile station is currently processing the Forward Supplemental Channel identified by  $FOR\_SCH\_ID$ , then the mobile station should continue processing the Forward Supplemental Channel identified by  $FOR\_SCH\_ID$  according to the Forward Supplemental Assignment previously received for the Forward Supplemental Channel identified by  $FOR\_SCH\_ID$  up to the time specified by the implicit start time ( $FOR\_SCH\_START\_TIME\_INCL_S$  is set to '0') or the explicit start time ( $FOR\_SCH\_START\_TIME\_INCL_S$  is set to '1') (i.e., the mobile station should stop processing the forward supplemental channel identified by  $FOR\_SCH\_ID$  at the time specified by the implicit start time or the explicit start time, or at the time the previously received assignment ends, whichever time is earlier). The mobile station should cancel the pending Forward Supplemental Channel assignment if any.

- + If  $FOR\_SCH\_START\_TIME\_INCL_S$  is equal to '1', the mobile station should stop processing the Forward Supplemental Channel identified by  $FOR\_SCH\_ID$  at the time specified by  $FOR\_SCH\_START\_TIME_S[FOR\_SCH\_ID]$ .

- + If  $FOR\_SCH\_START\_TIME\_INCL_S$  is equal to '0', the mobile station should stop processing the Forward Supplemental Channel identified by  $FOR\_SCH\_ID$  no later than the first 80 ms boundary (relative to System Time) occurring at least 80 ms after the end of the frame containing the last bit of the *Extended Supplemental Channel Assignment Message* or the action time of the *Universal Handoff Direction Message*.

- Otherwise, if the mobile station is not currently processing the Forward Supplemental Channel identified by  $FOR\_SCH\_ID$ , the mobile station should cancel the pending Forward Supplemental Channel assignment if any.

#### 2.6.6.2.5.1.2 Processing of the Reverse Supplemental Burst Assignment

A Reverse Supplemental Assignment specifies the explicit start time identified by  $REV\_SCH\_START\_TIME$  or the implicit start time (if  $REV\_SCH\_START\_TIME\_INCL$  is set to '0'),  $REV\_SCH\_DURATION$ , and  $REV\_SCH\_NUM\_BITS\_IDX$  of a reverse burst assignment. The time interval of duration is specified by  $REV\_SCH\_DURATION$  (see Table 3.7.3.3.2.37-3) and starts at the time specified by the explicit start time  $REV\_SCH\_START\_TIME$  or the

implicit start time (if REV\_SCH\_START\_TIME\_INCL is set to '0'). This time interval for a Reverse Supplemental Assignment is called the reverse supplemental assignment interval. A value of REV\_SCH\_DURATION equal to '1111' indicates infinite duration. A value of REV\_SCH\_DURATION equal to '0000' indicates that the mobile station should stop transmitting the reverse Supplemental Channels at the explicit start time specified by REV\_SCH\_START\_TIME or the implicit start time (if REV\_SCH\_START\_TIME\_INCL is set to '0'). The implicit start time is the time occurring no later than the first 80 ms boundary (relative to System Time) which occurs at least 80 ms after the end of the frame containing the last bit of the *Extended Supplemental Channel Assignment Message* or the action time of the *Universal Handoff Direction Message*.

If the mobile station receives an *Extended Supplemental Channel Assignment Message* with REV\_SCH\_CC\_INCL set to '1', the mobile station shall begin to use the Reverse Supplemental Channel configuration specified by this message at the start time of this Reverse Supplemental Assignment.

For each Reverse Supplemental Assignment the mobile station shall determine the start time for processing reverse supplemental channel as the time for which the following equation holds:

$$(\lfloor t / (\text{START\_TIME\_UNIT}_S + 1) \rfloor - \text{REV\_SCH\_START\_TIME}_R) \bmod 32 = 0,$$

where t is the System Time in units of 20 ms.

Figure 2.6.6.2.5.1.1-1 illustrates the scenario in which a second Reverse Supplemental Assignment is received while the mobile station is transmitting on the reverse supplemental channel according to a previously received assignment. Two cases are displayed in Figure 2.6.6.2.5.1.1-1: Case a) where the first assignment extends beyond the start time of the second assignment and Case b) where the first assignment ends before the second one starts.

Figure 2.6.6.2.5.1.1-2 shows an example scenario in which the mobile station receives a second Reverse Supplemental Assignment before it starts transmitting on the supplemental channel according to the first assignment. In this case, the second assignment simply replaces the first assignment.

For each Reverse Supplemental Channel assignment corresponding to each Reverse Supplemental Channel (identified by REV\_SCH\_ID), the mobile station shall perform the following:

- The mobile station shall determine,  $N_{\text{RSCH\_BITS}_S}[\text{REV\_SCH\_ID}_R]$ , the number of information bits per Reverse Supplemental Channel frame identified by REV\_SCH\_ID according to the following rules:
  - If  $\text{RSCH\_VAR\_TABLE\_ID}_S[\text{REV\_SCH\_ID}_R]$  is equal to '000', then:

- 1           + If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '0' or if USE\_FLEX\_NUM\_BITS<sub>S</sub> is  
2           equal to '1' and RSCH\_NBIT\_TABLE\_ID<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] is equal to '0000',  
3           then the mobile station shall set the number of information bits per frame,  
4           N\_RSCH\_BITS\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] and number of CRC bits per frame,  
5           RSCH\_CRC\_LEN\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>], according to Table 3.7.3.3.2.37-2  
6           using REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub> as the index to the table.
- 7           + If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '1' and  
8           RSCH\_NBIT\_TABLE\_ID<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] is not equal to '0000', then the  
9           mobile station shall set the number of CRC bits per frame,  
10          RSCH\_CRC\_LEN\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>], according to Table 3.7.5.20-1 using  
11          CRC\_LEN\_IDX<sub>S</sub>[RSCH\_NBIT\_TABLE\_ID<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>]][REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub>]  
12          as the index to the table. The mobile station shall also set the  
13          number of information bits per frame, N\_RSCH\_BITS\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>], to  
14          NUM\_BITS<sub>S</sub>[RSCH\_NBIT\_TABLE\_ID<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>]][  
15          [REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub>].
- 16         - If RSCH\_VAR\_TABLE\_ID<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] is not equal to '000', then:
- 17           + The mobile station shall set N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>], the  
18           set of indices to the number of information bits per frame as follows:
- 19           o If REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub> is equal to '0000', then  
20           N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] = {REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub>},
- 21           o otherwise, the mobile station shall set (initialize)  
22           N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] = { REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub>  
23           }, and for i=1, ..., REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub> the mobile station shall  
24           add REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub> -  
25           VAR\_RSCH\_RATE\_OFFSET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>][REV\_SCH\_NUM\_BITS\_IDX<sub>R</sub>][  
26           i] to the set specified by N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>]
- 27           + If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '0' or if USE\_FLEX\_NUM\_BITS<sub>S</sub> is  
28           equal to '1' and RSCH\_NBIT\_TABLE\_ID<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] is equal to '0000',  
29           then the mobile station shall determine N\_RSCH\_BITS\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>],  
30           the set of number of information bits per frame as follows. The  $i^{\text{th}}$  member of  
31           the set N\_RSCH\_BITS\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] is obtained using Table  
32           3.7.3.3.2.37-1 and the  $i^{\text{th}}$  member of the set  
33           N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] as the index to the table.
- 34           + If USE\_FLEX\_NUM\_BITS<sub>S</sub> is equal to '1' and  
35           RSCH\_NBIT\_TABLE\_ID<sub>S</sub>[FOR\_SCH\_ID<sub>R</sub>] is not equal to '0000', then
- 36           o the mobile station shall set N\_RSCH\_BITS\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>], the set  
37           of number of information bits per frame as follows.  
38           The  $i^{\text{th}}$  member of the set N\_RSCH\_BITS\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>] is equal to  
39           NUM\_BITS<sub>S</sub>[SCH\_NBIT\_TABLE\_ID<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>]][  
40           [N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>]][i]], where  
41           N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>][i] denotes the  $i^{\text{th}}$  member of the  
42           set N\_RSCH\_BITS\_IDX\_SET<sub>S</sub>[REV\_SCH\_ID<sub>R</sub>].

- 1           o the mobile station shall set RSCH\_CRC\_LEN\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>], the  
2           set of number of information bits per frame as follows.  
3           The  $i^{\text{th}}$  member of the set RSCH\_CRC\_LEN\_IDX\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] is  
4           equal to  
5           CRC\_LEN\_IDX<sub>s</sub>[RSCH\_NBIT\_TABLE\_ID<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>]][N\_RSCH\_BITS\_I  
6           DX\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>][i]], where  
7           N\_RSCH\_BITS\_IDX\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>][i] denotes the  $i^{\text{th}}$  member of the  
8           set N\_RSCH\_BITS\_IDX\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>].
- 9       • If REV\_SCH\_DURATION<sub>s</sub>[REV\_SCH\_ID] is not equal to '0000', then
- 10       – If the mobile station is currently transmitting on the Reverse Supplemental  
11       Channel identified by REV\_SCH\_ID, then the mobile station may continue  
12       transmitting on the Reverse Supplemental Channel identified by REV\_SCH\_ID  
13       with the Walsh cover specified by  
14       REV\_WALSH\_ID<sub>s</sub>[REV\_SCH\_ID][REV\_SCH\_NUM\_BITS\_IDX[REV\_SCH\_ID<sub>r</sub>]]  
15       according to the current Reverse Supplemental Assignment for the Reverse  
16       Supplemental Channel identified by REV\_SCH\_ID up to the time specified by  
17       the REV\_SCH\_START\_TIME<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] (i.e., the mobile station shall stop  
18       transmitting on the reverse supplemental channel identified by REV\_SCH\_ID at  
19       either the time specified by the start time of the new assignment, or at the time  
20       the previously received assignment ends, whichever time is earlier).
- 21       At the time specified by REV\_SCH\_START\_TIME<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>], the mobile  
22       station may start transmitting on the Reverse Supplemental Channel identified  
23       by REV\_SCH\_ID with REV\_SCH\_MUX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>],  
24       REV\_SCH\_RC<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>], REV\_SCH\_CODING<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>],  
25       REV\_SCH\_FRAME\_LENGTH<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>], the Walsh cover specified by  
26       REV\_WALSH\_ID<sub>s</sub>[REV\_SCH\_ID][REV\_SCH\_NUM\_BITS\_IDX<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>]]  
27       and number of bits per frame (or set of number of information bits per frame if  
28       RSCH\_VAR\_TABLE\_ID<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>] is not equal to '000') specified by  
29       N\_RSCH\_BITS\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>].
- 30       If the set of number of bits per frame, N\_RSCH\_BITS\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>], has  
31       more than one member and R\_INC\_RATE\_ALLOWED<sub>s</sub> is equal to '0', then the  
32       following rule applies for the duration of this assignment:
- 33       + Once the mobile station transmits  $n$  number of bits per Reverse  
34       Supplemental Channel specifies by REV\_SCH\_ID, where  $n$  is a member of  
35       the set N\_RSCH\_BITS\_SET<sub>s</sub>[REV\_SCH\_ID<sub>r</sub>], the mobile station shall not  
36       transmit at a rate higher than the one specifies by  $n$  information bits per  
37       frame for the duration of the assignment.

- 1       – If the mobile station is not currently transmitting on the Reverse Supplemental  
2       Channel identified by  $REV\_SCH\_ID_r$ , then at the time specified by  
3        $REV\_SCH\_START\_TIME_s[REV\_SCH\_ID_r]$ , the mobile station may start  
4       transmitting on the Reverse Supplemental Channel identified by  $REV\_SCH\_ID$   
5       with the Walsh cover specified by  
6        $REV\_WALSH\_ID_s[REV\_SCH\_ID][REV\_SCH\_NUM\_BITS\_IDX_s[REV\_SCH\_ID_r]]$   
7       and number of bits per frame (or set of number of information bits per frame if  
8        $RSCH\_VAR\_TABLE\_ID_s[REV\_SCH\_ID_r]$  is not equal to '000') specified by  
9        $N\_RSCH\_BITS\_SET_s[REV\_SCH\_ID_r]$ . If the set of number of bits per frame,  
10       $N\_RSCH\_BITS\_SET_s[REV\_SCH\_ID_r]$ , has more than one member and  
11       $R\_INC\_RATE\_ALLOWED_s$  is equal to '0', then the following rule applies for the  
12      duration of this assignment:
- 13      + Once the mobile station transmits  $n$  number of bits per Reverse  
14      Supplemental Channel specifies by  $REV\_SCH\_ID$ , where  $n$  is a member of  
15      the set  $N\_RSCH\_BITS\_SET_s[REV\_SCH\_ID_r]$ , the mobile station shall not  
16      transmit at a rate higher than the one specifies by  $n$  information bits per  
17      frame for the duration of the assignment.
- 18   • If  $REV\_SCH\_DURATION_s[REV\_SCH\_ID_r]$  is equal to '0000', the mobile station shall  
19   perform the followings:
- 20      – If the mobile station is currently transmitting on the Reverse Supplemental  
21      Channel identified by  $REV\_SCH\_ID$ , then the mobile station may continue  
22      transmitting on the Reverse Supplemental Channel identified by  $REV\_SCH\_ID$   
23      with the Walsh cover specified by  
24       $REV\_WALSH\_ID_s[REV\_SCH\_ID][REV\_SCH\_NUM\_BITS\_IDX[REV\_SCH\_ID_r]]$   
25      according to the current Reverse Supplemental Assignment for the Reverse  
26      Supplemental Channel identified by  $REV\_SCH\_ID$  up to the time specified by  
27      the implicit start time (if  $REV\_SCH\_START\_TIME\_INCL_s$  is equal to '1') or the  
28      explicit start time (if  $REV\_SCH\_START\_TIME\_INCL_s$  is equal to '1') (i.e., the  
29      mobile station shall stop transmitting on the reverse supplemental channel  
30      identified by  $REV\_SCH\_ID$  at the implicit start time or the explicit start time, or  
31      at the time the previously received assignment ends, whichever time is earlier).  
32      The mobile station shall cancel the pending Reverse Supplemental Channel  
33      assignment if any.
- 34      + If  $REV\_SCH\_START\_TIME\_INCL_s$  is equal to '1', the mobile station shall stop  
35      transmitting on the Reverse Supplemental Channel identified by  
36       $REV\_SCH\_ID_r$  at the time specified by  
37       $REV\_SCH\_START\_TIME_s[REV\_SCH\_ID_r]$ .
- 38      + If  $REV\_SCH\_START\_TIME\_INCL_s$  is equal to '0', the mobile station shall stop  
39      transmitting on the Reverse Supplemental Channel identified by  
40       $REV\_SCH\_ID_r$  no later than the first 80 ms boundary (relative to System  
41      Time) occurring at least 80 ms after the end of the frame containing the last  
42      bit of the *Extended Supplemental Channel Assignment Message* or the action  
43      time of the *Universal Handoff Direction Message*.

- 1       – Otherwise, if the mobile is not currently transmitting on the Reverse  
2       Supplemental Channel identified by REV\_SCH\_ID, the mobile station shall  
3       cancel the pending Forward Supplemental Channel assignment if any.
- 4       • If REV\_SCH\_DTX\_DURATION<sub>S</sub> is not equal to '1111', the mobile station shall  
5       perform the following:
  - 6       – The mobile station shall maintain a  
7       REV\_SCH\_DTX\_TRANSMISSION\_COUNTER[REV\_SCH\_ID<sub>r</sub>] counter counting  
8       discontinuous transmission time in units of 20 ms as follows:
    - 9       + The mobile station shall reset the  
10       REV\_SCH\_DTX\_TRANSMISSION\_COUNTER[REV\_SCH\_ID<sub>r</sub>] counter to 0:
      - 11       o For each Reverse Supplemental Channel assignment corresponding to  
12       REV\_SCH\_ID<sub>r</sub>, at action time specified by the REV\_SCH\_START\_TIME<sub>r</sub>  
13       field for that assignment, if included; otherwise at the action time of the  
14       message.
      - 15       o Each time the mobile station resumes transmission on Reverse  
16       Supplemental Channelc after discontinued operation on the Reverse  
17       Supplemental Channel.
    - 18       + The mobile station shall increment the  
19       REV\_SCH\_DTX\_TRANSMISSION\_COUNTER[REV\_SCH\_ID<sub>r</sub>] counter by one  
20       at each 20ms interval for which the mobile station is not transmitting on  
21       the Reverse Supplemental Channel during the Reverse Supplemental  
22       Channel duration.
  - 23       – If the REV\_SCH\_DTX\_TRANSMISSION\_COUNTER[REV\_SCH\_ID<sub>r</sub>] counter value  
24       exceeds REV\_SCH\_DTX\_DURATION<sub>S</sub> (i.e., the mobile station discontinues  
25       transmission on the Reverse Supplemental Channel for more than the duration  
26       specified by REV\_SCH\_DTX\_DURATION<sub>S</sub>), the mobile station shall perform the  
27       following:
    - 28       + The mobile station shall not resume transmission on the Reverse  
29       Supplemental Channel corresponding to REV\_SCH\_ID<sub>r</sub>.
    - 30       + The mobile station shall send an indication to each affected service instance  
31       indicating that the mobile station has terminated transmission on the  
32       supplemental channel corresponding to REV\_SCH\_ID<sub>r</sub> due to expiration of  
33       the discontinued transmission period.

#### 34 2.6.6.2.5.2 Processing of Reverse Traffic Channel Handoff Messages

35 The mobile station sends the following messages on the Reverse Traffic Channel in support  
36 of handoff when its transmitter is enabled, following the receipt of a *forward dedicated*  
37 *channel acquired* indication from Layer 2 (see [4]):

- 38 1. *Pilot Strength Measurement Message* or *Extended Pilot Strength Measurement*  
39 *Message*: The mobile station shall send an autonomous *Pilot Strength*  
40 *Measurement Message* if P\_REV\_IN\_USE<sub>S</sub> is less than seven or *Extended Pilot*  
41 *Strength Measurement Message* if P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven  
42 in assured mode. The mobile station shall send either *Pilot Strength Measurement*



1 *Message or Extended Pilot Strength Measurement Message* containing  
 2 measurements consistent with the event whenever any of the following events  
 3 occur:

- 4 • P\_REV\_IN\_USE<sub>s</sub> is less than or equal to three or SOFT\_SLOPE<sub>s</sub> is equal to  
 5 '000000' and the strength of a Neighbor Set or Remaining Set pilot is found to  
 6 be above T\_ADD<sub>s</sub>.
- 7 • P\_REV\_IN\_USE<sub>s</sub> is greater than three, SOFT\_SLOPE<sub>s</sub> is not equal to '000000',  
 8 and the strength PS, as specified in 2.6.6.2.2, of any Candidate Set pilot is  
 9 found to satisfy the following inequality:

$$10 \times \log_{10} PS > \frac{\text{SOFT\_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD\_INTERCEPT}_s}{2}$$

11 where the summation is performed over all pilots currently in the Active Set and  
 12 a *Pilot Strength Measurement Message* or an *Extended Pilot Strength*  
 13 *Measurement Message* carrying this information has not been sent since the  
 14 last *Extended Handoff Direction Message*, *General Handoff Direction Message* or  
 15 *Universal Handoff Direction Message* was received.

- 16 • P\_REV\_IN\_USE<sub>s</sub> is greater than three, SOFT\_SLOPE<sub>s</sub> is not equal to '000000',  
 17 and the strength PS, as specified in 2.6.6.2.2, of any Neighbor Set or Remaining  
 18 Set pilot is found to satisfy the following inequality:

$$10 \times \log_{10} PS > \max\left(\frac{\text{SOFT\_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD\_INTERCEPT}_s}{2}, -\frac{T\_ADD_s}{2}\right)$$

20 where the summation is performed over all pilots currently in the Active Set.

- 21 • P\_REV\_IN\_USE<sub>s</sub> is less than or equal to three or SOFT\_SLOPE<sub>s</sub> is equal to  
 22 '000000', the strength of a Candidate Set pilot exceeds the strength of an Active  
 23 Set pilot by T\_COMP<sub>s</sub> × 0.5 dB, and a *Pilot Strength Measurement Message*  
 24 carrying this information has not been sent since the last *Extended Handoff*  
 25 *Direction Message*, *General Handoff Direction Message* or *Universal Handoff*  
 26 *Direction Message* was received.
- 27 • P\_REV\_IN\_USE<sub>s</sub> is greater than three, SOFT\_SLOPE<sub>s</sub> is not equal to '000000',  
 28 and the strength of a Candidate Set pilot exceeds the strength of an Active Set  
 29 pilot by T\_COMP<sub>s</sub> × 0.5 dB and satisfies the following inequality:

$$10 \times \log_{10} PS > \frac{\text{SOFT\_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD\_INTERCEPT}_s}{2}$$

31 where the summation is performed over all pilots currently in the Active Set and  
 32 a *Pilot Strength Measurement Message* or an *Extended Pilot Strength*  
 33 *Measurement Message* carrying this information has not been sent since the  
 34 last *Extended Handoff Direction Message*, *General Handoff Direction Message* or  
 35 *Universal Handoff Direction Message* was received.

- 1       • The handoff drop timer of an Active Set pilot has expired and a *Pilot Strength*  
2       *Measurement Message* or an *Extended Pilot Strength Measurement Message*  
3       carrying this information has not been sent since the last *Extended Handoff*  
4       *Direction Message*, *General Handoff Direction Message*, or *Universal handoff*  
5       *Direction Message* was received.
  - 6       • A Candidate Set pilot has been autonomously promoted to the Active Set (see  
7       2.6.6.2.6.1), and an *Extended Pilot Strength Measurement Message* carrying this  
8       information has not been sent since the last *Extended Handoff Direction*  
9       *Message*, *General Handoff Direction Message*, or *Universal Handoff Direction*  
10      *Message* was received.
- 11      2. *Handoff Completion Message* or *Extended Handoff Completion Message*: The mobile  
12      station shall send a *Handoff Completion Message* if P\_REV\_IN\_USE<sub>s</sub> is less than  
13      seven or an *Extended Handoff Completion Message* if P\_REV\_IN\_USE<sub>s</sub> is equal to or  
14      greater than seven in assured mode as follows:
- 15      • If the handoff message (*Extended Handoff Direction Message*, *General Handoff*  
16      *Direction Message* or *Universal Handoff Direction Message*) specifies a soft  
17      handoff, the mobile station shall send the *Handoff Completion Message* if  
18      P\_REV\_IN\_USE<sub>s</sub> is less than seven or an *Extended Handoff Completion Message*  
19      if P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven within T<sub>56m</sub> seconds after  
20      the action time of the received handoff message.
  - 21      • If the handoff message (*Extended Handoff Direction Message*, *General Handoff*  
22      *Direction Message* or *Universal Handoff Direction Message*) specifies a hard  
23      handoff without return on failure (see 2.6.6.2.8.1), the mobile station shall send  
24      the *Handoff Completion Message* if P\_REV\_IN\_USE<sub>s</sub> is less than seven or an  
25      *Extended Handoff Completion Message* if P\_REV\_IN\_USE<sub>s</sub> is equal to or greater  
26      than seven within T<sub>73m</sub> seconds after the action time of the received handoff  
27      message.
  - 28      • If the handoff message (*General Handoff Direction Message* or *Universal Handoff*  
29      *Direction Message*) specifies a hard handoff with return on failure (see  
30      2.6.6.2.8.2), the mobile station shall send the *Handoff Completion Message* if  
31      P\_REV\_IN\_USE<sub>s</sub> is less than seven or an *Extended Handoff Completion Message*  
32      if P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven within T<sub>56m</sub> seconds after  
33      mobile station declares the handoff to be successful (see 2.6.6.2.8.2).
- 34      3. *Candidate Frequency Search Report Message*: The mobile station shall send a  
35      *Candidate Frequency Search Report Message* in assured mode, whenever any of the  
36      following events occur:
- 37      • RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> is equal to '1', and a handoff attempt is  
38      unsuccessful (see 2.6.6.2.8.2). In this case, the mobile station shall send a  
39      *Candidate Frequency Search Report Message* within T<sub>56m</sub> seconds after  
40      completing a search of all pilots in the Candidate Frequency Search Set and  
41      resuming the use of the Serving Frequency Active Set (see 2.6.6.2.8.2.1).

- 1       • RETURN\_IF\_HANDOFF\_FAIL<sub>s</sub> is equal to '1', an inter-frequency handoff attempt  
2       is unsuccessful (see 2.6.6.2.8.2), and PERIODIC\_SEARCH<sub>s</sub> is equal to '1'. In  
3       this case, the mobile station shall send a *Candidate Frequency Search Report*  
4       *Message* in a search period if the conditions specified in 2.6.6.2.8.3.2 are met.
- 5       • The mobile station receives a *Candidate Frequency Search Request Message* or  
6       a *Candidate Frequency Search Control Message* with SEARCH\_TYPE set to '01'.  
7       If none of the conditions requiring the mobile station to send a *Mobile Station*  
8       *Reject Order* is true (see 2.6.6.2.5.1), the mobile station shall send a *Candidate*  
9       *Frequency Search Report Message*, as described in 2.6.6.2.8.3.1 and  
10      2.6.6.2.10.1.
- 11      • The mobile station receives a *Candidate Frequency Search Request Message* or  
12      *Candidate Frequency Search Control Message* with SEARCH\_TYPE set to '11',  
13      SEARCH\_MODE<sub>s</sub> is equal to '0000' and the Candidate Frequency Search Set is  
14      not empty. If none of the conditions requiring the mobile station to send a  
15      *Mobile Station Reject Order* is true (see 2.6.6.2.5.1), the mobile station shall  
16      send a *Candidate Frequency Search Report Message* in a search period if the  
17      conditions specified in 2.6.6.2.8.3.2 are met.
- 18      4. *Periodic Pilot Strength Measurement Message*: The mobile station shall send a  
19      *Periodic Pilot Strength Measurement Message* in unassured mode, as specified in  
20      2.6.6.2.5.1 and 2.6.6.2.12.
- 21      5. *Pilot Strength Measurement Mini Message*: If the mobile station supports the Mobile  
22      Assisted Burst operation capability, the mobile station shall send this message  
23      while processing any Supplemental Channel, according to the following:
  - 24      • The mobile station shall transmit a *Pilot Strength Measurement Mini Message* for  
25      a pilot *p* in the Active Set on the r-dsch logical channel whenever all of the  
26      following conditions are true:
    - 27      – ORDER\_FLAG<sub>s</sub> is equal to '1'.
    - 28      – The pilot *p* in the Active Set has a received signal strength that is greater  
29      than the signal strength of another pilot in the Active Set by  
30      PS\_MIN\_DELTA<sub>s</sub>, in units of 0.5 dB, at the current time and has been for  
31      ORDER\_INTERVAL<sub>s</sub> most recent successive 20 ms frame intervals since this  
32      pilot was last reported in a rank order based *Pilot Strength Measurement*  
33      *Mini Message*.
    - 34      – The rank order of pilot *p* has changed.
  - 35      • If PERIODIC\_FLAG<sub>s</sub> is equal to '1', the mobile station shall transmit a *Pilot*  
36      *Strength Measurement Mini Message* within PERIODIC\_INTERVAL<sub>s</sub> 20 ms frame  
37      intervals on the r-dsch for each of the *n* pilots in the Active Set with the largest  
38      signal strengths, where *n* = (min (NUM\_PILOTS, the number of pilots in the  
39      Active Set)), whenever the following condition is true:
    - 40      – The mobile station has not transmitted another *Pilot Strength*  
41      *Measurement Mini Message* for the corresponding pilot during the last  
42      PERIODIC\_INTERVAL<sub>s</sub> 20 ms frame intervals.

- If THRESHOLD\_FLAG<sub>s</sub> is equal to '1', the mobile station shall transmit a *Pilot Strength Measurement Mini Message* for pilot *p* on the r-dsch logical channel whenever all of the following conditions are true:
  - The mobile station has not transmitted a previous *Pilot Strength Measurement Mini Message* for pilot *p* within the most recent THRESHOLD\_INTERVAL<sub>s</sub> 20 ms frames intervals.
  - Pilot *p* is in the Active Set.
  - The signal strength of pilot *p* is greater than PS\_CEILING\_HIGH<sub>s</sub> and the signal strength of pilot *p* was less than or equal to PS\_CEILING\_LOW<sub>s</sub> at any time since the mobile station last sent a *Pilot Strength Measurement Mini Message* for pilot *p*; or the signal strength of pilot *p* is less than PS\_FLOOR\_LOW<sub>s</sub> and the signal strength for pilot *p* was greater than or equal to PS\_FLOOR\_HIGH<sub>s</sub> at any time since the last time that the mobile station sent a *Pilot Strength Measurement Mini Message* for pilot *p*.

#### 2.6.6.2.6 Set Maintenance

##### 2.6.6.2.6.1 Maintenance of the Active Set

The mobile station shall support a maximum Active Set size of N<sub>6m</sub> pilots. The mobile station shall track the pilot strengths of all pilots in the Active Set.

When the mobile station is first assigned Forward Traffic Channels, the mobile station shall initialize the Active Set to contain the pilots associated with the assigned Forward Traffic Channels. When the mobile station processes an *Extended Handoff Direction Message*, a *General Handoff Direction Message* or *Universal Handoff Direction Message*, then at the action time of the message the mobile station shall replace the pilots in the Active Set with the pilots listed in the message.

If the call rescue allowed timer is enabled, then the mobile station shall autonomously add one or more Candidate Set pilots whose strength exceeds T\_ADD<sub>s</sub> to the Active Set, beginning with the strongest, provided that:

- the NGHBR\_RESQ\_CONFIGURED field of the NGHBR\_REC for the corresponding pilot is equal to '1', and
- the resulting Active Set size does not exceed N<sub>6m</sub> pilots.

When autonomously adding Rescue Channel pilots to the Active Set, the mobile station may autonomously drop one or more of the existing pilots in the Active Set, beginning with the weakest, to allow for adding pilots when the Active Set is full.

##### 2.6.6.2.6.2 Maintenance of the Candidate Set

The mobile station shall support a maximum Candidate Set size of N<sub>7m</sub> pilots.

When the mobile station is first assigned a Forward Traffic Channel, the mobile station shall initialize the Candidate Set to contain no pilots. The mobile station shall adjust the Candidate Set whenever any of the following events occur:

- 1 • If the mobile station detects that the strength of a Neighbor Set pilot or a  
2 Remaining Set pilot exceeds  $T\_ADD_S$ , the mobile station shall add the pilot to the  
3 Candidate Set.
- 4 • If the mobile station processes an *Extended Handoff Direction Message*, a *General*  
5 *Handoff Direction Message* or a *Universal Handoff Direction Message* which does  
6 not list a pilot in the current Active Set, and the handoff drop timer corresponding  
7 to that pilot has not expired at the action time of the message, the mobile station  
8 shall add the pilot to the Candidate Set at the action time of the message.
- 9 • If the mobile station autonomously drops an existing pilot in the Active Set (see  
10 2.6.6.2.6.1), and the handoff drop timer corresponding to that pilot has not expired,  
11 the mobile station shall add the pilot to the Candidate Set.
- 12 • If  $P\_REV\_IN\_USE_S$  is greater than three, and  $SOFT\_SLOPE_S$  is not equal to  
13 '000000', the mobile station shall perform the following:
  - 14 – If the mobile station processes a *General Handoff Direction Message* or a  
15 *Universal Handoff Direction Message* which does not list a pilot in the current  
16 Active Set, the handoff drop timer corresponding to that pilot has expired at the  
17 action time of the message, and that pilot is found to be above  $T\_DROP_S$ , the  
18 mobile station shall add the pilot to the Candidate Set at the action time of the  
19 message.
  - 20 – If the mobile station autonomously drops an existing pilot in the Active Set (see  
21 2.6.6.2.6.1), the handoff drop timer corresponding to that pilot has expired, and  
22 that pilot is found to be above  $T\_DROP_S$ , the mobile station shall add the pilot  
23 to the Candidate Set.
- 24 • If the mobile station processes an *Extended Handoff Direction Message*, a *General*  
25 *Handoff Direction Message* or *Universal Handoff Direction Message*, which lists a  
26 pilot in the current Candidate Set, the mobile station shall delete the pilot from the  
27 Candidate Set at the action time of the message.
- 28 • If the handoff drop timer corresponding to a Candidate Set pilot expires, the mobile  
29 station shall delete the pilot from the Candidate Set.
- 30 • If the mobile station autonomously adds a Candidate Set pilot to the Active Set (see  
31 2.6.6.2.6.1), the mobile station shall delete the pilot from the Candidate Set.
- 32 • If the mobile station adds a pilot to the Candidate Set, and the resulting Candidate  
33 Set size exceeds  $N_{7m}$ , the mobile station shall delete from the Candidate Set the  
34 pilot whose handoff drop timer is closest to expiration. If more than one such pilot  
35 exists, the mobile station shall delete one such pilot that has the lowest strength.  
36 If no pilot in the Candidate Set has an enabled handoff drop timer, the mobile  
37 station shall delete from the Candidate Set the pilot that has the lowest strength.

#### 38 2.6.6.2.6.3 Maintenance of the Neighbor Set

39 The mobile station shall support a Neighbor Set size of at least  $N_{8m}$  pilots.

1 When the mobile station is first assigned a Forward Traffic Channel, the mobile station  
 2 shall initialize the Neighbor Set to contain all the pilots specified in the most recently  
 3 received *Neighbor List Message*, *Extended Neighbor List Message* or *General Neighbor List*  
 4 *Message*.

5 The mobile station shall maintain a counter,  $AGE_S$ , for each pilot in the Neighbor Set. The  
 6 mobile station shall initialize this counter to zero when it moves the pilot from the Active  
 7 Set or the Candidate Set to the Neighbor Set. The mobile station shall initialize this  
 8 counter to  $NGHBR\_MAX\_AGE_S$  when it moves the pilot from the Remaining Set to the  
 9 Neighbor Set. The mobile station shall increment  $AGE_S$  for each pilot in the Neighbor Set  
 10 upon receipt of a *Neighbor List Update Message* or an *Extended Neighbor List Update*  
 11 *Message*. When the mobile station is first assigned to a Forward Traffic Channel, the  
 12 mobile station shall set  $AGE_S$  for each pilot in the Neighbor Set to  $NGHBR\_MAX\_AGE_S$ .

13 The mobile station shall adjust the Neighbor Set whenever any of the following events  
 14 occur:

- 15 • If the mobile station receives a *Neighbor List Update Message* or an *Extended*  
 16 *Neighbor List Update Message*, it shall perform the following:
  - 17 – Increment  $AGE_S$  for each pilot in the Neighbor Set.
  - 18 – Delete from the Neighbor Set all pilots whose  $AGE_S$  exceeds  
 19  $NGHBR\_MAX\_AGE_S$ .
  - 20 – Add to the Neighbor Set each pilot named in the message, if it is not already a  
 21 pilot of the Active Set, Candidate Set, or Neighbor Set. If the mobile station can  
 22 store in the Neighbor Set only  $k$  additional pilots, and more than  $k$  new pilots  
 23 were sent in the *Neighbor List Update Message* or the *Extended Neighbor List*  
 24 *Update Message*, the mobile station shall store the first  $k$  new pilots listed in  
 25 the message.
- 26 • If the handoff drop timer of a pilot in the Candidate Set expires, the mobile station  
 27 shall add the pilot to the Neighbor Set.
- 28 • If  $P\_REV\_IN\_USE_S$  is less than or equal to three or  $SOFT\_SLOPE_S$  is equal to  
 29 '000000', the mobile station shall perform the following:
  - 30 – If the mobile station processes an *Extended Handoff Direction Message*, a  
 31 *General Handoff Direction Message*, or a *Universal Handoff Direction Message* in  
 32 which a pilot in the Active Set is not listed, and the handoff drop timer  
 33 corresponding to the pilot has expired, the mobile station shall add the pilot to  
 34 the Neighbor Set.
  - 35 – If the mobile station autonomously drops an existing pilot in the Active Set (see  
 36 2.6.6.2.6.1) and the handoff drop timer corresponding to the pilot has expired,  
 37 the mobile station shall add the pilot to the Neighbor Set.
- 38 • If  $P\_REV\_IN\_USE_S$  is greater than three, and  $SOFT\_SLOPE_S$  is not equal to  
 39 '000000', the mobile station shall perform the following:

- 1       – If the mobile station processes an *Extended Handoff Direction Message*, a  
2       *General Handoff Direction Message*, or a *Universal Handoff Direction Message*  
3       which does not list a pilot in the current Active Set, the handoff drop timer  
4       corresponding to that pilot has expired, and that pilot is found to be below  
5        $T_{DROP_s}$ , the mobile station shall add the pilot to the Neighbor Set.
- 6       – If the mobile station autonomously drops an existing pilot in the Active Set (see  
7       2.6.6.2.6.1), the handoff drop timer corresponding to that pilot has expired, and  
8       that pilot is found to be below  $T_{DROP_s}$ , the mobile station shall add the pilot  
9       to the Neighbor Set.
- 10      • If the mobile station adds a pilot to the Candidate Set, and the resulting Candidate  
11      Set size exceeds the size supported by the mobile station, the mobile station shall  
12      add the deleted Candidate Set pilot to the Neighbor Set (see 2.6.6.2.6.2).
- 13      • If the mobile station detects that the strength of a Neighbor Set pilot exceeds  
14       $T_{ADD_s}$ , the mobile station shall delete the pilot from the Neighbor Set.
- 15      • If the mobile station processes an *Extended Handoff Direction Message*, a *General*  
16      *Handoff Direction Message* or a *Universal Handoff Direction Message* which lists a  
17      pilot in the current Neighbor Set, the mobile station shall delete the pilot from the  
18      Neighbor Set.
- 19      • If the mobile station adds a pilot to the Neighbor Set, and the resulting Neighbor  
20      Set size exceeds the size supported by the mobile station, the mobile station shall  
21      delete from the Neighbor Set the pilot whose  $AGE_s$  is the largest. If more than one  
22      such pilot exists, the mobile station shall delete one such pilot that has the lowest  
23      strength.

#### 24   2.6.6.2.7 Soft Handoff

##### 25   2.6.6.2.7.1 Forward Traffic Channel Processing

26   All Forward Traffic Channels associated with pilots in the Active Set of the mobile station  
27   carry identical modulation symbols with the exception of the power control subchannel  
28   (see [2]).

29   When the Active Set contains more than one pilot, the mobile station should provide  
30   diversity combining of the associated Forward Traffic Channels. The mobile station shall  
31   provide for differential propagation delays from zero to at least 150  $\mu s$ .

##### 32   2.6.6.2.7.2 Reverse Traffic Channel Power Control During Soft Handoff

33   The *Extended Handoff Direction Message*, a *General Handoff Direction Message* or a  
34   *Universal Handoff Direction Message* identifies sets of Forward Fundamental Channels or  
35   Forward Dedicated Control Channels that carry identical closed loop power control  
36   subchannels. A set consists of one or more Forward Fundamental Channels or Forward  
37   Dedicated Control Channels with identical power control information.

38   The *Universal Handoff Direction Message* identifies sets of Forward Common Power Control  
39   Channels that carry identical closed loop power control subchannels. A set consists of one

1 or more Forward Common Power Control Channels with identical power control  
2 information.

3 Each Rescue Channel that has been autonomously promoted to the Active Set as part of  
4 Call Rescue Soft Handoff (see 2.6.6.2.13) shall form its own set. The mobile station shall  
5 not diversity combine the closed loop power control subchannel of any Rescue Channel  
6 with any other Forward Fundamental Channel until directed otherwise by an *Extended*  
7 *Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff*  
8 *Direction Message*.

9 In each power control group containing valid power control bits (see [2]), the mobile station  
10 should provide diversity combining of the identical closed loop power control subchannels  
11 and shall obtain at most one power control bit from each set of identical closed loop power  
12 control subchannels. The mobile station should only combine reliable power control bits  
13 (see [11]) as follows:

- 14 • If the reliable power control bits obtained from all sets are equal to '0', the mobile  
15 station shall increase its power as specified in [2].
- 16 • If the reliable power control bit obtained from any set is equal to '1', the mobile  
17 station shall decrease its power as specified in [2].

#### 18 2.6.6.2.7.3 Starting Periodic Search following Soft Handoff

19 If the PERIODIC SEARCH<sub>S</sub> is equal to '1', a periodic search is not already in progress, and  
20 the Frequency Assignment after handoff is different from the Candidate Frequency  
21 (CDMABAND<sub>S</sub> is not equal to CF\_CDMABAND<sub>S</sub> or CDMACH<sub>S</sub> is not equal to  
22 CF\_CDMACH<sub>S</sub>), the mobile station shall perform the following:

- 23 • The mobile station shall set ALIGN\_TIMING\_USED<sub>S</sub> to '0' and SEARCH\_OFFSET<sub>S</sub> to  
24 '000000'.
- 25 • The mobile station shall start a periodic search as described in 2.6.6.2.8.3.2.

#### 26 2.6.6.2.8 CDMA-to-CDMA Hard Handoff

27 The base station directs the mobile station to perform a CDMA-to-CDMA hard handoff by  
28 sending an *Extended Handoff Direction Message*, a *General Handoff Direction Message* or a  
29 *Universal Handoff Direction Message* in which the mobile station is transitioned between  
30 disjoint sets of base stations, different Frequency Assignments, or different frame offsets.  
31 When the base station uses a *Extended Handoff Direction Message*, a *General Handoff*  
32 *Direction Message*, *MEID Universal Handoff Direction Message* or a *Universal Handoff*  
33 *Direction Message* to direct the mobile to a channel with flexible channel spacing between  
34 the forward and reverse channels, the base station extends these message using the  
35 *General Extension Message* and include channel records that specify the forward and  
36 reverse frequencies to be used by the mobile station for handoff. The mobile station shall  
37 process this message as specified in section 2.6.18. If RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is  
38 equal to '0', the mobile station performs the actions described in 2.6.6.2.8.1. If  
39 RETURN\_IF\_HANDOFF\_FAIL<sub>S</sub> is equal to '1', the mobile station performs the actions  
40 described in 2.6.6.2.8.2.



#### 2.6.6.2.8.1 Hard Handoff without Return on Failure

At the action time specified in the *Extended Handoff Direction Message*, the *General Handoff Direction Message* or *Universal Handoff Direction Message* the mobile station shall disable its transmitter, reset the fade timer specified in 2.6.4.1.8, suspend incrementing TOT\_FRAMES<sub>s</sub>, BAD\_FRAMES<sub>s</sub>, DCCH\_TOT\_FRAMES<sub>s</sub>, and DCCH\_BAD\_FRAMES<sub>s</sub> if applicable as specified in 2.6.4.1.1, and tune to the assigned Forward Traffic Channel. The mobile station shall perform acquisition of the pilots in the new Active Set.

If a periodic Serving Frequency pilot report procedure is in progress, the mobile station shall abort it (see 2.6.6.2.12).

The mobile station shall begin monitoring the assigned Forward Traffic Channel within the time specified below:

- If the *Extended Handoff Direction Message*, *General Handoff Direction Message* or *Universal Handoff Direction Message* specifies a CDMA Frequency Assignment different from the Serving Frequency and an Active Set containing pilots with pilot PN sequence offsets identical to those of the pilots in the Serving Frequency Active Set, the mobile station shall begin monitoring the assigned Forward Traffic Channel within T<sub>60m</sub> seconds after the action time.
- If the *Extended Handoff Direction Message*, *General Handoff Direction Message* or *Universal Handoff Direction Message* specifies a CDMA Frequency Assignment different from the Serving Frequency and an Active Set containing a pilot with pilot PN sequence offset not equal to that of any pilot in the Serving Frequency Active Set, the mobile station shall begin monitoring the assigned Forward Traffic Channel within T<sub>61m</sub> seconds after the action time.
- If the *Extended Handoff Direction Message*, *General Handoff Direction Message* or *Universal Handoff Direction Message* specifies a CDMA-to-CDMA hard handoff without changing the CDMA Frequency Assignment, the mobile station shall begin monitoring the assigned Forward Traffic Channel within T<sub>62m</sub> seconds after the action time.

If the Target Frequency is the same as the Candidate Frequency (TF\_CDMABAND<sub>s</sub> is equal to CF\_CDMABAND<sub>s</sub>, and TF\_CDMACH<sub>s</sub> is equal to CF\_CDMACH<sub>s</sub>) and is different from the Serving Frequency (TF\_CDMABAND<sub>s</sub> is not equal to SF\_CDMABAND<sub>s</sub>, or TF\_CDMACH<sub>s</sub> is not equal to SF\_CDMACH<sub>s</sub>), the mobile station shall perform the following:

- If applicable, the mobile station shall replace its Neighbor Set with its Candidate Frequency Neighbor Set, excluding the pilots in its Active Set. When the mobile station adds a pilot from its Candidate Frequency Neighbor Set to its Active Set, it shall maintain SEARCH\_PRIORITY<sub>s</sub>, SRCH\_WIN\_NGHBR<sub>s</sub>, and SRCH\_OFFSET\_NGHBR<sub>s</sub> associated with the pilot.
- The mobile station shall set PILOT\_INC<sub>s</sub> to CF\_PILOT\_INC<sub>s</sub>, SRCH\_WIN\_N<sub>s</sub> to CF\_SRCH\_WIN\_N<sub>s</sub>, and SRCH\_WIN\_R<sub>s</sub> to CF\_SRCH\_WIN\_R<sub>s</sub>.

- The mobile station shall set  $SEARCH\_PRIORITY\_INCL_S$  to  $CF\_SEARCH\_PRIORITY\_INCL_S$ ,  $SRCH\_OFFSET\_INCL_S$  to  $CF\_SRCH\_OFFSET\_INCL_S$ , and  $SRCH\_WIN\_NGHBR\_INCL_S$  to  $CF\_SRCH\_WIN\_NGHBR\_INCL_S$ .

If a F-CPCCH is not assigned, the mobile station shall perform the following:

- After the action time, upon receiving a period of  $(N_{11m} \times 20)$  ms with sufficient signal quality on the physical channel corresponding to  $FPC\_PRI\_CHAN_S$  on the assigned Forward Traffic Channel, the mobile station shall re-enable its transmitter. The mobile station shall transmit the Traffic Channel Preamble, as described in [2], followed by a Handoff Completion Message or Extended Handoff Completion Message.
- After the action time, upon receiving a period of  $(N_{3m} \times 20)$  ms with sufficient signal quality on the physical channel corresponding to  $FPC\_PRI\_CHAN_S$ , the mobile station shall resume incrementing  $TOT\_FRAMES_S$ ,  $BAD\_FRAMES_S$ ,  $DCCH\_TOT\_FRAMES_S$ , and  $DCCH\_BAD\_FRAMES_S$  if applicable as specified in 2.6.4.1.1.

If a F-CPCCH is assigned, the mobile station shall perform the following:

- After the action time, upon receiving a period of  $(N_{19m} \times 1.25)$  ms with sufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile station, the mobile station shall re-enable its transmitter. The mobile station shall transmit the Traffic Channel Preamble, as described in [2], followed by an *Extended Handoff Completion Message*. The mobile station shall also transmit the Reverse Channel Quality Indicator Channel as described in [2] and [3].

If the  $PERIODIC\_SEARCH_S$  is equal to '1', a periodic search is not already in progress, and the Frequency Assignment after handoff is different from the Candidate Frequency ( $CDMABAND_S$  is not equal to  $CF\_CDMABAND_S$  or  $CDMACH_S$  is not equal to  $CF\_CDMACH_S$ ), the mobile station shall perform the following:

- The mobile station shall set  $ALIGN\_TIMING\_USED_S$  to '0' and  $SEARCH\_OFFSET_S$  to '000000'.
- The mobile station shall start a periodic search as described in 2.6.6.2.8.3.2.

#### 2.6.6.2.8.2 Hard Handoff with Return on Failure

At the action time specified in the *General Handoff Direction Message* or *Universal Handoff Direction Message*, the mobile station shall perform the following:

- The mobile station shall stop processing the Forward Fundamental Channel, the Forward Dedicated Control Channel, the Forward Supplemental Code Channels (if any), and the Forward Supplemental Channels (if any).
- The mobile station shall stop transmitting on the Reverse Fundamental Channel, on the Reverse Dedicated Control Channel, and on the Reverse Supplemental Code Channels (if any), and on the Reverse Supplemental Channels (if any).
- The mobile station shall disable the fade timer (see 2.6.4.1.8) and the handoff drop timers corresponding to the Serving Frequency Active Set and Candidate Set (see 2.6.6.2.3), and shall suspend incrementing  $TOT\_FRAMES_S$ ,  $BAD\_FRAMES_S$ ,  $DCCH\_TOT\_FRAMES_S$ , and  $DCCH\_BAD\_FRAMES_S$  if applicable (see 2.6.4.1.1).

- 1       • The mobile station shall lock the accumulation of valid level changes in the closed  
2       loop mean output power and shall ignore received power control bits related to the  
3       period that the transmitter is disabled (see [2]).
- 4       • If the Serving Frequency is different from the Target Frequency ( $SF\_CDMACH_S$  is  
5       not equal to  $TF\_CDMACH_S$  or  $SF\_CDMABAND_S$  is not equal to  $TF\_CDMABAND_S$ ),  
6       the mobile station shall set  $CDMACH_S$  to  $TF\_CDMACH_S$  and  $CDMABAND_S$  to  
7        $TF\_CDMABAND_S$ , and shall tune to the Target Frequency.

8       The mobile station shall not change its time reference (see [2]) until the handoff is  
9       successfully completed (as described later in this section) or the mobile station resumes  
10      using the Serving Frequency Active Set (as described in 2.6.6.2.8.2.1).

11     The mobile station shall maintain a *handoff* timer. The mobile station shall set the  
12     expiration time for the handoff timer to  $(0.08 \times TF\_WAIT\_TIME_S)$  seconds and enable the  
13     timer at the action time of the *General Handoff Direction Message* or *Universal Handoff*  
14     *Direction Message*.

15     The mobile station shall perform the following actions:

- 16       • If the Target Frequency is different from the Serving Frequency ( $TF\_CDMABAND_S$  is  
17       not equal to  $SF\_CDMABAND_S$ , or  $TF\_CDMACH_S$  is not equal to  $SF\_CDMACH_S$ ), the  
18       mobile station shall measure the mean input power on the Target Frequency  
19       (*target\_freq\_pwr*, in dBm/1.23 MHz) and may use *target\_freq\_pwr* along with the  
20       measurement of the average input power on the Serving Frequency  
21       (*avg\_serving\_freq\_pwr*, in dBm/1.23 MHz) in the handoff procedure. The mobile  
22       station may declare the handoff attempt to be unsuccessful if all of the following  
23       conditions are true:
  - 24          –  $DIFF\_RX\_PWR\_THRESH_S$  is not equal to '00000',
  - 25          – the mobile station has been measuring the received power on the Serving  
26          Frequency for at least the last  $N_{12m}$  frames, and
  - 27          –  $(target\_freq\_pwr - avg\_serving\_freq\_pwr)$  is less than  $(-30 + 2 \times$   
28           $DIFF\_RX\_PWR\_THRESH_S)$  dB.

29       If the mobile station declares the handoff attempt to be unsuccessful, it shall  
30       restore the configuration to what it was before the handoff attempt (see 2.6.6.2.5.1)  
31       and send a *Candidate Frequency Search Report Message* as described in  
32       2.6.6.2.8.2.1.

- 33       • The mobile station shall measure  $E_c/I_0$  for each pilot in the Active Set using the  
34       procedures specified in 2.6.6.2.2, if any of the following conditions is true:
  - 35          – the Target Frequency is the same as the Serving Frequency ( $TF\_CDMABAND_S$  is  
36          equal to  $SF\_CDMABAND_S$ , and  $TF\_CDMACH_S$  is equal to  $SF\_CDMACH_S$ ),
  - 37          – the mobile station does not use the power measurements in the handoff  
38          procedure,
  - 39          –  $DIFF\_RX\_PWR\_THRESH_S$  is equal to '00000',

- 1       – the mobile station has not been measuring the received power on the Serving  
2       Frequency for at least the last  $N_{12m}$  frames, or
- 3       –  $(target\_freq\_pwr - avg\_servng\_freq\_pwr)$  is not less than  $(-30 + 2 \times$   
4        $DIFF\_RX\_PWR\_THRESH_S)$  dB.

5       If the mobile station measures  $E_c/I_o$  for pilots in the Active Set, it shall compare the  
6       sum of the measured  $E_c/I_o$  for all pilots with the minimum total pilot  $E_c/I_o$   
7       threshold ( $MIN\_TOTAL\_PILOT\_EC\_IO_S$ ).

- 8       – If  $MIN\_TOTAL\_PILOT\_EC\_IO_S$  is not equal to '00000', and  $(-20 \times \log_{10}$   
9        $(E_c/I_o)_{total})$  is greater than  $MIN\_TOTAL\_PILOT\_EC\_IO_S$ , where  $(E_c/I_o)_{total}$  is the  
10      sum of the measured  $E_c/I_o$  for the pilots in the Active Set, the mobile station  
11      shall declare the handoff attempt to be unsuccessful, and shall perform the  
12      following:

- 13      + If  $COMPLETE\_SEARCH_S$  is equal to '1', and the Target Frequency is the  
14      same as the Candidate Frequency ( $TF\_CDMABAND_S$  is equal to  
15       $CF\_CDMABAND_S$ , and  $TF\_CDMACH_S$  is equal to  $CF\_CDMACH_S$ ) and is  
16      different from the Serving Frequency ( $TF\_CDMABAND_S$  is not equal to  
17       $SF\_CDMABAND_S$ , or  $TF\_CDMACH_S$  is not equal to  $SF\_CDMACH_S$ ), the  
18      mobile station shall measure the strength of each pilot in its Candidate  
19      Frequency Search Set using the procedures specified in 2.6.6.2.2;  
20      otherwise, the mobile station shall end the search.

- 21      + The mobile station shall then restore its configuration to what it was before  
22      the handoff attempt (see 2.6.6.2.5.1) and send a *Candidate Frequency*  
23      *Search Report Message* as described in 2.6.6.2.8.2.1.

- 24      – If  $MIN\_TOTAL\_PILOT\_EC\_IO_S$  is equal to '00000', or  $(-20 \times \log_{10} (E_c/I_o)_{total})$  is  
25      not less than  $MIN\_TOTAL\_PILOT\_EC\_IO_S$ , where  $(E_c/I_o)_{total}$  is the sum of the  
26      measured  $E_c/I_o$  for the pilots in the Active Set, the mobile station shall attempt  
27      to demodulate the Forward Traffic Channel(s). If the Active Set contains more  
28      than one pilot, the mobile station shall perform the actions specified in  
29      2.6.6.2.7. If the Target Frequency is the same as the Candidate Frequency  
30      ( $TF\_CDMABAND_S$  is equal to  $CF\_CDMABAND_S$ , and  $TF\_CDMACH_S$  is equal to  
31       $CF\_CDMACH_S$ ), and is different from the Serving Frequency ( $TF\_CDMABAND_S$   
32      is not equal to  $SF\_CDMABAND_S$ , or  $TF\_CDMACH_S$  is not equal to  
33       $SF\_CDMACH_S$ ), the mobile station shall measure the strength of each pilot in  
34      its Candidate Frequency Search Set using the procedures specified in 2.6.6.2.2,  
35      and the mobile station shall wait for the first of the following events to occur:

- 36      + If the handoff timer expires, the mobile station shall declare the handoff  
37      attempt to be unsuccessful, and perform the following:

- o If COMPLETE\_SEARCH<sub>S</sub> is equal to '1', and if the Target Frequency is the same as the Candidate Frequency (TF\_CDMABAND<sub>S</sub> is equal to CF\_CDMABAND<sub>S</sub>, and TF\_CDMACH<sub>S</sub> is equal to CF\_CDMACH<sub>S</sub>) and is different from the Serving Frequency (TF\_CDMABAND<sub>S</sub> is not equal to SF\_CDMABAND<sub>S</sub>, or TF\_CDMACH<sub>S</sub> is not equal to SF\_CDMACH<sub>S</sub>), and the mobile station has not completed the search of all pilots in its Candidate Frequency Search Set, then it shall complete the search, i.e., it shall obtain at least one measurement of the strength of each pilot in its Candidate Frequency Search Set, using the search procedures specified in 2.6.6.2.8.3.

- o Otherwise, the mobile station shall end the search.

The mobile station shall then restore its configuration to what it was before the handoff attempt (see 2.6.6.2.5.1) and send a *Candidate Frequency Search Report Message* as described in 2.6.6.2.8.2.1.

- + If a F-CPCCH is not assigned, and the mobile station receives a period of ( $N_{11m} \times 20$ ) ms with sufficient signal quality on the physical channel corresponding to FPC\_PRI\_CHAN<sub>S</sub>, or if a F-CPCCH is assigned, and the mobile station receives a period of ( $N_{19m} \times 1.25$ ) ms with sufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile station, then, the mobile station shall declare the handoff attempt to be successful, and perform the following:
  - o The mobile station shall disable the handoff timer.
  - o If TF\_RESET\_L2<sub>S</sub> is equal to '1', Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset the acknowledgment procedures as specified in [4].
  - o If TF\_RESET\_FPC<sub>S</sub> is equal to '1', the mobile station shall initialize the Forward Traffic Channel power control counters as specified in 2.6.4.1.1.1.
  - o If the Target Frequency is the same as the Candidate Frequency (TF\_CDMABAND<sub>S</sub> is equal to CF\_CDMABAND<sub>S</sub>, and TF\_CDMACH<sub>S</sub> is equal to CF\_CDMACH<sub>S</sub>) and is different from the Serving Frequency (TF\_CDMABAND<sub>S</sub> is not equal to SF\_CDMABAND<sub>S</sub>, or TF\_CDMACH<sub>S</sub> is not equal to SF\_CDMACH<sub>S</sub>), the mobile station shall perform the following:
    - ◊ If applicable, the mobile station shall replace its Neighbor Set with its Candidate Frequency Neighbor Set, excluding the pilots in its Active Set. When the mobile station adds a pilot from its Candidate Frequency Neighbor Set to its Active Set, it shall maintain SEARCH\_PRIORITY<sub>S</sub>, SRCH\_WIN\_NGHBR<sub>S</sub>, and SRCH\_OFFSET\_NGHBR<sub>S</sub> associated with the pilot.

- 1                   ◇ The mobile station shall set PILOT\_INC<sub>S</sub> to CF\_PILOT\_INC<sub>S</sub>,  
2                   SRCH\_WIN\_N<sub>S</sub> to CF\_SRCH\_WIN\_N<sub>S</sub>, and SRCH\_WIN\_R<sub>S</sub> to  
3                   CF\_SRCH\_WIN\_R<sub>S</sub>.
- 4                   ◇ The mobile station shall set SEARCH\_PRIORITY\_INCL<sub>S</sub> to  
5                   CF\_SEARCH\_PRIORITY\_INCL<sub>S</sub>, SRCH\_OFFSET\_INCL<sub>S</sub> to  
6                   CF\_SRCH\_OFFSET\_INCL<sub>S</sub>, and SRCH\_WIN\_NGHR\_INCL<sub>S</sub> to  
7                   CF\_SRCH\_WIN\_NGHR\_INCL<sub>S</sub>.
- 8                   o The mobile station shall re-enable its transmitter and shall re-enable the  
9                   fade timer (see 2.6.4.1.8) and reset it for T<sub>5m</sub> seconds. Then, the mobile  
10                  station shall transmit the Traffic Channel Preamble, as described in [2],  
11                  followed by a *Handoff Completion Message* if P\_REV\_IN\_USE<sub>S</sub> is less  
12                  than seven or an *Extended Handoff Completion Message* if  
13                  P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven.
- 14                  o If a F-CPCCH is not assigned, after starting the handoff timer, upon  
15                  receiving the first period of (N<sub>3m</sub> × 20) ms with sufficient signal quality  
16                  on the physical channel corresponding to FPC\_PRI\_CHAN<sub>S</sub>, the mobile  
17                  station shall resume incrementing TOT\_FRAMES<sub>S</sub>, BAD\_FRAMES<sub>S</sub>,  
18                  DCCH\_TOT\_FRAMES<sub>S</sub>, and DCCH\_BAD\_FRAMES<sub>S</sub> if applicable as  
19                  specified in 2.6.4.1.1.
- 20                  o If the Target Frequency is same as the Candidate Frequency  
21                  (TF\_CDMABAND<sub>S</sub> is equal to CF\_CDMABAND<sub>S</sub> and TF\_CDMACH<sub>S</sub> is  
22                  equal to CF\_CDMACH<sub>S</sub>), then the mobile station shall set  
23                  PERIODIC\_SEARCH<sub>S</sub> to '0'.
- 24                  o If PERIODIC\_SEARCH<sub>S</sub> is equal to '1', the mobile station shall perform  
25                  the following:
  - 26                  ◇ The mobile station shall set ALIGN\_TIMING\_USED<sub>S</sub> to '0' and  
27                  SEARCH\_OFFSET<sub>S</sub> to '000000'.
  - 28                  ◇ The mobile station shall start a periodic search as described in  
29                  2.6.6.2.8.3.2.
- 30                  o The mobile station shall maintain its pilot sets using the procedures  
31                  described in 2.6.6.2.6.

#### 32 2.6.6.2.8.2.1 Restoring the Configuration

33 If the mobile station declares a handoff attempt to be unsuccessful (see 2.6.6.2.8.2), it  
34 shall perform the following actions:

- 35                  • If the handoff timer is enabled, the mobile station shall disable it.
- 36                  • The mobile station shall restore the following parameters:
  - 37                  – Message encryption mode: If SF\_ENCRYPT\_MODE<sub>S</sub> is equal to '0', the mobile  
38                  station shall turn off message encryption; otherwise, it shall turn on message  
39                  encryption.

- 1       – Service configuration: The mobile station shall use the service configuration  
2       stored in SF\_SERVICE\_CONFIG<sub>S</sub> to process Forward and Reverse Traffic  
3       Channel frames.
- 4       – The mobile station shall restore the list of calls stored in SF\_CALLS<sub>S</sub>.
- 5       – Protocol revision level (P\_REV<sub>S</sub> = SF\_P\_REV<sub>S</sub>)
- 6       – Protocol revision level in use on the serving frequency (P\_REV\_IN\_USE<sub>S</sub> =  
7       SF\_P\_REV\_IN\_USE<sub>S</sub>)
- 8       – Service negotiation type (SERV\_NEG<sub>S</sub> = SF\_SERV\_NEG<sub>S</sub>)
- 9       – Private long code mask: If SF\_PRIVATE\_LCM<sub>S</sub> is set to '1' then the mobile  
10      station shall set PVTLCM\_42 to SF\_PVTLCM\_42<sub>S</sub>.
- 11      – Long code mask: If SF\_PRIVATE\_LCM<sub>S</sub> is equal to '1', the mobile station shall  
12      use the private long code mask; otherwise, it shall use the public long code  
13      mask derived from SF\_PLCM\_TYPE<sub>S</sub> and SF\_PLCM\_39<sub>S</sub> (if any).
- 14      – Search window size for the Active Set and Candidate Set  
15      (SRCH\_WIN\_A<sub>S</sub> = SF\_SRCH\_WIN\_A<sub>S</sub>)
- 16      – Search window size for the Neighbor Set  
17      (SRCH\_WIN\_N<sub>S</sub> = SF\_SRCH\_WIN\_N<sub>S</sub>)
- 18      – Search window size for the Remaining Set  
19      (SRCH\_WIN\_R<sub>S</sub> = SF\_SRCH\_WIN\_R<sub>S</sub>)
- 20      – Pilot detection threshold (T\_ADD<sub>S</sub> = SF\_T\_ADD<sub>S</sub>)
- 21      – Pilot drop threshold (T\_DROP<sub>S</sub> = SF\_T\_DROP<sub>S</sub>)
- 22      – Soft slope for the dynamic add and drop threshold (SOFT\_SLOPE<sub>S</sub> =  
23      SF\_SOFT\_SLOPE<sub>S</sub>)
- 24      – Intercept for the dynamic add threshold (ADD\_INTERCEPT<sub>S</sub> =  
25      SF\_ADD\_INTERCEPT<sub>S</sub>)
- 26      – Intercept for the dynamic drop threshold (DROP\_INTERCEPT<sub>S</sub> =  
27      SF\_DROP\_INTERCEPT<sub>S</sub>)
- 28      – Active Set versus Candidate Set comparison threshold (T\_COMP<sub>S</sub> =  
29      SF\_T\_COMP<sub>S</sub>)
- 30      – Drop timer value (T\_TDROP<sub>S</sub> = SF\_T\_TDROP<sub>S</sub>)
- 31      – Drop timer range value (T\_TDROP\_RANGE<sub>S</sub> = SF\_T\_TDROP\_RANGE<sub>S</sub>)
- 32      – Frame offset (FRAME\_OFFSET<sub>S</sub> = SF\_FRAME\_OFFSET<sub>S</sub>)
- 33      – Nominal power setting (NOM\_PWR<sub>S</sub> = SF\_NOM\_PWR<sub>S</sub>)
- 34      – Extended nominal power setting (NOM\_PWR\_EXT<sub>S</sub> = SF\_NOM\_PWR\_EXT<sub>S</sub>)
- 35      – Power control step (PWR\_CNTL\_STEP<sub>S</sub> = SF\_PWR\_CNTL\_STEP<sub>S</sub>)
- 36      – CDMA band class (CDMABAND<sub>S</sub> = SF\_CDMABAND<sub>S</sub>)

- 1       – Frequency assignment ( $CDMACH_S = SF\_CDMACH_S$ )
- 2       – Active Set (For each pilot in the Serving Frequency Active Set: (PILOT\_REC,
- 3         PWR\_COMB\_IND) )
- 4       – Code channel list ( $CODE\_CHAN\_LIST_S = SF\_CODE\_CHAN\_LIST_S$ )
- 5       • The mobile station shall tune to the Serving Frequency and resume using the
- 6         Serving Frequency Active Set as follows:
  - 7       – If the mobile station was processing the Forward Fundamental Channel prior to
  - 8         tuning to the Candidate Frequency, the mobile station shall resume processing
  - 9         the Forward Fundamental Channel. If the mobile station was transmitting on
  - 10        the Reverse Fundamental Channel prior to tuning to the Candidate Frequency,
  - 11        the mobile station shall resume transmitting on the Reverse Fundamental
  - 12        Channel.
  - 13       – If the mobile station was processing the Forward Dedicated Control Channel
  - 14         prior to tuning to the Candidate Frequency, the mobile station shall resume
  - 15         processing the Forward Dedicated Control Channel. If the mobile station was
  - 16         transmitting on the Reverse Dedicated Control Channel prior to tuning to the
  - 17         Candidate Frequency, the mobile station shall resume transmitting on the
  - 18         Reverse Dedicated Control Channel.
  - 19       – The mobile station shall not resume transmitting on the Reverse Supplemental
  - 20         Code Channels and Reverse Supplemental Channels (if any). The mobile
  - 21         station shall not process on the Forward Supplemental Code Channels and
  - 22         Forward Supplemental Channels (if any).
  - 23       – When the mobile station resumes transmission on the Reverse Traffic Channel,
  - 24         it shall use the following rules to re-enable its transmitter:
    - 25       + If the interval between the time that the mobile station disables its
    - 26         transmitter and the time that it resumes using the Serving Frequency Active
    - 27         Set is equal to or greater than  $(N_{2m} \times 20)$  ms, then:
      - 28           o If a F-CPCCH is not assigned, the mobile station shall wait to receive a
      - 29             period of  $(N_{3m} \times 20)$  ms with sufficient signal quality on the physical
      - 30             channel corresponding to  $FPC\_PRI\_CHAN_S$  before it re-enables its
      - 31             transmitter.
      - 32           o If a F-CPCCH is assigned, the mobile station shall wait to receive a
      - 33             period of  $(N_{17m} \times 1.25)$  ms with sufficient signal quality on the Forward
      - 34             Common Power Control Subchannels assigned to this mobile station
      - 35             before it re-enables its transmitter.



- 1           + Otherwise, after the mobile station tunes to the Serving Frequency, the  
2           mobile station shall re-enable its transmitter no later than  $N_{3m} \times 20$  ms if a  
3           F-CPCCH is not assigned, and no later than  $(N_{17m} \times 1.25)$  ms if a F-CPCCH  
4           is assigned. The mobile station should re-enable its transmitter earlier.  
5           After the mobile station re-enables its transmitter, the mean output power  
6           shall be as specified in [2] for a step change in input power. If the mobile  
7           station re-enables its transmitter earlier than  $(N_{3m} \times 20)$  ms if a F-CPCCH is  
8           not assigned, or earlier than  $(N_{17m} \times 1.25)$  ms if a F-CPCCH is assigned,  
9           after it tunes to the Serving Frequency, the initial mean output power shall  
10          be as specified in [2], where the initial mean input power estimate is either:  
11          o    within 6 dB of the actual mean input power, or  
12          o    equal to the mean input power before the mobile station tuned to the  
13          Target Frequency.
- 14          • The mobile station shall enable the fade timer and the handoff drop timers  
15          corresponding to the pilots in its Active Set and Candidate Set. The mobile station  
16          shall resume incrementing TOT\_FRAMES<sub>s</sub>, BAD\_FRAMES<sub>s</sub>, DCCH\_TOT\_FRAMES<sub>s</sub>,  
17          and DCCH\_BAD\_FRAMES<sub>s</sub> if applicable as specified in 2.6.4.1.1.
- 18          • The mobile station shall send a *Candidate Frequency Search Report Message* within  
19          T<sub>56m</sub> seconds of declaring the handoff attempt to be unsuccessful. The mobile  
20          station shall report the contents of the *Candidate Frequency Search Report*  
21          *Message* as follows:
- 22          – The mobile station shall report the two components of the Target Frequency in  
23          the CDMA\_FREQ and BAND\_CLASS fields.
- 24          – The mobile station shall report the received power on the Target Frequency and  
25          on the Serving Frequency in the CF\_TOTAL\_RX\_PWR and SF\_TOTAL\_RX\_PWR  
26          fields, respectively.
- 27          – For each pilot in the Target Frequency Active Set that measures above  
28          TF\_T\_ADD<sub>s</sub>, the mobile station shall report its phase and strength in the fields  
29          PILOT\_PN\_PHASE and PILOT\_STRENGTH, respectively.
- 30          – If the Target Frequency is the same as the Candidate Frequency  
31          (TF\_CDMABAND<sub>s</sub> is equal to CF\_CDMABAND<sub>s</sub>, and TF\_CDMACH<sub>s</sub> is equal to  
32          CF\_CDMACH<sub>s</sub>), and is different from the Serving Frequency (TF\_CDMABAND<sub>s</sub>  
33          is not equal to SF\_CDMABAND<sub>s</sub> or TF\_CDMACH<sub>s</sub> is not equal to  
34          SF\_CDMACH<sub>s</sub>), the mobile station shall also report the strength of each pilot in  
35          the Candidate Frequency Search Set that measures above CF\_T\_ADD<sub>s</sub>.
- 36          • If the Serving Frequency is the same as the Candidate Frequency (SF\_CDMABAND<sub>s</sub>  
37          is equal to CF\_CDMABAND<sub>s</sub> and SF\_CDMACH<sub>s</sub> is equal to CF\_CDMACH<sub>s</sub>), then  
38          the mobile station shall set PERIODIC\_SEARCH<sub>s</sub> to '0'.
- 39          • If PERIODIC\_SEARCH<sub>s</sub> is equal to '1' and the Candidate Frequency Search Set is  
40          not empty, the mobile station shall perform the following:

- 1       – The mobile station shall set ALIGN\_TIMING\_USED<sub>S</sub> to '0' and
- 2       SEARCH\_OFFSET<sub>S</sub> to '000000'.
- 3       – The mobile station shall carry out the periodic search procedures described in
- 4       2.6.6.2.8.3.2.

#### 5   2.6.6.2.8.3 Search of Pilots on the CDMA Candidate Frequency

6   If SEARCH\_MODE<sub>S</sub> is equal to '0000', the mobile station shall perform the following: If  
 7   PERIODIC\_SEARCH<sub>S</sub> is equal to '0', the mobile station shall search the Candidate  
 8   Frequency Search Set once, as described in 2.6.6.2.8.3.1; otherwise, the mobile station  
 9   shall search the Candidate Frequency Search Set periodically, as described in  
 10   2.6.6.2.8.3.2.

##### 11   2.6.6.2.8.3.1 CDMA Candidate Frequency Single Search

12   The mobile station does a single search of the Candidate Frequency Search Set by  
 13   performing the following actions at the action time of the *Candidate Frequency Search*  
 14   *Control Message* or the *Candidate Frequency Search Request Message* that started the  
 15   search:

- 16       • If ALIGN\_TIMING\_USED<sub>S</sub> is set to '0', the mobile station shall measure the strength
- 17       of all pilots in the Candidate Frequency Search Set in one or more visits to the
- 18       Candidate Frequency, as described in 2.6.6.2.8.3.3.
- 19       • If ALIGN\_TIMING\_USED<sub>S</sub> is set to '1', the mobile station shall measure the strength
- 20       of all pilots in the Candidate Frequency Search Set in one or more scheduled visits
- 21       (see below) to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

22   The mobile station shall schedule visits to the Candidate Frequency only at  
 23    $((0.00125 \times \text{SEARCH\_OFFSET}_S) + k \times (\text{SEARCH\_TIME\_RESOLUTION}_S \times$   
 24   *inter\_visit\_time*)) seconds after the action time of the *Candidate Frequency Search*  
 25   *Request Message* or the *Candidate Frequency Search Control Message* that started  
 26   the search, where

27                     $k =$  an integer between 0 and *max\_num\_visits*, inclusive, where  
 28                    *max\_num\_visits* is the value of MAX\_NUM\_VISITS field of the  
 29                    last *Candidate Frequency Search Response Message* sent by  
 30                    the mobile station,

31   and

32                    *inter\_visit\_time* = the value of the INTER\_VISIT\_TIME field of the last *Candidate*  
 33                    *Frequency Search Response Message* sent by the mobile  
 34                    station.

- 35       • The mobile station shall complete the measurements and send a *Candidate*
- 36       *Frequency Search Report Message* within  $((0.00125 \times \text{SEARCH\_OFFSET}_S) +$   
 37       *freshness\_interval*) seconds after the action time of the *Candidate Frequency Search*  
 38       *Control Message*, or the *Candidate Frequency Search Request Message*, where  
 39       *freshness\_interval* is determined as follows:

- 1       – If the value of the TOTAL\_OFF\_TIME\_FWD field or of the  
2       TOTAL\_OFF\_TIME\_REV field of the last *Candidate Frequency Search Response*  
3       *Message* sent by the mobile station to the base station is greater than or equal  
4       to  $\lceil (T_{70m} - T_{71m}) / \text{SEARCH\_TIME\_RESOLUTION}_S \rceil$ , then

$$\text{freshness\_interval} = (\max(\text{fwd\_time}, \text{rev\_time}) + T_{71m}) \text{ seconds,}$$

6       where

$$\text{fwd\_time} = \text{SEARCH\_TIME\_RESOLUTION}_S \times (\text{value of the} \\ \text{TOTAL\_OFF\_TIME\_FWD field of the last } \textit{Candidate Frequency} \\ \text{Search Response Message sent by the mobile station}),$$

10       and

$$\text{rev\_time} = \text{SEARCH\_TIME\_RESOLUTION}_S \times (\text{value of the} \\ \text{TOTAL\_OFF\_TIME\_REV field of the last } \textit{Candidate Frequency} \\ \text{Search Response Message sent by the mobile station}).$$

- 14       – Otherwise,

$$\text{freshness\_interval} = T_{70m} \text{ seconds.}$$

16       The mobile station shall set the fields of the *Candidate Frequency Search Report*  
17       *Message* as follows:

- 18       – The mobile station shall report the two components of the Candidate Frequency  
19       in the CDMA\_FREQ and BAND\_CLASS fields.
- 20       – The mobile station shall report the received power on the Candidate Frequency  
21       and on the Serving Frequency in the CF\_TOTAL\_RX\_PWR and  
22       SF\_TOTAL\_RX\_PWR fields, respectively.
- 23       – For each pilot in the Candidate Frequency Search Set that measures above  
24       CF\_T\_ADD<sub>S</sub>, the mobile station shall report its phase and strength in the fields  
25       PILOT\_PN\_PHASE and PILOT\_STRENGTH, respectively.

#### 26   2.6.6.2.8.3.2 Candidate Frequency Periodic Search

27   When the mobile station performs a periodic search, it periodically searches the Candidate  
28   Frequency Search Set and reports the results to the base station in the *Candidate*  
29   *Frequency Search Report Message*, as described in this section. The mobile station may  
30   measure all pilots in the Candidate Frequency Search Set in one visit to the Candidate  
31   Frequency, or it may visit the Candidate Frequency several times in a search period, each  
32   time measuring all or some of the pilots in the Candidate Frequency Search Set, as  
33   described in 2.6.6.2.8.3.3.

34   If SF\_TOTAL\_EC\_THRESH<sub>S</sub> is not equal to '11111', while tuned to the Serving Frequency  
35   (specified by CDMACH<sub>S</sub> and CDMABAND<sub>S</sub>), the mobile station shall measure the total  
36   received power spectral density, in mW/1.23 MHz, on the Serving Frequency at least once  
37   every 20 ms frame. The mobile station shall maintain the average of the spectral density  
38   (*spec\_density*) over the last N<sub>12m</sub> frames.

(In the following,  $(E_c/I_o)_{total}$  is the total  $E_c/I_o$  of the pilots in the Active Set, measured as specified in 2.6.6.2.2, and  $total\_ec$  is defined as  $(10 \times \log_{10} ((E_c/I_o)_{total} \times spec\_density))$ .)

The mobile station shall maintain a periodic search timer as follows:

- When the mobile station starts a periodic search, it shall set the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to  $SEARCH\_PERIOD_S$  and shall enable the timer.
  - If the periodic search is started by a *Candidate Frequency Search Request Message* or a *Candidate Frequency Search Control Message*, then the mobile station shall start the periodic search ( $0.00125 \times SEARCH\_OFFSET_S$ ) seconds after the action time of the *Candidate Frequency Search Request Message* or the *Candidate Frequency Search Control Message* that started the search.
  - If the periodic search is started following successful or unsuccessful handoff attempt, the mobile station shall start the periodic search:
    - + Upon sending the *Handoff Completion Message* or *Extended Handoff Completion Message*, in the case that the handoff was successful.
    - + Upon sending the *Candidate Frequency Search Report Message*, in the case that the handoff was unsuccessful.
- When the periodic search timer expires, the mobile station shall reset the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to  $SEARCH\_PERIOD_S$  and shall re-enable the timer.
- If  $ALIGN\_TIMING\_USED_S$  is set to '0',  $SF\_TOTAL\_EC\_THRESH_S$  is not equal to '11111' and  $SF\_TOTAL\_EC\_IO\_THRESH_S$  is equal to '11111', the mobile station shall perform the following actions once per frame:
  - Disable the periodic search timer if  $total\_ec$  is not less than  $(-120 + 2 \times SF\_TOTAL\_EC\_THRESH_S)$ .
  - Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to  $SEARCH\_PERIOD_S$ , and re-enable the timer if the following conditions are true:
    - + the periodic search timer is disabled, and
    - +  $total\_ec$  is less than  $(-120 + 2 \times SF\_TOTAL\_EC\_THRESH_S)$ .
- If  $ALIGN\_TIMING\_USED_S$  is set to '0',  $SF\_TOTAL\_EC\_THRESH_S$  is equal to '11111' and  $SF\_TOTAL\_EC\_IO\_THRESH_S$  is not equal to '11111', the mobile station shall perform the following actions once per frame:
  - Disable the periodic search timer if  $(-20 \times \log_{10} (E_c/I_o)_{total})$  is not greater than  $SF\_TOTAL\_EC\_IO\_THRESH_S$ .
  - Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to  $SEARCH\_PERIOD_S$ , and re-enable the timer if the following conditions are true:
    - + the periodic search timer is disabled, and

- 1           +  $(-20 \times \log_{10} (E_c/I_o)_{\text{total}})$  is greater than  $SF\_TOTAL\_EC\_IO\_THRESH_S$ .
- 2       • If  $ALIGN\_TIMING\_USED_S$  is set to '0',  $SF\_TOTAL\_EC\_THRESH_S$  is not equal to  
3       '11111' and  $SF\_TOTAL\_EC\_IO\_THRESH_S$  is not equal to '11111', the mobile station  
4       shall perform the following actions once per frame:
- 5       – Disable the periodic search timer if the following conditions are true:
- 6           +  $total\_ec$  is not less than  $(-120 + 2 \times SF\_TOTAL\_EC\_THRESH_S)$ , and  
7           +  $(-20 \times \log_{10} (E_c/I_o)_{\text{total}})$  is not greater than  $SF\_TOTAL\_EC\_IO\_THRESH_S$ .
- 8       – Reset the expiration time of the periodic search timer to the value in  
9       Table 2.6.6.2.8.3.2-1 corresponding to  $SEARCH\_PERIOD_S$ , and re-enable the  
10       timer if the following conditions are true:
- 11       + the periodic search timer is disabled, and  
12       +  $total\_ec$  is less than  $(-120 + 2 \times SF\_TOTAL\_EC\_THRESH_S)$ , or  $(-20 \times \log_{10}$   
13        $(E_c/I_o)_{\text{total}})$  is greater than  $SF\_TOTAL\_EC\_IO\_THRESH_S$ .
- 14       • The mobile station shall maintain the periodic search timer independent of the total  
15        $E_c$  and the total  $E_c/I_o$  of the pilots in the Serving Frequency Active Set, if any of the  
16       following conditions is true:
- 17       –  $ALIGN\_TIMING\_USED_S$  is set to '1, or  
18       –  $SF\_TOTAL\_EC\_THRESH_S$  is equal to '11111' and  $SF\_TOTAL\_EC\_IO\_THRESH_S$  is  
19       equal to '11111'.

21                                   **Table 2.6.6.2.8.3.2-1. Search Period Values**

<b>SEARCH_PERIOD<sub>S</sub></b>	<b>Search Period (seconds)</b>	<b>SEARCH_PERIOD<sub>S</sub></b>	<b>Search Period (seconds)</b>
0	0.48	8	30
1	0.96	9	40
2	2	10	50
3	2.96	11	60
4	4	12	80
5	4.96	13	100
6	10	14	150
7	20	15	200

22

23       If the periodic search timer is enabled, the mobile station shall perform the following  
24       actions before the timer expires:

- 1 • If ALIGN\_TIMING\_USED<sub>s</sub> is set to '0', the mobile station shall measure the strength  
2 of all pilots in the Candidate Frequency Search Set at least once in one or more  
3 visits to the Candidate Frequency, as described in 2.6.6.2.8.3.3.
- 4 • If ALIGN\_TIMING\_USED<sub>s</sub> is set to '1', the mobile station shall measure the strength  
5 of all pilots in the Candidate Frequency Search Set in one or more scheduled visits  
6 (see below) to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

7 The mobile station shall schedule visits to the Candidate Frequency only at  
8  $((0.00125 \times \text{SEARCH\_OFFSET}_s) + k \times (\text{SEARCH\_TIME\_RESOLUTION}_s \times$   
9  $\text{inter\_visit\_time}))$  seconds after the action time of the *Candidate Frequency Search*  
10 *Request Message* or the *Candidate Frequency Search Control Message* that started  
11 the search, where

12  $k =$  an integer between 0 and  $\text{max\_num\_visits}$ , inclusive, where  
13  $\text{max\_num\_visits}$  is the value of MAX\_NUM\_VISITS field of the  
14 last *Candidate Frequency Search Response Message* sent by  
15 the mobile station,

16 and

17  $\text{inter\_visit\_time} =$  the value of the INTER\_VISIT\_TIME field of the last *Candidate*  
18 *Frequency Search Response Message* sent by the mobile  
19 station.

- 20 – The mobile station shall abort a scheduled visit to the Candidate Frequency if at  
21 the scheduled time, one or both of the following conditions hold:
  - 22 + SF\_TOTAL\_EC\_THRESH<sub>s</sub> is not equal to '1111' and  $\text{total\_ec}$  is not less  
23 than  
24  $(-120 + 2 \times \text{SF\_TOTAL\_EC\_THRESH}_s)$ , or
  - 25 + SF\_TOTAL\_EC\_IO\_THRESH<sub>s</sub> is not equal to '1111' and  $(-20 \times \log_{10}$   
26  $(E_c/I_o)_{\text{total}})$  is not greater than SF\_TOTAL\_EC\_IO\_THRESH<sub>s</sub>.
- 27 – If the mobile station aborts a scheduled visit during a search period, it may  
28 abort all remaining scheduled visits in that search period.
- 29 • The mobile station shall send a *Candidate Frequency Search Report Message* if  
30 MIN\_TOTAL\_PILOT\_EC\_IO<sub>s</sub> is equal to '00000' or if  $(-20 \times \log_{10} (E_c/I_o)_{\text{total}})$  is less  
31 than or equal to MIN\_TOTAL\_PILOT\_EC\_IO<sub>s</sub>, where  $(E_c/I_o)_{\text{total}}$  is the sum of  $E_c/I_o$   
32 for all those pilots that measure above CF\_T\_ADD<sub>s</sub> in the current search period.

33 The mobile station shall report the contents of the *Candidate Frequency Search*  
34 *Report Message* as follows:

- 35 – The mobile station shall report the two components of the Candidate Frequency  
36 in the CDMA\_FREQ and BAND\_CLASS fields.
- 37 – The mobile station shall report the received power on the Candidate Frequency  
38 and on the Serving Frequency in the CF\_TOTAL\_RX\_PWR and  
39 SF\_TOTAL\_RX\_PWR fields, respectively.

- 1       – For each pilot in the Candidate Frequency Search Set that measures above  
2       CF\_T\_ADD<sub>S</sub>, the mobile station shall report its phase and strength in the fields  
3       PILOT\_PN\_PHASE and PILOT\_STRENGTH, respectively.
- 4       • The mobile station shall ensure that the strength measurement for all pilots in the  
5       Candidate Frequency Search Set were obtained within *freshness\_interval* before the  
6       Candidate Frequency Search Report Message is sent, where *freshness\_interval* is  
7       determined as follows:
- 8       – If the value of the TOTAL\_OFF\_TIME\_FWD field or of the TOTAL\_OFF\_TIME\_REV  
9       field of the last *Candidate Frequency Search Response Message* sent by the  
10      mobile station to the base station is greater than or equal to  
11       $\lceil (T_{70m} - T_{71m}) / \text{SEARCH\_TIME\_RESOLUTION}_S \rceil$ , then  
12      
$$\text{freshness\_interval} = (\max(\text{fwd\_time}, \text{rev\_time}) + T_{71m}) \text{ seconds,}$$
- 13      where  
14      
$$\text{fwd\_time} = \text{SEARCH\_TIME\_RESOLUTION}_S \times (\text{value of the}$$
  
15      TOTAL\_OFF\_TIME\_FWD field of the last *Candidate Frequency*  
16      *Search Response Message* sent by the mobile station),
- 17      and  
18      
$$\text{rev\_time} = \text{SEARCH\_TIME\_RESOLUTION}_S \times (\text{value of the}$$
  
19      TOTAL\_OFF\_TIME\_REV field of the last *Candidate Frequency*  
20      *Search Response Message* sent by the mobile station).
- 21      – Otherwise,  
22      
$$\text{freshness\_interval} = T_{70m} \text{ seconds.}$$

#### 23 2.6.6.2.8.3.3 Candidate Frequency Pilot Measurements

24 The mobile station measures the strength of all pilots in the Candidate Frequency Search  
25 Set in one or more visits to the Candidate Frequency. The mobile station shall perform the  
26 following actions each time it visits the Candidate Frequency to measure pilot strengths:

- 27       • If the mobile station is processing the Forward Fundamental Channel, the mobile  
28       station shall stop processing the Forward Fundamental Channel. If the mobile  
29       station is transmitting on the Reverse Fundamental Channel, the mobile station  
30       shall stop transmitting on the Reverse Fundamental Channel.
- 31       • If the mobile station is processing the Forward Dedicated Control Channel, the  
32       mobile station shall stop processing the Forward Dedicated Control Channel. If the  
33       mobile station is transmitting on the Reverse Dedicated Control Channel, the  
34       mobile station shall stop transmitting on the Reverse Dedicated Control Channel.
- 35       • The mobile station shall stop processing the Forward Supplemental Code Channels  
36       and Forward Supplemental Channels (if any). The mobile station shall stop  
37       transmitting on the Reverse Supplemental Code Channels and Reverse  
38       Supplemental Channels (if any).

- 1       • The mobile station shall disable the fade timer (see 2.6.4.1.8) and the handoff drop  
2       timers corresponding to its current Active Set and Candidate Set (see 2.6.6.2.3),  
3       and shall suspend incrementing TOT\_FRAMES<sub>S</sub>, BAD\_FRAMES<sub>S</sub>,  
4       DCCH\_TOT\_FRAMES<sub>S</sub>, DCCH\_BAD\_FRAMES<sub>S</sub>, SCH\_TOT\_FRAMES<sub>S</sub>, and  
5       SCH\_BAD\_FRAMES<sub>S</sub> if applicable (see 2.6.4.1.1).
- 6       • The mobile station shall lock the accumulation of valid level changes in the closed  
7       loop mean output power and shall ignore received power control bits related to the  
8       period that the transmitter is disabled (see [2]).
- 9       • The mobile station shall store the following parameters from its current  
10      configuration:
  - 11      – CDMA band class (SF\_CDMABAND<sub>S</sub> = CDMABAND<sub>S</sub>)
  - 12      – Frequency Assignment (SF\_CDMACH<sub>S</sub> = CDMACH<sub>S</sub>)
  - 13      – Pilot detection threshold (SF\_T\_ADD<sub>S</sub> = T\_ADD<sub>S</sub>)
- 14      • The mobile station shall set the following parameters:
  - 15      – CDMABAND<sub>S</sub> = CF\_CDMABAND<sub>S</sub>
  - 16      – CDMACH<sub>S</sub> = CF\_CDMACH<sub>S</sub>
  - 17      – T\_ADD<sub>S</sub> = CF\_T\_ADD<sub>S</sub>
- 18      The mobile station shall tune to the Candidate Frequency.
- 19      • The mobile station shall not change its time reference (see [2]) until it resumes  
20      using the Serving Frequency Active Set, as described below.
- 21      • The mobile station shall measure the mean input power on the Candidate  
22      Frequency (*cand\_freq\_pwr*, in dBm / 1.23 MHz), and may use *cand\_freq\_pwr* along  
23      with the measurement of the mean input power on the Serving Frequency  
24      (*avg\_serving\_freq\_pwr*, in dBm / 1.23 MHz) in the search procedure as follows:
  - 25      – If DIFF\_RX\_PWR\_THRESH<sub>S</sub> is not equal to '00000', and (*cand\_freq\_pwr* -  
26      *avg\_serving\_freq\_pwr*) is less than  $(-30 + 2 \times \text{DIFF\_RX\_PWR\_THRESH}_S)$  dB, the  
27      mobile station may terminate the search for pilots in the current visit to the  
28      Candidate Frequency.
  - 29      – If DIFF\_RX\_PWR\_THRESH<sub>S</sub> is equal to '00000', the mobile station does not use  
30      the power measurements in the search procedure, or (*cand\_freq\_pwr* -  
31      *avg\_serving\_freq\_pwr*) is not less than  $(-30 + 2 \times \text{DIFF\_RX\_PWR\_THRESH}_S)$  dB,  
32      the mobile station shall measure  $E_c/I_0$  for all or some of the pilots in its  
33      Candidate Frequency Search Set, using the search procedures specified in  
34      2.6.6.2.2.
- 35      • The mobile station shall restore the following parameters:
  - 36      – Pilot detection threshold (T\_ADD<sub>S</sub> = SF\_T\_ADD<sub>S</sub>)
  - 37      – CDMA band class (CDMABAND<sub>S</sub> = SF\_CDMABAND<sub>S</sub>)
  - 38      – Frequency assignment (CDMACH<sub>S</sub> = SF\_CDMACH<sub>S</sub>)



- 1 • The mobile station shall tune to the Serving Frequency and shall resume using the  
2 Serving Frequency Active Set as follows:
  - 3 – If the mobile station was processing the Forward Fundamental Channel prior to  
4 tuning to the Candidate Frequency, the mobile station shall resume processing  
5 the Forward Fundamental Channel. If the mobile station was transmitting on  
6 the Reverse Fundamental Channel prior to tuning to the Candidate Frequency,  
7 the mobile station shall resume transmitting on the Reverse Fundamental  
8 Channel.
  - 9 – If the mobile station was processing the Forward Dedicated Control Channel  
10 prior to tuning to the Candidate Frequency, the mobile station shall resume  
11 processing the Forward Dedicated Control Channel. If the mobile station was  
12 transmitting on the Reverse Dedicated Control Channel prior to tuning to the  
13 Candidate Frequency, the mobile station shall resume transmitting on the  
14 Reverse Dedicated Control Channel.
  - 15 – If the Forward Supplemental Code Channels and Forward Supplemental  
16 Channels assignment has not expired, the mobile station shall resume  
17 processing the Forward Supplemental Code Channels and Forward  
18 Supplemental Channels (if any). If the Reverse Supplemental Code Channel  
19 and Reverse Supplemental Channels assignment has not expired, the mobile  
20 station may resume transmitting on the Reverse Supplemental Code Channels  
21 and Reverse Supplemental Channels (if any).
  - 22 – When the mobile station resumes transmission on the Reverse Traffic Channel,  
23 it shall use the following rules to re-enable its transmitter:
    - 24 + If the interval between the time that the mobile station disables its  
25 transmitter and the time that it resumes using the Serving Frequency Active  
26 Set is equal to or greater than  $(N_{2m} \times 20)$  ms, then the mobile station shall  
27 wait to receive a period of  $(N_{3m} \times 20)$  ms with sufficient signal quality on  
28 the physical channel corresponding to  $FPC\_PRI\_CHAN_S$  before it re-enables  
29 its transmitter.
    - 30 + Otherwise, the mobile station shall re-enable its transmitter no later than  
31  $N_{3m} \times 20$  ms after the mobile station tunes to the Serving Frequency. The  
32 mobile station should re-enable its transmitter earlier. After the mobile  
33 station re-enables its transmitter, the mean output power shall be as  
34 specified in 2.1.2.4.1 for a step change in input power. If the mobile station  
35 re-enables its transmitter earlier than  $N_{3m} \times 20$  ms after it tunes to the  
36 Serving Frequency, the initial mean output power shall be as specified in  
37 [2], where the initial mean input power estimate is either:
      - 38 o within 6 dB of the actual mean input power, or
      - 39 o equal to the mean input power before the mobile station tuned to the  
40 Target Frequency.

- The mobile station shall enable the fade timer and the handoff drop timers corresponding to the pilots in its Active Set and Candidate Set. The mobile station shall resume incrementing TOT\_FRAMES<sub>s</sub>, BAD\_FRAMES<sub>s</sub>, DCCH\_TOT\_FRAMES<sub>s</sub>, DCCH\_BAD\_FRAMES<sub>s</sub>, SCH\_TOT\_FRAMES<sub>s</sub>, and SCH\_BAD\_FRAMES<sub>s</sub> if applicable as specified in 2.6.4.1.8.

#### 2.6.6.2.8.3.4 Aborting CDMA Candidate Frequency Periodic Search

When the mobile station aborts a periodic search, it shall perform the following:

- The mobile station shall cancel any remaining visits to the Candidate Frequency in the current search period, and shall not send a *Candidate Frequency Search Report Message* for the current search period.
- The mobile station shall disable the periodic search timer.

#### 2.6.6.2.9 Reserved

#### 2.6.6.2.10 Reserved

#### 2.6.6.2.11 Processing of Reverse Supplemental Code Channels and Reverse Supplemental Channels

Reverse Supplemental Code Channels are not supported for P\_REV\_IN\_USE<sub>s</sub> greater than or equal to nine.

If USE\_T\_ADD\_ABORT<sub>s</sub> is set to '1', and the strength of a Neighbor Set or Remaining Set pilot is found to be above T\_ADD<sub>s</sub>, then the mobile station shall terminate any active transmission on Reverse Supplemental Code Channels or Reverse Supplemental Channels at the end of the current 20 ms frame. The mobile station shall perform the following:

- Any previously active Reverse Supplemental Code Channel or Reverse Supplemental Channel assignment shall be considered implicitly terminated.
- If active transmission on Reverse Supplemental Code Channels is terminated, the mobile station shall set NUM\_REV\_CODES<sub>s</sub> to '000' and shall set IGNORE\_SCAM<sub>s</sub> to '1'.
- If active transmission on Reverse Supplemental Channels is terminated, the mobile station shall set IGNORE\_ESCAM<sub>s</sub> to '1'.
- The mobile station shall set SCRM\_SEQ\_NUM<sub>s</sub> to (SCRM\_SEQ\_NUM<sub>s</sub> + 1) mod 16.
- The mobile station shall transmit a *Supplemental Channel Request Message* with USE\_SCRM\_SEQ\_NUM set to '1', SCRM\_SEQ\_NUM set to SCRM\_SEQ\_NUM<sub>s</sub>, and SIZE\_OF\_REQ\_BLOB set to '0000'.

#### 2.6.6.2.12 Periodic Serving Frequency Pilot Report Procedure

While the mobile station is tuned to the Serving Frequency (specified by CDMACH<sub>s</sub> and CDMABAND<sub>s</sub>), the mobile station shall measure the total received power spectral density, in mW/1.23 MHz, on the Serving Frequency at least once every 20 ms frame. The mobile station shall maintain the average value of the total received power spectral density,

1 *spec\_density*, over the last  $N_{12m}$  frames. The mobile station shall maintain the PPSMM  
2 timer as follows:

- 3 • When the mobile station starts a Periodic Serving Frequency Pilot Report  
4 Procedure, it shall set the PPSMM timer to  $PPSMM\_PERIOD_S \times 0.08$  seconds and  
5 shall enable the timer.
- 6 • When the PPSMM timer expires, the mobile station shall send a *Periodic Pilot*  
7 *Strength Measurement Message* (2.6.6.2.5.2) to the base station, reset the PPSMM  
8 timer to  $PPSMM\_PERIOD_S \times 0.08$  seconds and shall re-enable the timer.
- 9 • When the mobile station receives an *Extended Handoff Direction Message*, a  
10 *General Handoff Direction Message* or a *Universal Handoff Direction Message*  
11 directing the mobile station to perform a hard handoff (see 2.6.6.2.5.1), it shall  
12 abort the Periodic Serving Frequency Pilot Report Procedure and disable the  
13 PPSMM timer if it is enabled.
- 14 • If  $MIN\_PILOT\_PWR\_THRESH_S$  is not equal to '11111' and  
15  $MIN\_PILOT\_EC\_IO\_THRESH_S$  is equal to '11111', the mobile station shall perform  
16 the following actions once per frame:
  - 17 – Disable the PPSMM timer if the received total energy per PN chip,  $E_c$ , of the  
18 pilots in the Active Set is not less than  $(-120 + 2 \times MIN\_PILOT\_PWR\_THRESH_S)$ ,  
19 where the value of  $E_c$  is computed as  $10 \times \log_{10}(PS \times spec\_density)$  and PS is  
20 the total  $E_c/I_0$  of the pilots in the Active Set measured as specified in 2.6.6.2.2.
  - 21 – Reset the expiration time of the PPSMM timer to  $PPSMM\_PERIOD_S \times 0.08$   
22 seconds and re-enable the timer if the following conditions are true:
    - 23 o the PPSMM timer is disabled, and
    - 24 o the received total energy per PN chip,  $E_c$ , of the pilots in the Active Set is  
25 less than  $(-120 + 2 \times MIN\_PILOT\_PWR\_THRESH_S)$ .
- 26 • If  $MIN\_PILOT\_PWR\_THRESH_S$  is equal to '11111' and  $MIN\_PILOT\_EC\_IO\_THRESH_S$   
27 is not equal to '11111', the mobile station shall perform the following actions once  
28 per frame:
  - 29 – Disable the PPSMM timer if the total pilot strength of the pilots in the Active  
30 Set, PS, satisfies the condition that  $(-20 \times \log_{10}(PS))$  is not greater than  
31  $MIN\_PILOT\_EC\_IO\_THRESH_S$ .
  - 32 – Reset the expiration time of the PPSMM timer to  $PPSMM\_PERIOD_S \times 0.08$   
33 seconds and re-enable the timer if the following conditions are true:
    - 34 o the PPSMM timer is disabled, and
    - 35 o the total pilot strength of the pilots in the Active Set, PS, satisfies the  
36 condition that  $(-20 \times \log_{10}(PS))$  is greater than  
37  $MIN\_PILOT\_EC\_IO\_THRESH_S$ .
- 38 • If  $MIN\_PILOT\_PWR\_THRESH_S$  is not equal to '11111' and  
39  $MIN\_PILOT\_EC\_IO\_THRESH_S$  is not equal to '11111', the mobile station shall  
40 perform the following actions once per frame:

- 1       – Disable the PPSMM timer if the following conditions are true:
  - 2           o the received total energy per PN chip,  $E_c$ , of the pilots in the Active Set is not
  - 3           less than  $(-120 + 2 \times \text{MIN\_PILOT\_PWR\_THRESH}_S)$ , and
  - 4           o the total pilot strength of the pilots in the Active Set,  $PS$ , satisfies the
  - 5           condition that  $(-20 \times \log_{10}(PS))$  is not greater than
  - 6            $\text{MIN\_PILOT\_EC\_IO\_THRESH}_S$ .
- 7       – Reset the expiration time of the PPSMM timer to  $\text{PPSMM\_PERIOD}_S \times 0.08$
- 8       seconds and re-enable the timer if the following conditions are true:
  - 9           o the PPSMM timer is disabled, and
  - 10          o the received total energy per PN chip,  $E_c$ , of the pilots in the Active Set is
  - 11          less than  $(-120 + 2 \times \text{MIN\_PILOT\_PWR\_THRESH}_S)$ , or the total pilot strength
  - 12          of the pilots in the Active Set,  $PS$ , satisfies the condition that  $(-20 \times$
  - 13           $\log_{10}(PS))$  is greater than  $\text{MIN\_PILOT\_EC\_IO\_THRESH}_S$ .
- 14       • If  $\text{MIN\_PILOT\_PWR\_THRESH}_S$  is equal to '11111' and  $\text{MIN\_PILOT\_EC\_IO\_THRESH}_S$
- 15       is equal to '11111', the mobile station shall maintain the PPSMM timer independent
- 16       of the received power and the total  $E_c/I_0$  of the pilots.

#### 17 2.6.6.2.13 Call Rescue Soft Handoff

18 This section presents an overview and mobile station requirements for the support of call  
 19 rescue soft handoff while the mobile station is in the *Mobile Station Control on the Traffic*  
 20 *Channel State*.

##### 21 2.6.6.2.13.1 Overview

22 Support for the call rescue feature is mandatory for the mobile station. The mobile station  
 23 initiates call rescue soft handoff after disabling its transmitter due to:

- 24       • insufficient signal quality on the Forward Traffic Channel (see 2.6.4.1.8)
- 25       • an acknowledgment failure.

26 In order for a pilot to be autonomously added to the Active Set, it must be a valid soft  
 27 handoff candidate on the mobile station's neighbor list, and must also support a Rescue  
 28 Channel. A Rescue Channel is a Fundamental Channel that is used for call rescue soft  
 29 handoff, and has a pre-allocated Walsh Code that is provided to the mobile station as part  
 30 of the *General Neighbor List Message*, *Universal Neighbor List Message*, and *Extended*  
 31 *Neighbor List Update Message*.

32 If the mobile station is eligible to attempt call rescue soft handoff, then it re-enables its  
 33 transmitter and monitors the Rescue Channel (as well as the other Traffic Channels in the  
 34 Active Set) for good frames. Once good frames are received, then the call continues  
 35 normally.

36 Three timers are used as part of call rescue soft handoff: the rescue delay timer, the rescue  
 37 allowed timer, and the rescue attempt timer.

### 2.6.6.2.13.2 Requirements

If the rescue delay timer expires and the interval specified by  $\text{RESQ\_MIN\_PERIOD}_S$  has elapsed since the last successful call rescue, then the mobile station shall enable the rescue allowed timer with an initial value of  $(\text{RESQ\_ALLOWED\_TIME}_S \times 80)$  ms.

While the rescue allowed timer is enabled, if the mobile station is able to promote any new pilots to the Active Set (see 2.6.6.2.6.1), then the mobile station shall perform the following:

- disable the rescue allowed timer,
- update the service configuration as specified in 2.6.6.2.13.3.
- cancel any current and pending Forward or Reverse Supplemental Channel assignments.
- re-enable its transmitter at the last closed-loop power level plus  $\text{RESQ\_POWER\_DELTA}_S$ ,
- enable the rescue attempt timer with an initial value of  $(\text{RESQ\_ATTEMPT\_TIME}_S \times 40)$  ms.
- transmit the Traffic Channel preamble followed by a *Extended Pilot Strength Measurement Message*, where the length of the Traffic Channel preamble is determined as follows:
  - If operating in Radio Configuration 1 or 2, the length of the Traffic Channel preamble is given by  $\text{RESQ\_NUM\_PREAMBLE\_RC1\_RC2}_S \times 20\text{ms}$ .
  - If operating in Radio Configuration greater than 2, the length of the Traffic Channel preamble is given by the duration corresponding to  $\text{RESQ\_NUM\_PREAMBLE}_S$  as specified by the Table 3.7.3.3.2.17-1.

If the rescue allowed timer expires, then the mobile station shall not autonomously promote any new pilots to the Active Set.

While the rescue attempt timer is enabled, the mobile station shall not perform the Forward or Reverse Traffic Channel power control procedures specified in 2.6.4.1.1 and 2.6.6.2.7.2, respectively.

If the rescue attempt timer expires, then the mobile station shall disable its transmitter.

### 2.6.6.2.13.3 Service Configuration Update Due to Call Rescue

The mobile station shall set  $\text{CH\_IND}_S$  to '01'.

The mobile station shall replace the current Logical-to-Physical Mapping with the default Logical-to-Physical Mapping as specified in Table 2.6.4.2-1, where:

- requirement 1 is as follows: The  $\text{SR\_ID}$  field shall be set to the  $\text{SR\_ID}$  corresponding to the services mapped to the Fundamental Channel, and
- requirements 2 and 3 are as follows: the  $\text{PHYSICAL\_RESOURCE}$  field shall be set to '0000'.

1 The mobile station shall replace the current Service Configuration information record with  
 2 a new Service Configuration information record created as follows:

- 3 • The mobile station shall delete all Service Option Connection Records  
 4 corresponding to an SR\_ID that is not listed in the Call Rescue Logical-to-Physical  
 5 Mapping created above and the Layer 3 shall terminate the corresponding call  
 6 control instance (currently existing or pending instantiation).
- 7 • The mobile station shall identify the Call Control instance corresponding to the first  
 8 service option connection listed in this newly created Service Configuration  
 9 information record by the NULL identifier.

10 The mobile station shall set SYNC\_ID<sub>s</sub> to NULL.

### 11 2.6.6.3 Typical Message Exchanges During Handoffs

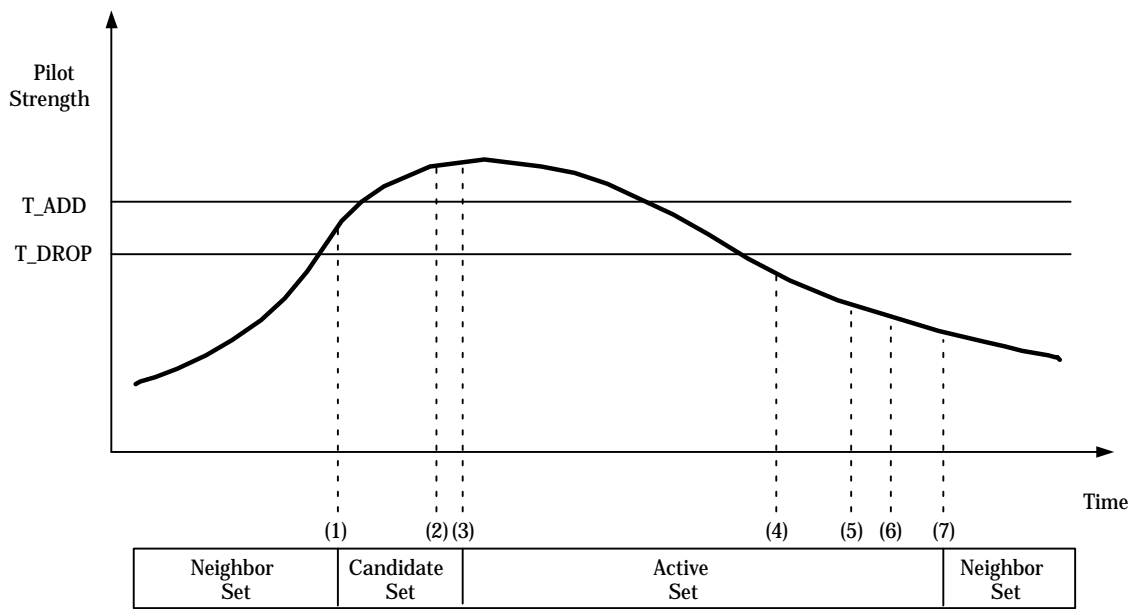
12 The following examples illustrate typical message exchanges between the mobile station  
 13 and the base station during handoff. Refer to Annex B for examples of call processing  
 14 during handoff.

15 Figure 2.6.6.3-1 shows an example of the messages exchanged between the mobile station  
 16 and the base station during a typical handoff process if P\_REV\_IN\_USE<sub>s</sub> is less than or  
 17 equal to three or SOFT\_SLOPE<sub>s</sub> is equal to '000000'.

18 Figure 2.6.6.3-2 shows an example of the messages exchanged between the mobile station  
 19 and the base station during a typical handoff process if P\_REV\_IN\_USE<sub>s</sub> is greater than  
 20 three and SOFT\_SLOPE<sub>s</sub> is not equal to '000000'.

21 Figure 2.6.6.3-3 illustrates the messaging triggered by a pilot of the Candidate Set as its  
 22 strength gradually rises above the strength of each pilot of the Active Set if  
 23 P\_REV\_IN\_USE<sub>s</sub> is less than or equal to three, or SOFT\_SLOPE<sub>s</sub> is equal to '000000'. Note  
 24 that the mobile station reports that a Candidate Set pilot is stronger than an Active Set  
 25 pilot only if the difference between their respective strengths is at least  $T\_COMP \times 0.5$  dB.

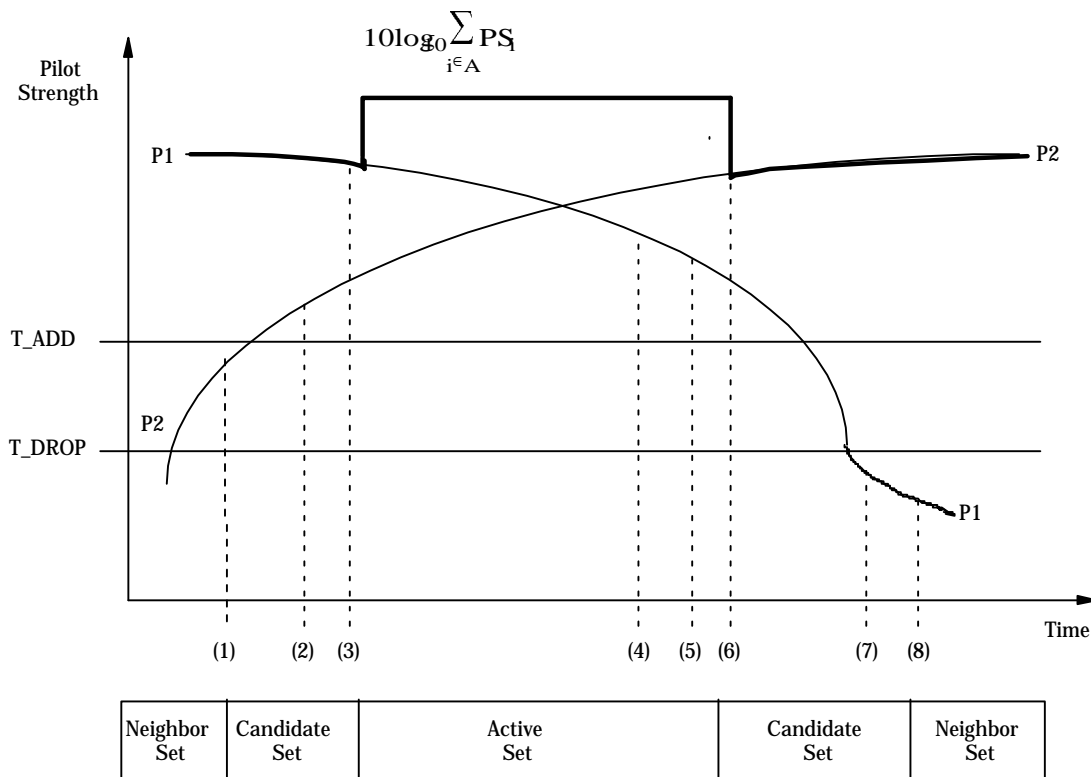
26 Figure 2.6.6.3-4 illustrates the messaging triggered by a pilot of the Candidate Set as its  
 27 strength gradually rises above the strength of each pilot of the Active Set if  
 28 P\_REV\_IN\_USE<sub>s</sub> is greater than three and SOFT\_SLOPE<sub>s</sub> is not equal to '000000'. Note  
 29 that the mobile station reports that a Candidate Set pilot is stronger than an Active Set  
 30 pilot only if the difference between their respective strengths is at least  $T\_COMP \times 0.5$  dB  
 31 and Pilot P<sub>0</sub> strength exceeds  $[(SOFT\_SLOPE/8) \times 10 \times \log_{10}(PS_1 + PS_2) +$   
 32 ADD\_INTERCEPT/2].



1  
2

- 3 (1) Pilot strength exceeds T\_ADD. Mobile station sends a *Pilot Strength Measurement*  
4 *Message* and transfers pilot to the Candidate Set.
- 5 (2) Base station sends an *Extended Handoff Direction Message*, a *General Handoff*  
6 *Direction Message* or a *Universal Handoff Direction Message*.
- 7 (3) Mobile station transfers pilot to the Active Set and sends a *Handoff Completion*  
8 *Message*.
- 9 (4) Pilot strength drops below T\_DROP. Mobile station starts the handoff drop timer.
- 10 (5) Handoff drop timer expires. Mobile station sends a *Pilot Strength Measurement*  
11 *Message*.
- 12 (6) Base station sends an *Extended Handoff Direction Message*, a *General Handoff*  
13 *Direction Message* or a *Universal Handoff Direction Message*.
- 14 (7) Mobile station moves pilot from the Active Set to the Neighbor Set and sends a  
15 *Handoff Completion Message*.

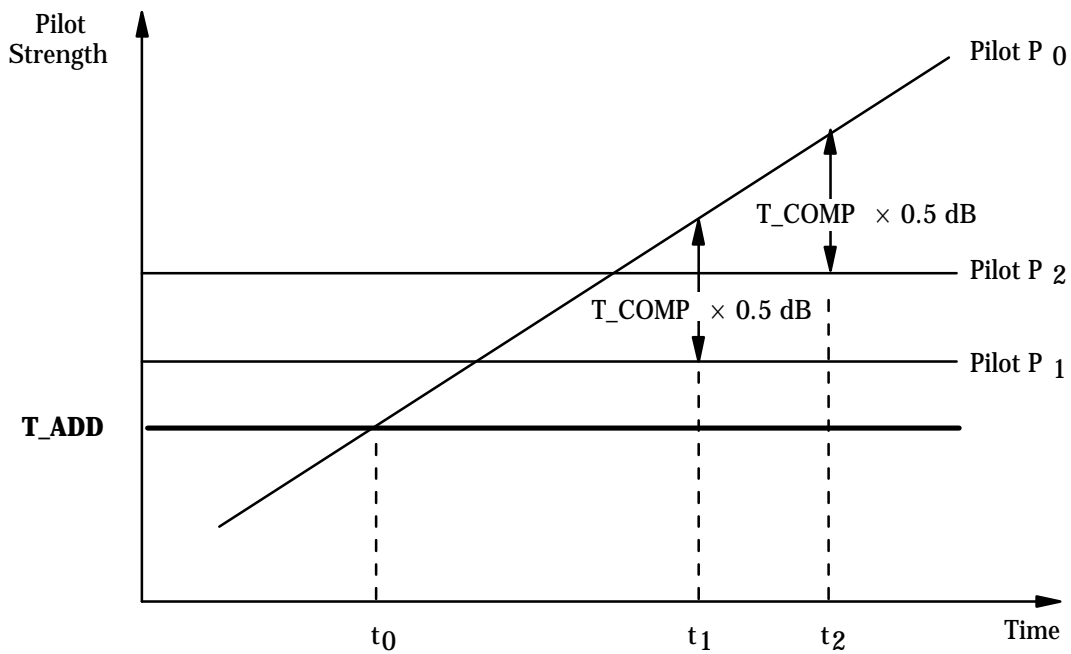
16 **Figure 2.6.6.3-1. Handoff Threshold Example if P\_REV\_IN\_USE<sub>s</sub> is Less Than or**  
17 **Equal to Three, or SOFT\_SLOPE<sub>s</sub> is Equal to '000000'**  
18



- (1) Pilot P<sub>2</sub> strength exceeds T\_ADD. Mobile station transfers the pilot to the Candidate Set.
- (2) Pilot P<sub>2</sub> strength exceeds  $[(SOFT\_SLOPE/8) \times 10 \times \log_{10}(PS_1) + ADD\_INTERCEPT/2]$ . Mobile station sends a *Pilot Strength Measurement Message*.
- (3) Mobile station receives an *Extended Handoff Direction Message*, a *General Handoff Direction Message* or a *Universal Handoff Direction Message*, transfers the pilot P<sub>2</sub> to the Active Set, and sends a *Handoff Completion Message*.
- (4) Pilot P<sub>1</sub> strength drops below  $[(SOFT\_SLOPE/8) \times 10 \times \log_{10}(PS_2) + DROP\_INTERCEPT/2]$ . Mobile station starts the handoff drop timer.
- (5) Handoff drop timer expires. Mobile station sends a *Pilot Strength Measurement Message*.
- (6) Mobile station receives an *Extended Handoff Direction Message*, a *General Handoff Direction Message* or a *Universal Handoff Direction Message*, transfers the pilot P<sub>1</sub> to the Candidate Set and sends a *Handoff Completion Message*.
- (7) Pilot P<sub>1</sub> strength drops below T\_DROP. Mobile station starts the handoff drop timer.
- (8) Handoff drop timer expires. Mobile station moves the pilot P<sub>1</sub> from the Candidate Set to the Neighbor Set.

**Figure 2.6.6.3-2. Handoff Threshold Example if P\_REV\_IN\_USE<sub>s</sub> is Greater Than Three, and SOFT\_SLOPE<sub>s</sub> is Not Equal to '000000'**





1

2

Candidate Set: Pilot P<sub>0</sub>

3

Active Set: Pilots P<sub>1</sub>, P<sub>2</sub>

4

t<sub>0</sub> – Pilot Strength Measurement Message sent, P<sub>0</sub> > T<sub>ADD</sub>

5

t<sub>1</sub> – Pilot Strength Measurement Message sent, P<sub>0</sub> > P<sub>1</sub> + T<sub>COMP</sub> × 0.5 dB

6

t<sub>2</sub> – Pilot Strength Measurement Message sent, P<sub>0</sub> > P<sub>2</sub> + T<sub>COMP</sub> × 0.5 dB

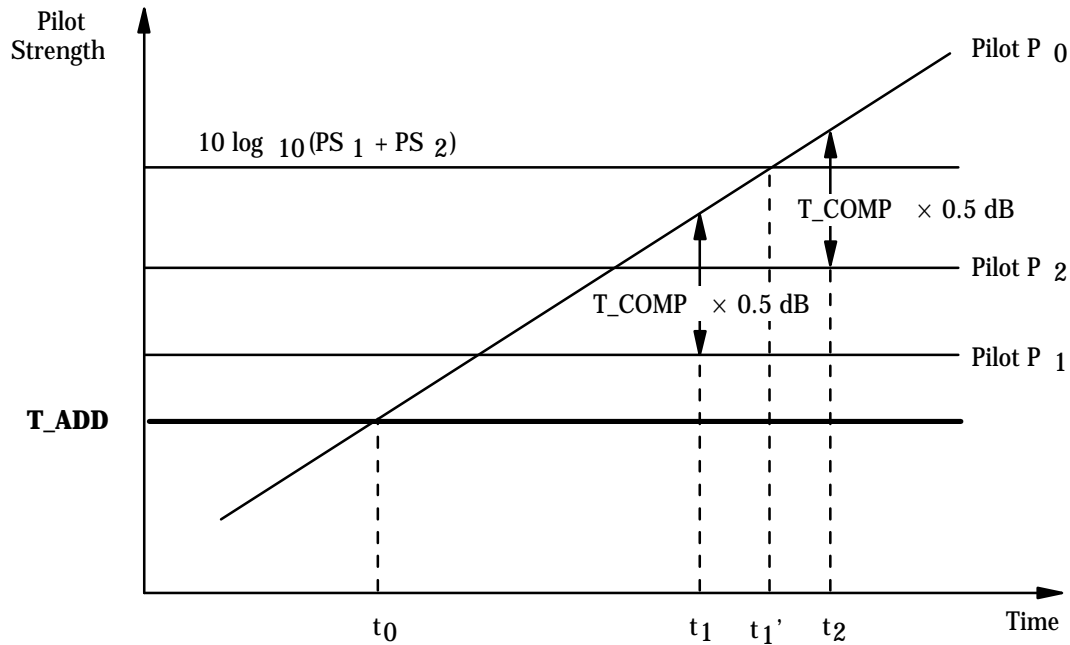
7

**Figure 2.6.6.3-3. Pilot Strength Measurements Triggered by a Candidate Pilot if  
P<sub>REV\_IN\_USE<sub>s</sub></sub> = 3 or SOFT\_SLOPE<sub>s</sub> = '000000'**

8

9

10



Candidate Set: Pilot P<sub>0</sub>

Active Set: Pilots P<sub>1</sub>, P<sub>2</sub>

*t*<sub>0</sub> – Pilot Strength Measurement Message not sent because

$$[10 \times \log_{10}(PS_0)] < [(SOFT\_SLOPE/8) \times 10 \times \log_{10}(PS_1 + PS_2) + ADD\_INTERCEPT/2]$$

*t*<sub>1</sub> – Pilot Strength Measurement Message not sent because

$P_0 > [P_1 + T\_COMP \times 0.5 \text{ dB}]$  but

$$[10 \times \log_{10}(PS_0)] < [(SOFT\_SLOPE/8) \times 10 \times \log_{10}(PS_1 + PS_2) + ADD\_INTERCEPT/2]$$

*t*<sub>1'</sub> – Pilot Strength Measurement Message sent because

$$[10 \times \log_{10}(PS_0)] > [(SOFT\_SLOPE/8) \times 10 \times \log_{10}(PS_1 + PS_2) + ADD\_INTERCEPT/2]$$

*t*<sub>2</sub> – Pilot Strength Measurement Message sent because

$P_0 > [P_2 + T\_COMP \times 0.5 \text{ dB}]$  and

$$[10 \times \log_{10}(PS_0)] > [(SOFT\_SLOPE/8) \times 10 \times \log_{10}(PS_1 + PS_2) + ADD\_INTERCEPT/2]$$

**Figure 2.6.6.3-4. Pilot Strength Measurements Triggered by a Candidate Pilot if  $P\_REV\_IN\_USE_s > 3$  and  $SOFT\_SLOPE_s$  is Not Equal to '000000'**

## 1 2.6.7 Hash Functions and Randomization

### 2 2.6.7.1 Hash Function

3 Certain procedures require a uniform distribution of mobile stations among N resources.  
 4 The following function returns an integer, using as arguments the mobile station's IMSI,  
 5 the number of resources N, and a modifier DECORR. The modifier serves to decorrelate  
 6 the values obtained for the various applications from the same mobile station.

7 HASH\_KEY shall be equal to the 32 least significant bits of  $(\text{IMSI\_O\_S1} + 2^{24} \times$   
 8  $\text{IMSI\_O\_S2})$ .

9 Define:

- 10 • Word L to be bits 0-15 of HASH\_KEY
- 11 • Word H to be bits 16-31 of HASH\_KEY

12 where bit 0 is the least significant bit of HASH\_KEY.

13 For determining CDMA Band, CDMA Channel Number, Paging Channel Number, Forward  
 14 Common Control Channel Number, Quick Paging Channel Number, and Paging Slot  
 15 Number, the hash value is computed as follows:<sup>41</sup>

$$16 \quad R = \lfloor N \times ((40503 \times (L \oplus H \oplus \text{DECORR})) \bmod 2^{16}) / 2^{16} \rfloor.$$

17 For determining a mobile station's assigned paging indicator bit positions, the hash value  
 18 is computed as follows:

$$19 \quad R_1 = \lfloor N \times ((40503 \times (L \oplus H \oplus \text{DECORR}_1)) \bmod 2^{16}) / 2^{16} \rfloor,$$

20 and

$$21 \quad R_2 = \lfloor (1 - \lfloor (2 \times R_1) / (N+4) \rfloor) \times (N+4) / 2 + \lfloor (2 \times R_1) / (N+4) \rfloor \times ((N+4) / 2 - 4) \times ((40503 \times (L$$
  
 22  $\oplus H \oplus \text{DECORR}_2)) \bmod 2^{16}) / 2^{16} \rfloor + N + 4 + \lfloor (2 \times R_1) / (N+4) \rfloor \times ((N+4) / 2) \text{ for Quick}$   
 23  $\text{Paging Channel indicator rate of 4800 bps, or}$

$$24 \quad R_2 = \lfloor (1 - \lfloor (2 \times R_1) / (N+8) \rfloor) \times (N+8) / 2 + \lfloor (2 \times R_1) / (N+8) \rfloor \times ((N+8) / 2 - 8) \times ((40503$$
  
 25  $\times (L \oplus H \oplus \text{DECORR}_2)) \bmod 2^{16}) / 2^{16} \rfloor + N + 8 + \lfloor (2 \times R_1) / (N+8) \rfloor \times ((N+8) / 2) \text{ for}$   
 26  $\text{Quick Paging Channel indicator rate of 9600 bps.}$

27 The mobile station shall choose the range N and the modifiers DECORR, DECORR<sub>1</sub>, and  
 28 DECORR<sub>2</sub> according to the application as shown in Table 2.6.7.1-1. In the table,  
 29 HASH\_KEY [0...11] denotes the 12 least significant bits of HASH\_KEY.

30

---

<sup>41</sup> This formula is adapted from Knuth, Donald N., *The Art of Computer Programming*, 2 volumes, (Reading, MA, Addison-Wesley, 1998).

1

**Table 2.6.7.1-1. Hash Function Modifier**

<b>Application</b>	<b>N</b>	<b>DECORR</b>	<b>Return Value</b>
CDMA Band Number	Number of band entries	$2 \times \text{HASH\_KEY} [0 \dots 11]$	$R + 1$
CDMA Channel Number	Number of channel entries	0	$R + 1$
Paging Channel Number	PAGE_CHAN <sub>S</sub> from <i>System Parameters Message</i> (up to 7)	$2 \times \text{HASH\_KEY} [0 \dots 11]$	$R + 1$
Quick Paging Channel Number	NUM_QPCH <sub>S</sub> from <i>Extended System Parameters Message</i> or <i>MC-RR Parameters Message</i> (up to 3)	$2 \times \text{HASH\_KEY} [0 \dots 11]$	$R + 1$
Paging Slot Number	2048	$6 \times \text{HASH\_KEY}[0 \dots 11]$	R
Paging Indicator Positions	376 (for 9600 bps), 188 (for 4800 bps)	$\text{DECORR}_1 = \lfloor t / 64 \rfloor \bmod 2^{16},$ $\text{DECORR}_2 = \lfloor t / 64 + 1 \rfloor \bmod 2^{16},$ where t is the System Time in 20ms frames, relative to the beginning of the assigned Quick Paging Channel slot.	$R_1$ and $R_2$
Forward Common Control Channel Number	NUM_FCCCH <sub>S</sub> from <i>MC-RR Parameters Message</i> (up to 7)	$2 \times \text{HASH\_KEY} [0 \dots 11]$	$R + 1$

2

3 **2.6.7.2 Pseudorandom Number Generator**

4 Where pseudorandom numbers are needed, a linear congruential generator shall be used.  
 5 The mobile station shall implement the linear congruential generator defined by:

$$6 \quad z_n = a \times z_{n-1} \bmod m$$

7 where  $a = 7^5 = 16807$  and  $m = 2^{31} - 1 = 2147483647$ .  $z_n$  is the output of the generator.<sup>42</sup>

---

<sup>42</sup> This generator has full period, ranging over all integers from 1 to m-1; the values 0 and m are never produced. Several suitable implementations can be found in Park, Stephen K. and Miller,

(footnote continued on next page)

1 During the *Mobile Station Initialization State*, the mobile station shall seed its generator  
2 with

$$3 \quad z_0 = (\text{ESN} \oplus \text{RANDOM\_TIME}) \bmod m$$

4 where RANDOM\_TIME shall be the least-significant 32-bits of SYS\_TIME<sub>s</sub> stored from the  
5 *Sync Channel Message*. If the initial value so produced is found to be zero, it shall be  
6 replaced with one. The mobile station shall compute a new  $z_n$  for each subsequent use.

7 The mobile station shall use the value  $u_n = z_n / m$  for those applications that require a  
8 binary fraction  $u_n$ ,  $0 < u_n < 1$ .

9 The mobile station shall use the value  $k_n = \lfloor N \times z_n / m \rfloor$  for those applications that require  
10 a small integer  $k_n$ ,  $0 \leq k_n \leq N - 1$ .

### 11 2.6.8 CODE\_CHAN\_LIST<sub>s</sub> Maintenance

12 The CODE\_CHAN\_LIST<sub>s</sub> is a descriptive structure used to manage the Forward  
13 Fundamental Channel and Forward Supplemental Code Channels, if any, associated with  
14 the mobile station's Active Set. Associated with each member of the mobile station's Active  
15 Set, there is an ordered array of code channels. The first entry of the ordered array  
16 specifies the Forward Fundamental Channel associated with the pilot and the subsequent  
17 entries, if any, specify the Forward Supplemental Code Channels associated with the pilot.  
18 The CODE\_CHAN\_LIST<sub>s</sub> is the collection of ordered arrays of code channels for each  
19 member of the mobile station's Active Set. The  $i^{\text{th}}$  entry in every array (of code channels  
20 associated with a member of the Active Set) corresponds to the  $i^{\text{th}}$  code channel.

21 The mobile station shall maintain the CODE\_CHAN\_LIST<sub>s</sub> as follows:

- 22 • When the mobile station is first assigned a Forward Fundamental Channel, it shall  
23 initialize the CODE\_CHAN\_LIST<sub>s</sub> to contain the Forward Fundamental Channel for  
24 each member of the Active Set.
- 25 • When the mobile station processes the *Extended Handoff Direction Message*, the  
26 mobile station shall update the CODE\_CHAN\_LIST<sub>s</sub> as follows:
  - 27 – For each pilot listed in the *Extended Handoff Direction Message* which does not  
28 have a corresponding code channel in the CODE\_CHAN\_LIST<sub>s</sub>, the mobile  
29 station shall add the code channel, CODE\_CHAN, of that pilot to the  
30 CODE\_CHAN\_LIST<sub>s</sub>, as the Forward Fundamental Channel for the pilot.
  - 31 – The mobile station shall delete all information in the CODE\_CHAN\_LIST<sub>s</sub>  
32 associated with a pilot that is not included in the *Extended Handoff Direction*  
33 *Message*.

---

Keith W., "Random Number Generators: Good Ones are Hard to Find," *Communications of the ACM*, vol. 31, no. 10, October 1988, pp. 1192-1201.

- 1       • When the mobile station processes the *General Handoff Direction Message*, the  
2       mobile station shall update the CODE\_CHAN\_LIST<sub>s</sub> to contain the Forward  
3       Fundamental Channel associated with each pilot included in the *General Handoff*  
4       *Direction Message*. The first code channel occurrence associated with each pilot  
5       included in the *General Handoff Direction Message* corresponds to the Forward  
6       Fundamental Channel. The mobile station shall perform the following:
  - 7       – If FOR\_SUP\_CONFIG<sub>r</sub> is included and FOR\_SUP\_CONFIG<sub>r</sub> is equal to '10' or  
8       '11', the mobile station shall perform the following actions:
    - 9       + For each pilot listed in the *General Handoff Direction Message*, the mobile  
10       station shall set the Forward Supplemental Code Channels (associated with  
11       the pilot) in the CODE\_CHAN\_LIST<sub>s</sub> to the Forward Supplemental Code  
12       Channels specified in the *General Handoff Direction Message*.
    - 13       + The mobile station shall delete all information in the CODE\_CHAN\_LIST<sub>s</sub>  
14       associated with a pilot that is not included in the *General Handoff Direction*  
15       *Message*.
  - 16       – If FOR\_SUP\_CONFIG<sub>r</sub> is equal to '00' or '01' or if FOR\_SUP\_CONFIG<sub>r</sub> is not  
17       included in the *General Handoff Direction Message*, the mobile station shall not  
18       update Supplemental Code Channels associated with the pilots included in the  
19       *General Handoff Direction Message*. The mobile station shall perform the  
20       following actions:
    - 21       + For each pilot listed in the *General Handoff Direction Message* which does  
22       not have a corresponding code channel in the CODE\_CHAN\_LIST<sub>s</sub>, the  
23       mobile station shall add the code channel, CODE\_CHAN, of that pilot to the  
24       CODE\_CHAN\_LIST<sub>s</sub>, as the Forward Fundamental Channel for the pilot.
    - 25       + The mobile station shall delete all information in the CODE\_CHAN\_LIST<sub>s</sub>  
26       associated with a pilot that is not included in the *General Handoff Direction*  
27       *Message*.
- 28       • When the mobile station processes the *Supplemental Channel Assignment Message*  
29       it shall follow the following rules:
  - 30       – If FOR\_SUP\_CONFIG<sub>r</sub> is equal to '10' or '11', the mobile station shall update the  
31       Forward Supplemental Code Channels for each pilot in the Active Set.
  - 32       – If the pilot is not listed in the *Supplemental Channel Assignment Message*, the  
33       mobile station shall delete all occurrences of Forward Supplemental Code  
34       Channels associated with the pilot from the Code Channel List.
  - 35       – If a pilot is listed in the *Supplemental Channel Assignment Message*, then the  
36       mobile station shall set the Forward Supplemental Code Channels (associated  
37       with the pilot) in the CODE\_CHAN\_LIST<sub>s</sub> to the Forward Supplemental Code  
38       Channels specified in the *Supplemental Channel Assignment Message*.
  - 39       – If FOR\_SUP\_CONFIG<sub>r</sub> is equal to '00' or '01', the mobile station shall not update  
40       Supplemental Code Channels associated with the pilots included in the  
41       *Supplemental Channel Assignment Message*.

## 1 2.6.9 CDMA Tiered Services

2 This section presents an overview and mobile station requirements for the support of  
3 CDMA Tiered services while the mobile station is in the *Mobile Station Idle State* and in the  
4 *Mobile Station Control on the Traffic Channel State*.

### 5 2.6.9.1 Overview

#### 6 2.6.9.1.1 Definition

7 The mobile station may support Tiered Services based upon User Zones. Tiered Services  
8 provide the user custom services and special features based upon the mobile station  
9 location. Tiered Services also provides private network support. Important to the  
10 operation of CDMA Tiered Services is the concept of User Zones. It is via User Zones by  
11 which the base station offers custom services based upon the mobile station location.

12 User Zones are associated with a set of features and services, plus a geographic area in  
13 which the User Zone features/services are made available to the customers that have  
14 subscribed to that User Zone. The boundary of the User Zone Geographic area may be  
15 established based on the coverage area of a public or private base station or it may be  
16 established independent of RF topology.

17 User Zones may be supported by the public system on the same frequency as the serving  
18 base station, or they may be supported on a private system operating on a different  
19 frequency.

#### 20 2.6.9.1.2 Types of User Zones

21 User Zones may be of two basic types:

- 22 • *Broadcast User Zones*: Broadcast User Zones are identified to the mobile station  
23 using the Paging Channel or the Primary Broadcast Control Channel. In this case,  
24 the base station broadcasts on the Paging Channel or the Primary Broadcast Control  
25 Channel messages identifying the User Zones that fall within the coverage area of  
26 the particular cell/sector. Mobile stations, as part of their monitoring of the Paging  
27 Channel or the Primary Broadcast Control Channel, will identify the presence of a  
28 particular User Zone.
- 29 • *Mobile Specific User Zones*: Mobile Specific User Zones are not broadcast by the base  
30 station. The mobile station may use other overhead message parameters and  
31 compare them with internally stored User Zone parameters to identify the presence  
32 of a particular User Zone. These parameters may include: SID, NID, BASE\_ID,  
33 BASE\_LAT, and BASE\_LONG.

34 *Broadcast User Zones* allow for permanent as well as temporary subscription. Temporary  
35 subscription provides User Zone features and capabilities to users who are not subscribed  
36 to the User Zone. In this case, a mobile station, upon entering a new coverage area, may  
37 detect the presence of a User Zone that it presently does not subscribe to, but one that  
38 supports temporary subscription. The mobile station then queries the network to obtain  
39 the User Zone parameters. Once these parameters are received, the mobile station offers  
40 to the user via the mobile station user interface, the option of subscribing to the particular

1 User Zone.

2 Some User Zones may require active registration (Active User Zones) upon the mobile  
3 station's entry to immediately trigger a change in a feature(s). For others, the implicit  
4 registration at call setup is sufficient (Passive User Zones). Active User Zones are used  
5 where inbound features change as a result of being in the User Zone. During the *Mobile*  
6 *Station Idle State*, a mobile stations needs to register to update the User Zone ID whenever  
7 the User Zone that the mobile station is entering and/or leaving is of the Active type.

8 A mobile station that supports User Zone services may store a list of User Zones, where  
9 each User Zone is identified by a User Zone ID (UZID). Associated with each stored User  
10 Zone, the mobile station may also store a number of determinant parameters used for  
11 identifying User Zones.

## 12 2.6.9.2 Requirements

13 If the mobile station supports User Zone services, it shall maintain and update UZID<sub>S</sub>  
14 according the following rule:

15 If the mobile station selects a User Zone supported by the base station, the mobile station  
16 shall set UZID<sub>S</sub> to the User Zone Identifier associated with the User Zone; otherwise, the  
17 mobile station shall set UZID<sub>S</sub> to '0000000000000000'. The precise process for  
18 determining how to select a User Zone that is supported by the base station is left to the  
19 mobile station manufacturer.

20 If the mobile station does not support User Zone services, the mobile station shall set  
21 UZID<sub>S</sub> to '0000000000000000'.

22 The mobile station may search pilots of private neighbor base stations on other frequencies  
23 and band classes as identified in the *Private Neighbor List Message*. Search performance  
24 criteria are defined [11].

### 25 2.6.9.2.1 User Zone Operation in the Mobile Station Idle State:

26 When a mobile station performs an idle handoff, it selects User Zones based on internally  
27 stored parameters and information broadcast on the Paging Channel or on the Primary  
28 Broadcast Control Channel as described in 2.6.9.1.

29 After the mobile station performs idle handoff, if the mobile station determines that a  
30 change from one Broadcast User Zone to another Broadcast User Zone is required, the  
31 mobile station shall not update UZID<sub>S</sub>, UZ\_EXIT\_IN\_USE<sub>S</sub> and shall not perform User Zone  
32 registration until the pilot strength of the currently serving base station exceeds that of the  
33 base station corresponding to the old User Zone by the value of UZ\_EXIT\_IN\_USE<sub>S</sub>.

34 If the mobile station determines that it needs to change User Zone, and if the difference  
35 between the pilot strengths exceeds UZ\_EXIT\_IN\_USE<sub>S</sub>, then the mobile station shall  
36 perform the following:

- 37 • Perform User Zone registration.
- 38 • Update UZID<sub>S</sub>.
- 39 • Set UZ\_EXIT\_IN\_USE<sub>S</sub> to UZ\_EXIT\_RCVD<sub>S</sub>.



The mobile station may also implement other means to avoid the premature exiting of a User Zone due to rapid changes in signal strength. The exact implementation of such techniques is left to mobile station implementation.

If the mobile station is in the *Mobile Station Idle State* and it receives a *User Zone Reject Message* the mobile station shall perform the following:

- Set REJECT\_ACTION\_INDI<sub>S</sub> to REJECT\_ACTION\_INDI<sub>R</sub>.
- If UZID\_ASSIGN\_INCL<sub>R</sub> = '0', the mobile station shall set UZID<sub>S</sub> to '0000000000000000', otherwise; the mobile station shall set UZID<sub>S</sub> to ASSIGN\_UZID<sub>R</sub>.

If the mobile station is in the *Mobile Station Idle State* and it selects an active User Zone, then the mobile station shall perform User Zone registration (see 2.6.5.1.10) by entering the *System Access State* with a registration indication.

The mobile station should provide the user with a User Zone indication corresponding to the User Zone in service each time UZID<sub>S</sub> is updated.

#### 2.6.9.2.2 User Zone Operation in the Mobile Station Control on the Traffic Channel State

If the mobile station is in the *Traffic Channel Substate* of the *Mobile Station Control on the Traffic Channel State* and if it determines that the User Zone has changed, it shall update UZID<sub>S</sub> and send a *User Zone Update Request Message* to the base station.

If the mobile station is in the *Traffic Channel Substate or Release Substate* of the *Mobile Station Control on the Traffic Channel State* and it receives a *User Zone Update Message*, then the mobile station shall update UZID<sub>S</sub> and set it equal to UZID<sub>R</sub>.

If the mobile station is in the *Traffic Channel Substate or Release Substate* of the *Mobile Station Control on the Traffic Channel State* and it receives a *User Zone Reject Message*, then the mobile station shall perform the following:

- Set REJECT\_ACTION\_INDI<sub>S</sub> to REJECT\_ACTION\_INDI<sub>R</sub>.
- If UZID\_ASSIGN\_INCL<sub>R</sub> = 0, the mobile station shall set UZID<sub>S</sub> to '0', otherwise; the mobile station shall set UZID<sub>S</sub> to ASSIGN\_UZID<sub>R</sub>.

The mobile station should provide the user with a User Zone indication corresponding to the User Zone in service each time UZID<sub>S</sub> is updated.

#### 2.6.10 Call Control Processing

As illustrated in Figure 2.6.10-1, the Call Control consists of the following states:

- *Waiting for Order Substate* - In this substate, the Call Control instance waits for an *Alert With Information Message* or an *Extended Alert With Information Message*.
- *Waiting for Mobile Station Answer Substate* - In this substate, the Call Control instance waits for the user to answer the call.
- *Conversation Substate* - In this substate, the parties involved in this call communicate.

- 1       • *Call Release Substate* - In this substate, the Call Control instance waits for the call
- 2       to be disconnected.
- 3

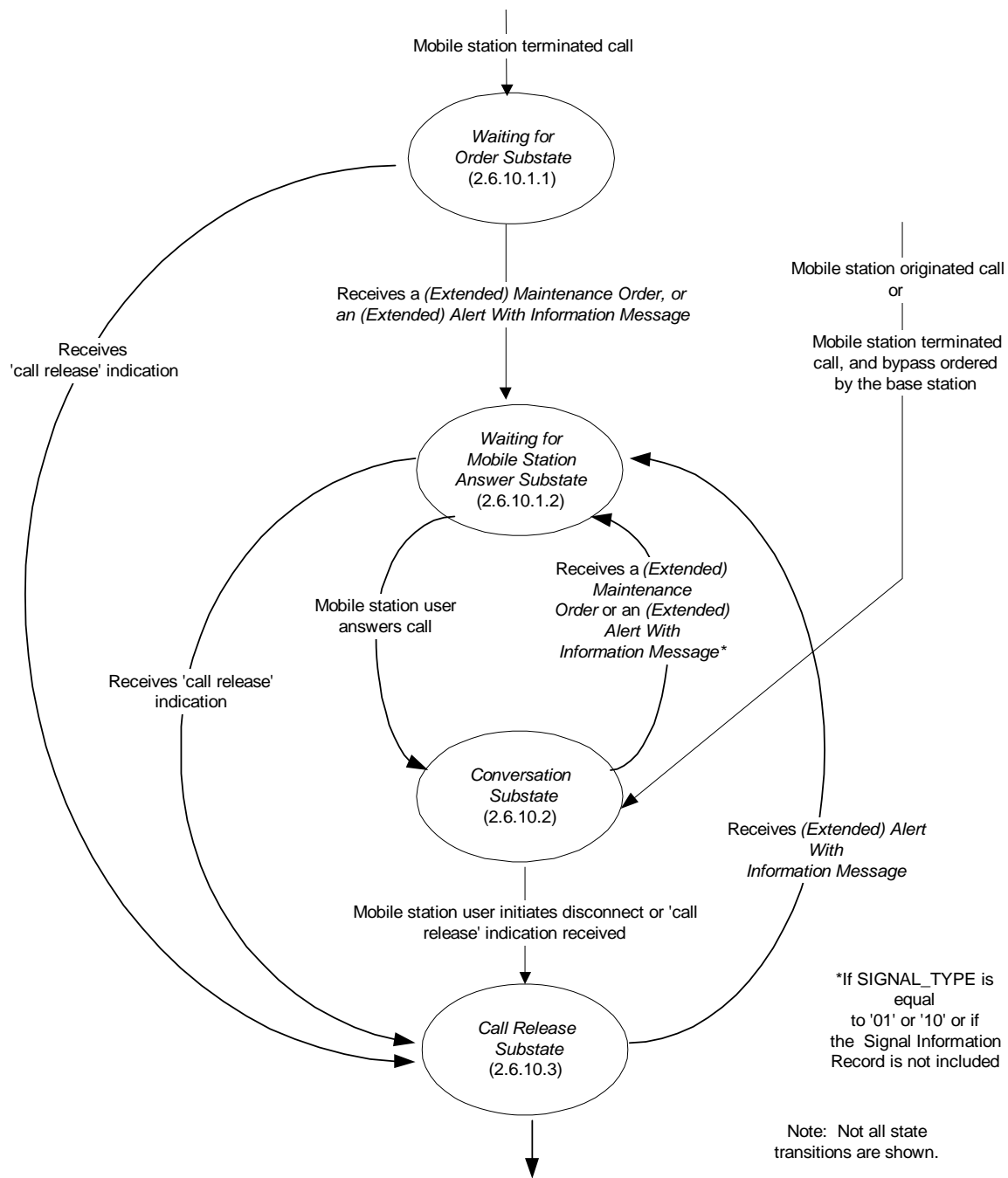


Figure 2.6.10-1. Call Control

1  
2  
3  
4

1 The following messages are processed by the Call Control:

- 2 - *Alert With Information Message*
- 3 - *Extended Alert with Information Message:*
- 4 - *Flash With Information Message*
- 5 - *Extended Flash With Information Message*
- 6 - *Send Burst DTMF Message*
- 7 - *Origination Continuation Message*

8 The following orders are processed by the Call Control:

- 9 - *Continuous DTMF Tone Order*
- 10 - *Maintenance Order*
- 11 - *Connect Order*

12 Upon instantiation, the Call Control instance shall perform the following:

- 13 • If this Call Control instance is instantiated with a 'restore indication', the Call  
14 Control instance shall enter the *Conversation Substate*.
- 15 • If the call is mobile station terminated, and BYPASS\_ALERT\_ANSWER<sub>s</sub> is '1', the  
16 Call Control instance shall perform the following:
  - 17 – The Call Control instance shall enter the *Conversation Substate*.
  - 18 – The mobile station shall not connect the audio input, e.g., the microphone of  
19 the mobile station, to the reverse link without the knowledge of the user.
- 20 • If the call is mobile station terminated and BYPASS\_ALERT\_ANSWER<sub>s</sub> is '0', the  
21 Call Control instance shall enter the *Waiting for Order Substate*.
- 22 • If the call is mobile station originated, the Call Control instance shall enter the  
23 *Conversation Substate*.

#### 24 2.6.10.1 Alerting

##### 25 2.6.10.1.1 Waiting for Order Substate

26 In this substate, the Call Control instance waits for an *Alert With Information Message* or  
27 an *Extended Alert With Information Message*.

28 Upon entering the *Waiting for Order Substate*, the Call Control instance shall set the  
29 substate timer for T<sub>52m</sub> seconds.

1 While in the *Waiting for Order Substate*, the Call Control instance shall perform the  
 2 following:

- 3 • If the substate timer expires, the Call Control instance shall send a “substate timer  
 4 expired indication” to the Layer 3 and shall enter the *Call Release Substate*.
- 5 • If the Call Control instance receives a “reset waiting for order substate timer  
 6 indication” from the Layer 3, the Call Control instance shall reset the substate  
 7 timer for T<sub>52m</sub> seconds.
- 8 • If the Call Control instance receives a “release indication” from the Layer 3, the Call  
 9 Control instance shall enter the *Call Release Substate*.
- 10 • If the Call Control instance receives an indication that the user has originated an  
 11 emergency call (see 2.6.4.3), the mobile station shall send a *Flash With Information*  
 12 *Message* or an *Extended Flash With Information Message* in assured mode with a  
 13 Global Emergency Call Information Record (see 2.7.4.31), as follows:
  - 14 - If this Call Control instance is identified by NULL, the mobile station shall send  
 15 either a *Flash With Information Message* or an *Extended Flash With Information*  
 16 *Message* (with either the CON\_REF\_INCL field of the message set to ‘0’ or the  
 17 CON\_REF\_INCL field set to ‘1’ and the CON\_REF field set to the connection  
 18 reference of the service option connection corresponding to this call); otherwise,  
 19 the mobile station shall send an *Extended Flash With Information Message*, with  
 20 the CON\_REF\_INCL field of the message set to ‘1’ and the CON\_REF field of the  
 21 message set to the connection reference of the service option connection  
 22 corresponding to this call.
- 23 • If the Call Control instance receives a message from the Layer 3 which is included  
 24 in the following list and every message field value is within its permissible range,  
 25 the Call Control instance shall process the message as described below and in  
 26 accordance with the message’s action time (see 2.6.4.1.5).
  - 27 1. *Alert With Information Message*: If the message contains a Signal information  
 28 record, the mobile station should alert the user in accordance with the Signal  
 29 information record; otherwise, the mobile station should use standard alert as  
 30 defined in 3.7.5.5. The Call Control instance shall enter the *Waiting for Mobile*  
 31 *Station Answer Substate* (see 2.6.10.1.2).
  - 32 2. *Extended Alert with Information Message*: If the message contains a Signal  
 33 information record, the mobile station should alert the user in accordance with  
 34 the Signal information record; otherwise, the mobile station should use  
 35 standard alert as defined in 3.7.5.5. The Call Control instance shall enter the  
 36 *Waiting for Mobile Station Answer Substate* (see 2.6.10.1.2).
  - 37 3. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Mobile*  
 38 *Station Answer Substate*.

- If the Call Control instance receives a message that is not included in the above list, cannot be processed, or requires a capability which is not supported, the Call Control instance shall discard the message and send a 'message rejected indication' to the Layer 3, with the reject reason indicated except when the following condition applies.

- If the Call Control instance fails to meet the criteria solely due to receipt of the Extended Record Type – International information record, the information record shall be discarded and the message shall be processed in accordance with the above procedures specified for the applicable message.

#### 2.6.10.1.2 Waiting for Mobile Station Answer Substate

In this substate, the Call Control instance waits for the user to answer the mobile station terminated call or to invoke special treatment.

Upon entering the *Waiting for Mobile Station Answer Substate*, the Call Control instance shall set the substate timer for T<sub>53m</sub> seconds.

While in the *Waiting for Mobile Station Answer Substate*, the Call Control instance shall perform the following:

- If the substate timer expires, the Call Control instance shall send a "substate timer expired indication" to the Layer 3 and shall enter the *Call Release Substate*.
- If the Call Control instance receives a "release indication" from the Layer 3, the Call Control instance shall enter the *Call Release Substate*.
- If the Call Control instance is directed by the user to answer the call, the mobile station shall send a *Connect Order* in assured mode:
  - If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, the mobile station shall perform the following: If this Call Control instance is identified by NULL, the mobile station shall either set the CON\_REF\_INCL field of the message to '0' or set the CON\_REF\_INCL field to '1' and set the CON\_REF field to the connection reference of the service option connection corresponding to this call; otherwise, the mobile station shall set the CON\_REF\_INCL field of the message to '1' and the CON\_REF field of the message to the connection reference of the service option connection corresponding to this call.

The Call Control instance shall enter the *Conversation Substate*.

- If the Call Control instance is directed by the user to forward the incoming call, the mobile station shall send a *Flash With Information Message* or an *Extended Flash With Information Message* in assured mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates User Selective Call Forwarding with a pre-registered number, as follows:

- 1       - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
2       *Information Message*.
- 3       - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
4       perform the following: if this Call Control instance is identified by NULL, the  
5       mobile station shall send either a *Flash With Information Message* or an  
6       *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
7       of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
8       field set to the connection reference of the service option connection  
9       corresponding to this call); otherwise, the mobile station shall send an  
10      *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
11      message set to '1' and the CON\_REF field of the message set to the connection  
12      reference of the service option connection corresponding to this call.
- 13      • If the Call Control instance is directed by user to forward the incoming call to a  
14      number stored in the mobile station, the mobile station shall send a *Flash With*  
15      *Information Message* or an *Extended Flash With Information Message* in assured  
16      mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended*  
17      *Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to the  
18      following:
- 19          - a pre-programmed feature code which indicates User Selective Call  
20          Forwarding to a number stored in the mobile station as the first digits in  
21          the field and
- 22          - the forwarding to number immediately following the pre-programmed  
23          feature code.
- 24      The mobile station shall send the message as follows:
- 25      - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
26      *Information Message*.
- 27      - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
28      perform the following: if this Call Control instance is identified by NULL, the  
29      mobile station shall send either a *Flash With Information Message* or an  
30      *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
31      of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
32      field set to the connection reference of the service option connection  
33      corresponding to this call); otherwise, the mobile station shall send an  
34      *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
35      message set to '1' and the CON\_REF field of the message set to the connection  
36      reference of the service option connection corresponding to this call.

- 1       • If the Call Control instance is directed by the user to forward the incoming call to  
2       network-based voice mail, the mobile station shall send a *Flash With Information*  
3       *Message* or an *Extended Flash With Information Message* in assured mode with a  
4       *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*  
5       information record (see 2.7.4.35) with the CHARi field set to a pre-programmed  
6       feature code which indicates User Selective Call Forwarding to voice mail, as  
7       follows:
  - 8       - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
9       *Information Message*.
  - 10      - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
11      perform the following: if this Call Control instance is identified by NULL, the  
12      mobile station shall send either a *Flash With Information Message* or an  
13      *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
14      of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
15      field set to the connection reference of the service option connection  
16      corresponding to this call); otherwise, the mobile station shall send an  
17      *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
18      message set to '1' and the CON\_REF field of the message set to the connection  
19      reference of the service option connection corresponding to this call.
- 20      • If the Call Control instance is directed by the user to activate answer holding, the  
21      mobile station shall send a *Flash With Information Message* or an *Extended Flash*  
22      *With Information Message* in assured mode requiring confirmation of delivery with a  
23      *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*  
24      information record (see 2.7.4.35) with the CHARi field set to a pre-programmed  
25      feature code which indicates Answer Holding:
  - 26      - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
27      *Information Message*.
  - 28      - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
29      perform the following: if this Call Control instance is identified by NULL, the  
30      mobile station shall send either a *Flash With Information Message* or an  
31      *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
32      of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
33      field set to the connection reference of the service option connection  
34      corresponding to this call); otherwise, the mobile station shall send an  
35      *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
36      message set to '1' and the CON\_REF field of the message set to the connection  
37      reference of the service option connection corresponding to this call.
- 38      After receiving confirmation of delivery of the *Flash With Information Message* or the  
39      *Extended Flash With Information Message*, the mobile station shall send a *Connect*  
40      *Order* in assured mode:



- 1        - If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, the mobile station shall  
 2        perform the following: If this Call Control instance is identified by NULL, the  
 3        mobile station shall either set the CON\_REF\_INCL field of the message to '0' or  
 4        set the CON\_REF\_INCL field to '1' and set the CON\_REF field to the connection  
 5        reference of the service option connection corresponding to this call; otherwise,  
 6        the mobile station shall set the CON\_REF\_INCL field of the message to '1' and  
 7        the CON\_REF field of the message to the connection reference of the service  
 8        option connection corresponding to this call.

9        The Call Control instance shall enter the *Conversation Substate*.

- 10       • If the Call Control instance receives an indication that the user has originated an  
 11       emergency call (see 2.6.4.3), the mobile station shall send a *Flash With Information*  
 12       *Message* or an *Extended Flash With Information Message* in assured mode with a  
 13       Global Emergency Call Information Record (see 2.7.4.31), as follows:
- 14       - If this Call Control instance is identified by NULL, the mobile station shall send  
 15       either a *Flash With Information Message* or an *Extended Flash With Information*  
 16       *Message* (with either the CON\_REF\_INCL field of the message set to '0' or the  
 17       CON\_REF\_INCL field set to '1' and the CON\_REF field set to the connection  
 18       reference of the service option connection corresponding to this call); otherwise,  
 19       the mobile station shall send an *Extended Flash With Information Message*, with  
 20       the CON\_REF\_INCL field of the message set to '1' and the CON\_REF field of the  
 21       message set to the connection reference of the service option connection  
 22       corresponding to this call.
- 23       • If the Call Control instance receives a message from Layer 3 which is included in  
 24       the following list and every message field value is within its permissible range, the  
 25       Call Control instance shall process the message as described below and in  
 26       accordance with the message's action time (see 2.6.4.1.5).
- 27       1. *Alert With Information Message*: The Call Control instance shall reset the  
 28       substate timer for T<sub>53m</sub> seconds. If this message does not contain a Signal  
 29       information record, the mobile station should use standard alert as defined in  
 30       3.7.5.5.
- 31       2. *Extended Alert With Information Message*: The Call Control instance shall reset  
 32       the substate timer for T<sub>53m</sub> seconds. If this message does not contain a Signal  
 33       information record, the mobile station should use standard alert as defined in  
 34       3.7.5.5.
- 35       3. *Maintenance Order*: The mobile station shall reset the substate timer for T<sub>53m</sub>  
 36       seconds.

- If the Call Control instance receives a message that is not included in the above list, cannot be processed, or requires a capability which is not supported, the Call Control instance shall discard the message and send a 'message rejected indication' to the Layer 3, with the reject reason indicated except when the following condition applies.
  - If the Call Control instance fails to meet the criteria solely due to receipt of the Extended Record Type – International information record, the information record shall be discarded and the message shall be processed in accordance with the above procedures specified for the applicable message.

#### 2.6.10.2 Conversation Substate

While in the *Conversation Substate*, the Call Control instance shall perform the following:

- If the Call Control instance receives a "release indication" from the Layer 3, the Call Control instance shall enter the *Call Release Substate*.
- The mobile station shall send an *Origination Continuation Message* in assured mode, within T<sub>54m</sub> seconds after the Call Control instance entering the *Conversation Substate* if any of the following conditions occur:
  - The mobile station originated the call, and did not send all the dialed digits in the *Origination Message*.
  - There is more than one calling party number associated with the mobile station.
  - A calling party subaddress is used in the call.
  - A called party subaddress is used in the call.

If more than one calling party number is associated with the mobile station, the mobile station shall include the calling party number being used in the calling party number information record in the *Origination Continuation Message*. If only one calling party number is associated with the mobile station, the mobile station shall not include the calling party number information record in the *Origination Continuation Message*. If a calling party subaddress is used, the mobile station shall include the calling party subaddress information record in the *Origination Continuation Message*; otherwise, the mobile station shall omit the calling party subaddress information record. If a called party subaddress is used, the mobile station shall include the called party subaddress information record in the *Origination Continuation Message*; otherwise, the mobile station shall omit the called party subaddress information record.

- 1     • If the Call Control instance is directed by the user to issue a flash, the mobile  
2       station shall build a *Flash With Information Message* or an *Extended Flash With*  
3       *Information Message* with the collected digits or characters contained in a *Keypad*  
4       *Facility* information record, if needed, and shall send the message in assured mode,  
5       as follows:
  - 6       - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
7         *Information Message*.
  - 8       - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
9         perform the following: if this Call Control instance is identified by NULL, the  
10        mobile station shall send either a *Flash With Information Message* or an  
11        *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
12        of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
13        field set to the connection reference of the service option connection  
14        corresponding to this call); otherwise, the mobile station shall send an  
15        *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
16        message set to '1' and the CON\_REF field of the message set to the connection  
17        reference of the service option connection corresponding to this call.
- 18    • If the Call Control instance is directed by the user to forward the incoming call, the  
19      mobile station shall send a *Flash With Information Message* or an *Extended Flash*  
20      *With Information Message* in assured mode with a *Keypad Facility* information  
21      record (see 2.7.4.2) or the *Extended Keypad Facility* information record (see  
22      2.7.4.35) with the CHARi field set to a pre-programmed feature code which  
23      indicates User Selective Call Forwarding with a pre-registered number, as follows:
  - 24      - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
25         *Information Message*.
  - 26      - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
27         perform the following: if this Call Control instance is identified by NULL, the  
28         mobile station shall send either a *Flash With Information Message* or an  
29         *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
30         of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
31         field set to the connection reference of the service option connection  
32         corresponding to this call); otherwise, the mobile station shall send an  
33         *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
34         message set to '1' and the CON\_REF field of the message set to the connection  
35         reference of the service option connection corresponding to this call.
- 36    • If the Call Control instance is directed by the user to forward the incoming call to a  
37      number stored in the mobile station, the mobile station shall send a *Flash With*  
38      *Information Message* or an *Extended Flash With Information Message* in assured  
39      mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended*  
40      *Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to the  
41      following:

- a pre-programmed feature code which indicates User Selective Call Forwarding to a number stored in the mobile station as the first digits in the field and
- the forwarding to number immediately following the pre-programmed feature code.

The mobile station shall send the message as follows:

- If P\_REV\_IN\_USE<sub>s</sub> is less than seven, the mobile station shall send a *Flash With Information Message*.
- If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven and if this Call Control instance is identified by NULL, the mobile station shall send either a *Flash With Information Message* or an *Extended Flash With Information Message* (with either the CON\_REF\_INCL field of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF field set to the connection reference of the service option connection corresponding to this call). Otherwise, the mobile station shall send an *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the message set to '1' and the CON\_REF field of the message set to the connection reference of the service option connection corresponding to this call.
- If the Call Control instance is directed by the user to forward the incoming call to network-based voice mail, the mobile station shall send a *Flash With Information Message* or an *Extended Flash With Information Message* in assured mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates User Selective Call Forwarding to voice mail, as follows:
  - If P\_REV\_IN\_USE<sub>s</sub> is less than seven, the mobile station shall send a *Flash With Information Message*.
  - If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven and if this Call Control instance is identified by NULL, the mobile station shall send either a *Flash With Information Message* or an *Extended Flash With Information Message* (with either the CON\_REF\_INCL field of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF field set to the connection reference of the service option connection corresponding to this call). Otherwise, the mobile station shall send an *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the message set to '1' and the CON\_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- 1       • If the Call Control instance is directed by the user to activate answer holding, the  
2       mobile station shall send a *Flash With Information Message* or an *Extended Flash*  
3       *With Information Message* in assured mode requiring confirmation of delivery with a  
4       *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*  
5       information record (see 2.7.4.35) with the CHARi field set to a pre-programmed  
6       feature code which indicates Answer Holding, as follows:
  - 7       - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
8       *Information Message*.
  - 9       - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
10       perform the following: if this Call Control instance is identified by NULL, the  
11       mobile station shall send either a *Flash With Information Message* or an  
12       *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
13       of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
14       field set to the connection reference of the service option connection  
15       corresponding to this call); otherwise, the mobile station shall send an  
16       *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
17       message set to '1' and the CON\_REF field of the message set to the connection  
18       reference of the service option connection corresponding to this call.
- 19       • If answer holding is activated and the Call Control instance is directed by the user  
20       to deactivate answer holding, the mobile station shall send a *Flash With Information*  
21       *Message* or an *Extended Flash With Information Message* in assured mode with a  
22       *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*  
23       information record (see 2.7.4.35) with the CHARi field set to a pre-programmed  
24       feature code which indicates Answer Holding, as follows:
  - 25       - If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall send a *Flash With*  
26       *Information Message*.
  - 27       - If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall  
28       perform the following: if this Call Control instance is identified by NULL, the  
29       mobile station shall send either a *Flash With Information Message* or an  
30       *Extended Flash With Information Message* (with either the CON\_REF\_INCL field  
31       of the message set to '0' or the CON\_REF\_INCL field set to '1' and the CON\_REF  
32       field set to the connection reference of the service option connection  
33       corresponding to this call); otherwise, the mobile station shall send an  
34       *Extended Flash With Information Message*, with the CON\_REF\_INCL field of the  
35       message set to '1' and the CON\_REF field of the message set to the connection  
36       reference of the service option connection corresponding to this call.
- 37       • If the Call Control instance is directed by the user to send burst DTMF digits, the  
38       mobile station shall build the *Send Burst DTMF Message* with the dialed digits and  
39       shall send the message in assured mode requiring confirmation of delivery.

- If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, the mobile station shall perform the following: If this Call Control instance is identified by NULL, the mobile station shall set the CON\_REF\_INCL field of the message to '0'; otherwise, the mobile station shall set the CON\_REF\_INCL field of the message to '1' and the CON\_REF field of the message to the connection reference of the service option connection corresponding to this call.

The mobile station sending multiple *Send Burst DTMF Messages* shall preserve relative ordering of these messages (see [4]). The mobile station should attempt to preserve the user timing as much as possible, using recommended values of DTMF\_ON\_LENGTH (see Table 2.7.2.3.2.7-1) and DTMF\_OFF\_LENGTH (see Table 2.7.2.3.2.7-2).

- If the Call Control instance is directed by the user to send a continuous DTMF digit, the mobile station shall build the *Continuous DTMF Tone Order* with the dialed digit and shall send the order in assured mode requiring confirmation of delivery, as follows:

- If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, the mobile station shall perform the following: If this Call Control instance is identified by NULL, the mobile station shall either set the CON\_REF\_INCL field of the message to '0' or set the CON\_REF\_INCL field to '1' and set the CON\_REF field to the connection reference of the service option connection corresponding to this call; otherwise, the mobile station shall set the CON\_REF\_INCL field of the message to '1' and the CON\_REF field of the message to the connection reference of the service option connection corresponding to this call.

When the Call Control instance is directed by the user to cease sending the continuous DTMF digit, the mobile station shall send the *Continuous DTMF Tone Order* (ORDQ = '1111111') in assured mode requiring confirmation of delivery, as follows:

- If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, the mobile station shall perform the following: If this Call Control instance is identified by NULL, the mobile station shall either set the CON\_REF\_INCL field of the message to '0' or set the CON\_REF\_INCL field to '1' and set the CON\_REF field to the connection reference of the service option connection corresponding to this call; otherwise, the mobile station shall set the CON\_REF\_INCL field of the message to '1' and the CON\_REF field of the message to the connection reference of the service option connection corresponding to this call.

The mobile station sending multiple *Continuous DTMF Tone Orders* shall preserve relative ordering of these messages (see [2]). The mobile station shall send the *Continuous DTMF Tone Order* with the ORDQ set to '1111111' indicating the completion of the current continuous DTMF digit before sending the *Continuous DTMF Tone Order* for another digit or the *Send Burst DTMF Message*.

- 1       • If the Call Control instance is directed by the user to disconnect the call, the Call  
2       Control instance shall send a 'call release request' to the Layer 3 and shall enter  
3       the *Call Release Substate*.
- 4       • If the Call Control instance receives an indication that this packet data service  
5       instance has been inactivated, the Call Control instance shall send a "call inactive  
6       indication" to the Layer 3 and shall enter the *Call Release Substate*.
- 7       • If the Call Control instance receives an indication that the user has originated an  
8       emergency call (see 2.6.4.3), the mobile station shall send a *Flash With Information*  
9       *Message* or an *Extended Flash With Information Message* in assured mode with a  
10      Global Emergency Call Information Record (see 2.7.4.31), as follows:
  - 11      – If this Call Control instance is identified by NULL, the mobile station shall send  
12      either a *Flash With Information Message* or an *Extended Flash With Information*  
13      *Message* (with either the CON\_REF\_INCL field of the message set to '0' or the  
14      CON\_REF\_INCL field set to '1' and the CON\_REF field set to the connection  
15      reference of the service option connection corresponding to this call); otherwise,  
16      the mobile station shall send an *Extended Flash With Information Message*, with  
17      the CON\_REF\_INCL field of the message set to '1' and the CON\_REF field of the  
18      message set to the connection reference of the service option connection  
19      corresponding to this call.
- 20      • If the Call Control instance receives a message from the Layer 3 which is included  
21      in the following list and every message field value is within its permissible range,  
22      the Call Control instance shall process the message as described below and in  
23      accordance with the message's action time (see 2.6.4.1.5).
  - 24      1. *Alert With Information Message*: If the message contains a Signal information  
25      record with the SIGNAL\_TYPE field set to '01' or '10', or if the message does not  
26      contain a Signal information record, the Call Control instance shall enter the  
27      *Waiting For Mobile Station Answer Substate*. The mobile station should alert  
28      the user in accordance with the Signal information record. If this message does  
29      not contain a Signal information record, the mobile station should use standard  
30      alert as defined in 3.7.5.5.
  - 31      2. *Continuous DTMF Tone Order*
  - 32      3. *Extended Alert With Information Message*: If the message contains a Signal  
33      information record with the SIGNAL\_TYPE field set to '01' or '10', or if the  
34      message does not contain a Signal information record, the Call Control instance  
35      shall enter the *Waiting For Mobile Station Answer Substate*. The mobile station  
36      should alert the user in accordance with the Signal information record. If this  
37      message does not contain a Signal information record, the mobile station  
38      should use standard alert as defined in 3.7.5.5.
  - 39      4. *Flash With Information Message*

1           5. *Extended Flash With Information Message*

2           6. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Mobile*  
3           *Station Answer Substate*.

4           7. *Send Burst DTMF Message*:

- 5           • If the Call Control instance receives a message that is not included in the above  
6           list, cannot be processed, or requires a capability which is not supported, the Call  
7           Control instance shall discard the message and send a 'message rejected indication'  
8           to the Layer 3, with the reject reason indicated except when the following condition  
9           applies.

- 10          - If the Call Control instance fails to meet the criteria solely due to receipt of the  
11          Extended Record Type – International information record, the information  
12          record shall be discarded and the message shall be processed in accordance  
13          with the above procedures specified for the applicable message.

14   2.6.10.3 Call Release Substate

15   In this substate, the Call Control instance waits for the call to be released.

16   While in the *Call Release Substate*, the Call Control instance shall perform the following:

- 17          • If the Call Control instance receives a message from the Layer 3 which is included  
18          in the following list and every message field value is within its permissible range,  
19          the Call Control instance shall process the message as described below and in  
20          accordance with the message's action time (see 2.6.4.1.5).

21          1. *Alert With Information Message*: The Call Control instance shall send an "enter  
22          traffic channel substate indication" to the Layer 3 and shall enter the *Waiting*  
23          *for Mobile Station Answer Substate*. If this message does not contain a Signal  
24          information record, the mobile station should use standard alert as defined in  
25          3.7.5.5.

26          2. *Extended Alert With Information Message*: The Call Control instance shall send  
27          a "enter traffic channel substate indication" to Layer 3 and shall enter the  
28          *Waiting for Mobile Station Answer Substate*. If this message does not contain a  
29          Signal information record, the mobile station should use standard alert as  
30          defined in 3.7.5.5.

- 31          • If the Call Control instance receives a message that is not included in the above  
32          list, cannot be processed, or requires a capability which is not supported, the Call  
33          Control instance shall discard the message and send a 'message rejected indication'  
34          to the Layer 3, with the reject reason indicated except when the following condition  
35          applies.



- 1        - If the Call Control instance fails to meet the criteria solely due to receipt of the
- 2        Extended Record Type – International information record, the information
- 3        record shall be discarded and the message shall be processed in accordance
- 4        with the above procedures specified for the applicable message.

## 5        2.6.11 Common Procedures for Extended Encryption and Message Integrity

6        This section describes the common procedures for the messages used for extended  
7        encryption and message integrity.

### 8        2.6.11.1 Registration Accepted Order

9        The mobile station shall perform the following procedures in the order listed below.

- 10       • If  $ORDQ_r$  is equal to '00000101', the mobile station shall set  $ROAM\_INDI_s$  to
- 11        $ROAM\_INDI_r$  and should display the roaming condition.
- 12       • If  $ORDQ_r$  is equal to '00000111', the mobile station shall perform the following:
  - 13       – Set  $ROAM\_INDI_s$  to  $ROAM\_INDI_r$  and the mobile station should display the
  - 14       roaming condition.
  - 15       – Set  $C\_SIG\_ENCRYPT\_MODE_s$  to  $C\_SIG\_ENCRYPT\_MODE_r$ .
  - 16       – If  $ENC\_KEY\_SIZE_r$  is included, the mobile station shall set  $ENC\_KEY\_SIZE_s$  to
  - 17        $ENC\_KEY\_SIZE_r$ .
  - 18       – If  $MSG\_INTEGRITY\_SUP_s$  is equal to '0' and  $C\_SIG\_ENCRYPT\_MODE_r$  is not
  - 19       equal to '000', the mobile station shall perform the following:
    - 20       + Set  $TX\_EXT\_SSEQ[0][KEY\_ID]$ ,  $TX\_EXT\_SSEQ[1][KEY\_ID]$ ,
    - 21        $RX\_EXT\_SSEQ[0][KEY\_ID]$ , and  $RX\_EXT\_SSEQ[1][KEY\_ID]$  to  $1 + 256 \times$
    - 22        $NEW\_SSEQ\_H$  included in the *Registration Message*.
    - 23       + Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself
    - 24       (the most recently generated CMEAKEY is associated with the AUTHR of the
    - 25       *Registration Message*).
    - 26       + Set  $ENC\_KEY[KEY\_ID]$  to the 128-bit pattern.
    - 27       + Set  $INT\_KEY[KEY\_ID]$  to the 128-bit pattern.
    - 28       – If  $MSG\_INTEGRITY\_SUP_s$  is equal to '1', the mobile station shall perform the
    - 29       following:
      - 30       + If  $CHANGE\_KEYS_r$  is equal to '0', the mobile station shall set
      - 31        $RESTORE\_KEY$  to '0'.
      - 32       + If  $CHANGE\_KEYS_r$  is equal to '1', the mobile station shall perform the
      - 33       following:
        - 34       o Set  $KEY\_ID$  to  $SDU\_KEY\_ID$  provided by the LAC Layer (see [4]).

- 1           o Set TX\_EXT\_SSEQ[0][KEY\_ID], TX\_EXT\_SSEQ[1][KEY\_ID],  
2           RX\_EXT\_SSEQ[0][KEY\_ID], and RX\_EXT\_SSEQ[1][KEY\_ID] to  $1 + 256 \times$   
3           NEW\_SSEQ\_H included in the *Registration Message*.
- 4           o If KEY\_ID is equal to '00' or '01', the mobile station shall perform the  
5           following:
  - 6           ◇ Form a 128-bit pattern by concatenating the CMEAKEY with a copy  
7           of itself (the most recently generated CMEAKEY associated with the  
8           AUTHR of the *Registration Message*).
  - 9           ◇ Set ENC\_KEY[KEY\_ID] to the 128-bit pattern.
  - 10          ◇ Set INT\_KEY[KEY\_ID] to the 128-bit pattern.
  - 11          ◇ Set LAST\_2G\_KEY\_IDS to KEY\_ID.
- 12          o If KEY\_ID is equal to '10' or '11', the mobile station shall perform the  
13          following:
  - 14          ◇ Set ENC\_KEY[KEY\_ID] to the CK generated by AKA.
  - 15          ◇ Set INT\_KEY[KEY\_ID] to the IK generated by AKA.
  - 16          ◇ Set LAST\_3G\_KEY\_IDS to KEY\_ID.
  - 17          ◇ If the mobile station supports R-UIM, then the mobile shall set  
18          USE\_UAK<sub>S</sub> to USE\_UAK<sub>R</sub>; otherwise, the mobile station shall perform  
19          the following:
    - 20          – Set USE\_UAK<sub>S</sub> to '0'.
    - 21          – If USE\_UAK<sub>R</sub> is equal to '1', then the mobile station shall send a  
22          *Mobile Station Reject Order* with ORDQ equal to '00010100' (UAK  
23          not supported).
  - 24          ◇ Set RESTORE\_KEY to '0'.
  - 25          ◇ Send a *Security Mode Completion Order*.
  - 26          ◇ Disable the key setup timer if it is running.
- 27          + Set INTEGRITY\_MODE<sub>S</sub> to the SDU\_INTEGRITY\_ALGO provided by the LAC  
28          Layer (see [4]).
- 29
- 30          – If ENC\_KEY\_SIZE<sub>R</sub> is included and not set to reserved value and if current key  
31          strength is greater than the desired key strength specified by ENC\_KEY\_SIZE<sub>R</sub>  
32          according to table 3.7.4.5-2, mobile station shall perform the key strength  
33          reduction algorithm procedures to reduce the key strength of ENC\_KEY[KEY\_ID]  
34          according to ENC\_KEY\_SIZE<sub>R</sub> as described in 2.3.12.5.4. The current key  
35          strength is 64 bit if KEY\_ID is equal to '00' or '01' and is 128 bit if KEY\_ID is  
36          equal to '10' or '11'.

## 2.6.11.2 Extended Channel Assignment Message

The mobile station shall perform the following procedures in the order listed below.

- If  $P\_REV\_IN\_USE_S$  is less than 10, or  $MSG\_INTEGRITY\_SUP_S$  is equal to '0', the mobile station shall perform the following:
  - If  $ENC\_KEY\_SIZE_R$  is included, the mobile station shall set  $ENC\_KEY\_SIZE_S$  to  $ENC\_KEY\_SIZE_R$ .
  - If  $D\_SIG\_ENCRYPT\_MODE_R$  is included, the mobile station shall perform the following:
    - + If  $D\_SIG\_ENCRYPT\_MODE_R$  is equal to '000', the mobile station shall set  $D\_SIG\_ENCRYPT\_MODE_S$  to  $C\_SIG\_ENCRYPT\_MODE_S$ ; otherwise, the mobile station shall perform the following:
      - o Set  $D\_SIG\_ENCRYPT\_MODE_S$  to  $D\_SIG\_ENCRYPT\_MODE_R$
      - o Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the most recently generated CMEAKEY associated with the AUTHR of the *Origination Message* or *Page Response Message*) and set  $TX\_EXT\_SSEQ[0][KEY\_ID]$ ,  $TX\_EXT\_SSEQ[1][KEY\_ID]$ ,  $RX\_EXT\_SSEQ[0][KEY\_ID]$ , and  $RX\_EXT\_SSEQ[1][KEY\_ID]$  to  $1 + 256 \times NEW\_SSEQ\_H$  included in the *Origination Message* or *Page Response Message*<sup>43</sup>.
      - o Set  $ENC\_KEY[KEY\_ID]$  to the 128-bit pattern.
      - o Set  $INT\_KEY[KEY\_ID]$  to the 128-bit pattern.
  - If  $C\_SIG\_ENCRYPT\_MODE_R$  is included, the mobile station shall set  $C\_SIG\_ENCRYPT\_MODE_S$  to  $C\_SIG\_ENCRYPT\_MODE_R$ .
- If  $P\_REV\_IN\_USE_S$  is equal to or greater than 10 and  $MSG\_INTEGRITY\_SUP_S$  is equal to '1', the mobile station shall perform the following:
  - If the LAC Layer indicates that the message does not contain a valid MACI, the mobile station shall set  $D\_SIG\_ENCRYPT\_MODE_S$  to  $C\_SIG\_ENCRYPT\_MODE_S$ ; otherwise, the mobile station shall perform the following:
    - + Set  $D\_SIG\_ENCRYPT\_MODE_S$  to  $D\_SIG\_ENCRYPT\_MODE_R$ .
    - + If  $C\_SIG\_ENCRYPT\_MODE$  is included, the mobile station shall set  $C\_SIG\_ENCRYPT\_MODE_S$  to  $C\_SIG\_ENCRYPT\_MODE_R$ .
    - + If  $ENC\_KEY\_SIZE_R$  is included, the mobile station shall set  $ENC\_KEY\_SIZE_S$  to  $ENC\_KEY\_SIZE_R$ .

---

<sup>43</sup> If the mobile station is in the *Mobile Station Origination Attempt Substate*, the  $NEW\_SSEQ\_H$  field shall be the one included in the *Origination Message*. If the mobile station is in the *Page Response Substate*, the  $NEW\_SSEQ\_H$  field shall be the one included in the *Page Response Message*.

- 1           + If MSG\_INTEGRITY\_INFO<sub>r</sub> is set to '1', the mobile station shall perform the
- 2           following:
- 3           o If CHANGE\_KEYS<sub>r</sub> is equal to '0', the mobile station shall set
- 4           RESTORE\_KEY to '0'.
- 5           o If CHANGE\_KEYS<sub>r</sub> is equal to '1', the mobile station shall perform the
- 6           following:
- 7           ◇ Set KEY\_ID to SDU\_KEY\_ID provided by the LAC Layer (see [4]).
- 8           ◇ Set TX\_EXT\_SSEQ[0][KEY\_ID], TX\_EXT\_SSEQ[1][KEY\_ID],
- 9           RX\_EXT\_SSEQ[0][KEY\_ID], and RX\_EXT\_SSEQ[1][KEY\_ID] to 1 + 256
- 10          × NEW\_SSEQ\_H included in the *Origination Message* or *Page*
- 11          *Response Message*.
- 12          ◇ If KEY\_ID is equal to '00' or '01', the mobile station shall perform the
- 13          following:
- 14           – Form a 128-bit pattern by concatenating the CMEAKEY with a
- 15           copy of itself (the most recently generated CMEAKEY associated
- 16           with the AUTHR of the *Origination Message* or *Page Response*
- 17           *Message*).
- 18           – Set ENC\_KEY[KEY\_ID] to the 128-bit pattern.
- 19           – Set INT\_KEY[KEY\_ID] to the 128-bit pattern.
- 20           – Set LAST\_2G\_KEY\_ID<sub>s</sub> to KEY\_ID.
- 21          ◇ If KEY\_ID is equal to '10' or '11', the mobile station shall perform the
- 22          following:
- 23           – Set ENC\_KEY[KEY\_ID] to the CK generated by AKA.
- 24           – Set INT\_KEY[KEY\_ID] to the IK generated by AKA.
- 25           – Set LAST\_3G\_KEY\_ID<sub>s</sub> to KEY\_ID
- 26           – If the mobile station supports R-UIM, then the mobile shall set
- 27           USE\_UAK<sub>s</sub> to USE\_UAK<sub>r</sub>; otherwise, the mobile station shall
- 28           perform the following:
- 29           + Set USE\_UAK<sub>s</sub> to '0'.
- 30           + If USE\_UAK<sub>r</sub> is equal to '1', then the mobile station shall send
- 31           a *Mobile Station Reject Order* with ORDQ equal to '00010100'
- 32           (UAK not supported).
- 33          ◇ Set RESTORE\_KEY to '0'.
- 34          ◇ Send a *Security Mode Completion Order*.
- 35          ◇ Disable the key setup timer if it is running.
- 36          o Set INTEGRITY\_MODE<sub>s</sub> to the SDU\_INTEGRITY\_ALGO delivered by the
- 37          LAC Layer.

1

- 2 • If ENC\_KEY\_SIZE<sub>R</sub> is included and not set to reserved value and if current key  
3 strength is greater than the desired key strength specified by ENC\_KEY\_SIZE<sub>R</sub>  
4 according to table 3.7.4.5-2, mobile station shall perform the key strength  
5 reduction algorithm procedures to reduce the key strength of ENC\_KEY[KEY\_ID]  
6 according to ENC\_KEY\_SIZE<sub>R</sub> as described in 2.3.12.5.4. The current key strength  
7 is 64 bit if KEY\_ID is equal to '00' or '01' and is 128 bit if KEY\_ID is equal to '10' or  
8 '11'.

### 9 2.6.11.3 General Handoff Direction Message and Universal Handoff Direction Message

10 The mobile station shall perform the following procedures in the order listed below at the  
11 action time of the message.

- 12 • If D\_SIG\_ENCRYPT\_MODE<sub>R</sub> is included, the mobile station shall set  
13 D\_SIG\_ENCRYPT\_MODE<sub>S</sub> to D\_SIG\_ENCRYPT\_MODE<sub>R</sub>.
- 14 • If ENC\_KEY\_SIZE<sub>R</sub> is included, the mobile station shall set ENC\_KEY\_SIZE<sub>S</sub> to  
15 ENC\_KEY\_SIZE<sub>R</sub>.
- 16 • If REGISTER\_IN\_IDLE<sub>R</sub> is included, the mobile station shall set  
17 REGISTER\_IN\_IDLE<sub>S</sub> to REGISTER\_IN\_IDLE<sub>R</sub>.
- 18 • If MSG\_INTEGRITY\_SUP<sub>R</sub> is included, the mobile station shall set  
19 MSG\_INTEGRITY\_SUP<sub>S</sub> to MSG\_INTEGRITY\_SUP<sub>R</sub>.
- 20 • If GEN\_2G\_KEY<sub>R</sub> is included and is set to '1', the mobile station shall perform the  
21 following in the order listed below:
  - 22 – Perform the CDMA\_3G\_2G\_Conversion procedure as defined in [44] for 3G to  
23 2G one-way roaming to generate a new CMEAKEY from CK.
  - 24 – Set TX\_EXT\_SSEQ[0]['00'] to TX\_EXT\_SSEQ[0][KEY\_ID], TX\_EXT\_SSEQ[1]['00']  
25 to TX\_EXT\_SSEQ[1][KEY\_ID], RX\_EXT\_SSEQ[0]['00'] to  
26 RX\_EXT\_SSEQ[0][KEY\_ID], and RX\_EXT\_SSEQ[1]['00'] to  
27 RX\_EXT\_SSEQ[1][KEY\_ID].
  - 28 – Form a 128-bit pattern by concatenating the resultant CMEAKEY with a copy of  
29 itself.
  - 30 – Store the 128-bit pattern in ENC\_KEY['00'] and INT\_KEY['00'].
  - 31 – Set KEY\_ID and LAST\_2G\_KEY\_ID<sub>S</sub> to '00'.
- 32 • If ENC\_KEY\_SIZE<sub>R</sub> is included and not set to reserved value and if current key  
33 strength is greater than the desired key strength specified by ENC\_KEY\_SIZE<sub>R</sub>  
34 according to table 3.7.4.5-2, mobile station shall perform the key strength  
35 reduction algorithm procedures to reduce the key strength of ENC\_KEY[KEY\_ID]  
36 according to ENC\_KEY\_SIZE<sub>R</sub> as described in 2.3.12.5.4. The current key strength  
37 is 64 bit if KEY\_ID is equal to '00' or '01' and is 128 bit if KEY\_ID is equal to '10' or  
38 '11'.

## 2.6.11.4 Security Mode Command Message on f-csch

The mobile station shall perform the following procedures in the order listed below.

- Set C\_SIG\_ENCRYPT\_MODE<sub>S</sub> to C\_SIG\_ENCRYPT\_MODE<sub>R</sub>.
- If ENC\_KEY\_SIZE<sub>R</sub> is included, the mobile station shall set ENC\_KEY\_SIZE<sub>S</sub> to ENC\_KEY\_SIZE<sub>R</sub>.
- If MSG\_INTEGRITY\_SUP<sub>S</sub> is equal to '0', C\_SIG\_ENCRYPT\_MODE<sub>R</sub> is not equal to '000' and the mobile sent a *Security Mode Request Message* with the NEW\_SSEQ\_H\_INCL field equal to '1' prior to receiving this message when C\_SIG\_ENCRYPT\_MODE<sub>S</sub> was not equal to '000', the mobile station shall perform the following:
  - Set TX\_EXT\_SSEQ[0][KEY\_ID], TX\_EXT\_SSEQ[1][KEY\_ID], RX\_EXT\_SSEQ[0][KEY\_ID], and RX\_EXT\_SSEQ[1][KEY\_ID] to  $1 + 256 \times \text{NEW\_SSEQ\_H}$  included in the *Security Mode Request Message*.
- If MSG\_INTEGRITY\_SUP<sub>S</sub> is equal to '1' and MSG\_INTEGRITY\_INFO<sub>R</sub> is equal to '1', the mobile station shall perform the following:
  - If CHANGE\_KEYS<sub>R</sub> is equal to '0', the mobile station shall set RESTORE\_KEY to '0'.
  - If CHANGE\_KEYS<sub>R</sub> is equal to '1', the mobile station shall perform the following:
    - + Set KEY\_ID to SDU\_KEY\_ID provided by the LAC Layer (see [4]).
    - + If KEY\_ID is equal to '00' or '01', the mobile station shall perform the following:
      - o Set TX\_EXT\_SSEQ[0][KEY\_ID], TX\_EXT\_SSEQ[1][KEY\_ID], RX\_EXT\_SSEQ[0][KEY\_ID], and RX\_EXT\_SSEQ[1][KEY\_ID] to  $1 + 256 \times \text{NEW\_SSEQ\_H}$  included in the *Security Mode Request Message*.
      - o Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the most recently generated CMEAKEY associated with the AUTHR of the *Registration Message*, *Origination Message*, *Page Response Message* or the CMEAKEY associated with the AUTHU generated during Unique Challenge-Response procedure as described in 2.3.12.1.4).
      - o Set ENC\_KEY[KEY\_ID] to the 128-bit pattern.
      - o Set INT\_KEY[KEY\_ID] to the 128-bit pattern.
      - o Set LAST\_2G\_KEY\_ID<sub>S</sub> to KEY\_ID.
    - + If KEY\_ID is equal to '10' or '11', the mobile station shall perform the following:
      - o Set TX\_EXT\_SSEQ[0][KEY\_ID], TX\_EXT\_SSEQ[1][KEY\_ID], RX\_EXT\_SSEQ[0][KEY\_ID], and RX\_EXT\_SSEQ[1][KEY\_ID] to  $1 + 256 \times \text{NEW\_SSEQ\_H}$  included in the *Authentication Response Message*, or *Security Mode Request Message*.

- 1           o Set ENC\_KEY[KEY\_ID] to the CK generated by AKA.
- 2           o Set INT\_KEY[KEY\_ID] to the IK generated by AKA.
- 3           o Set LAST\_3G\_KEY\_ID<sub>S</sub> to KEY\_ID.
- 4           o If the mobile station supports R-UIM, then the mobile station shall set
- 5           USE\_UAK<sub>S</sub> to USE\_UAK<sub>R</sub>; otherwise, the mobile station shall perform the
- 6           following:
  - 7           ◊ Set USE\_UAK<sub>S</sub> to '0'.
  - 8           ◊ If USE\_UAK<sub>R</sub> is equal to '1', then the mobile station shall send a
  - 9           *Mobile Station Reject Order* with ORDQ equal to '00010100' (UAK not
  - 10           supported).
- 11          + Set RESTORE\_KEY to '0'.
- 12          + Perform the key strength reduction algorithm procedures to reduce the key
- 13          strength of ENC\_KEY[KEY\_ID] according to ENC\_KEY\_SIZE<sub>R</sub> as described in
- 14          2.3.12.5.3.
- 15          + Send a *Security Mode Completion Order*.
- 16          + Disable the key setup timer if it is running.
- 17          – Set INTEGRITY\_MODE<sub>S</sub> to the SDU\_INTEGRITY\_ALGO delivered by the LAC
- 18          Layer.
- 19
- 20          • If ENC\_KEY\_SIZE<sub>R</sub> is included and not set to reserved value and if current key
- 21          strength is greater than the desired key strength specified by ENC\_KEY\_SIZE<sub>R</sub>
- 22          according to table 3.7.4.5-2, mobile station shall perform the key strength
- 23          reduction algorithm procedures to reduce the key strength of ENC\_KEY[KEY\_ID]
- 24          according to ENC\_KEY\_SIZE<sub>R</sub> as described in 2.3.12.5.4. The current key strength
- 25          is 64 bit if KEY\_ID is equal to '00' or '01' and is 128 bit if KEY\_ID is equal to '10' or
- 26          '11'.
- 27      2.6.11.5 Base Station Reject Order on f-csch and f-dsch.
- 28      The mobile station shall perform the following procedures in the order listed below.
- 29          • If ORDQ<sub>R</sub> is equal to '00000000' or if ORDQ<sub>R</sub> is equal to '00000010',
- 30          REJECT\_REASON<sub>R</sub> = '0011', and REJECTED\_L3\_MSG\_TYPE<sub>R</sub> indicates the rejected
- 31          message is an *Origination Message*, the mobile station shall set ENC\_KEY[i] and
- 32          INT\_KEY[i] to NULL, where i ranges from '00' to '11'. The mobile station shall set
- 33          C\_SIG\_ENCRYPT\_MODE<sub>S</sub> to '000'. The mobile station shall re-originate by sending
- 34          a new *Origination Message*.

- If  $ORDQ_r$  is equal to '00000001' or if  $ORDQ_r$  is equal to '00000010' and  $REJECTED\_L3\_MSG\_TYPE_r$  indicates the rejected message is not an *Origination Message*, the mobile station shall send a *Security Mode Request Message*. If  $MSG\_INTEGRITY\_SUP_s$  is equal to '0', the mobile station shall select a 24-bit number and include this number in the  $NEW\_SSEQ\_H$  field in the *Security Mode Request Message*; otherwise, the mobile station shall select a 24-bit number and deliver this number to the LAC Layer along with the *Security Mode Request Message*. If the mobile receives two *Base Station Reject Orders* without successfully decrypting any encrypted message or without successfully validating the MACI of any message between the two orders, the mobile station shall set  $REG\_SECURITY\_RESYNC$  to YES and enter the *System Determination Substate* with an encryption/message integrity failure indication.

#### 2.6.11.6 Mobile Station processing when decryption or MACI check failed

Whenever the mobile station cannot decrypt an encrypted message or validate the MACI of a message that requires MACI validation, the mobile station may send an un-encrypted *Mobile Station Reject Order* indicating the failure condition to the base station.

If the failure to decrypt or to validate MACI persists, the mobile station may attempt to resynchronize the crypto-sync with the base station by sending a *Security Mode Request Message* to the base station as follows:

- If  $MSG\_INTEGRITY\_SUP_s$  is equal to '0', the mobile station shall select a 24-bit number and include this number in the  $NEW\_SSEQ\_H^{44}$  field in the *Security Mode Request Message*; otherwise, the mobile station shall select a 24-bit number and deliver this number to the LAC Layer along with the *Security Mode Request Message*.

The mobile station shall set  $REG\_SECURITY\_RESYNC$  to YES and enter the *System Determination Substate* with an encryption/message integrity failure indication if either of the following conditions are true:

- The mobile station chooses not to perform resynchronization procedure as described above.
- The mobile station still cannot decrypt message or validate the MACI of message from the base station after successfully receiving and processing *Security Mode Command Message* in response to *Security Mode Request Message* sent by mobile station in resynchronization procedure as specified in 2.6.11.4 or 2.6.4.1.14.

#### 2.6.12 Common Procedures for Processing f-csch Messages

This section describes the common procedures for processing messages received on the f-

---

<sup>44</sup> The mobile station should select a different value of  $NEW\_SSEQ\_H$  every time  $NEW\_SSEQ\_H$  is included in a message. This is to prevent the re-use of the same 24 most significant bits of the 32-bit crypto-sync.



1 csch.

## 2 2.6.12.1 Fast Call Setup Order

3 The mobile station shall perform the following procedures in the order listed below:

- 4 • If  $RER\_MODE\_ENABLED_r$  is included and equal to '1', and the mobile station  
5 supports operation in the radio environment reporting mode, the mobile station  
6 shall set  $RER\_MODE\_ENABLED$  to YES,  $RER\_COUNT$  to 0, and shall perform the  
7 following:
  - 8 – The mobile station shall disable the radio environment report timer, if enabled.
  - 9 – The mobile station shall store the following:
    - 10 + Maximum number of *Radio Environment Messages* that the mobile station is  
11 permitted to transmit while in radio environment reporting mode  
12 ( $RER\_MAX\_NUM\_MSG_s = infinity$ , if  $RER\_MAX\_NUM\_MSG\_IDX_r$  is equal to  
13 '111'; otherwise,  $RER\_MAX\_NUM\_MSG_s = 2^{RER\_MAX\_NUM\_MSG\_IDX_r}$ ).
    - 14 + Maximum number of pilots to maintain in  $RER\_PILOT\_LIST$   
15 ( $MAX\_RER\_PILOT\_LIST\_SIZE_s = MAX\_RER\_PILOT\_LIST\_SIZE_r$ ).
    - 16 + System identification for radio environment reporting mode ( $RER\_SID_s =$   
17  $SID_s$ ).
    - 18 + Network identification for radio environment reporting mode ( $RER\_NID_s =$   
19  $NID_s$ ).
  - 20 – The initial radio environment report pilot list ( $RER\_PILOT\_LIST$ ) is generated as  
21 follows:
    - 22 + If  $ORDQ_r$  is equal to '00000001' and the size of the current  $RER\_PILOT\_LIST$   
23 is greater than  $MAX\_RER\_PILOT\_LIST\_SIZE_s$ , the mobile station shall  
24 remove all but the first  $MAX\_RER\_PILOT\_LIST\_SIZE_s$  pilots from  
25  $RER\_PILOT\_LIST$ .
    - 26 + Otherwise, the initial  $RER\_PILOT\_LIST$  is generated according to the  
27 procedures specified in [4].
  - 28 – The mobile station shall enable the radio environment report timer with an  
29 initial value of *infinity* if  $RER\_TIME_r$  is equal to '111'; otherwise, the mobile  
30 station shall enable the radio environment report timer with an initial value of  
31  $2^{RER\_TIME_r}$  seconds if  $RER\_TIME\_UNIT_r$  is equal to '00', or  $2^{RER\_TIME_r}$  minutes if  
32  $RER\_TIME\_UNIT_r$  is equal to '01', or  $2^{RER\_TIME_r}$  hours if  $RER\_TIME\_UNIT_r$  is  
33 equal to '10'.
- 34 • If  $RER\_MODE\_ENABLED_r$  is included and equal to '0', and  $RER\_MODE\_ENABLED$   
35 is equal to YES, the mobile station shall perform the following:
  - 36 – The mobile station shall disable the radio environment report timer and set  
37  $RER\_MODE\_ENABLED$  to NO.
  - 38 – If  $TKZ\_MODE\_PENDING$  is equal to YES, then the mobile station shall set

- 1 TKZ\_MODE\_PENDING to NO.
- 2 • If TKZ\_MODE\_ENABLED<sub>r</sub> is included and equal to '1', and the mobile station  
3 supports tracking zone reporting, the mobile station shall set TKZ\_COUNT to 0 and  
4 perform the following:
- 5 – The mobile station shall disable the tracking zone update timer, if enabled.
  - 6 – The mobile station shall store the following:
    - 7 + Tracking zone list length (TKZ\_LIST\_LEN<sub>s</sub> = TKZ\_LIST\_LEN<sub>r</sub>).
    - 8 + Tracking zone timer (TKZ\_TIMER<sub>s</sub> = TKZ\_TIMER<sub>r</sub>).
    - 9 + Maximum number of *Radio Environment Messages* that the mobile station is  
10 permitted to transmit while in tracking zone mode (TKZ\_MAX\_NUM\_MSG<sub>s</sub> =  
11 *infinity*, if TKZ\_MAX\_NUM\_MSG\_IDX<sub>r</sub> is equal to '111'; otherwise,  
12 TKZ\_MAX\_NUM\_MSG<sub>s</sub> = 2<sup>TKZ\_MAX\_NUM\_MSG\_IDX<sub>r</sub></sup>).
    - 13 + System identification for tracking zone mode (TKZ\_SID<sub>s</sub> = SID<sub>s</sub>).
    - 14 + Network identification for tracking zone mode (TKZ\_NID<sub>s</sub> = NID<sub>s</sub>).
    - 15 + Tracking zone update period (TKZ\_UPDATE\_PRD<sub>s</sub> = TKZ\_UPDATE\_PRD<sub>r</sub>).
  - 16 – If RER\_MODE\_ENABLED is equal to NO, the mobile station shall set  
17 TKZ\_MODE\_ENABLED to YES; otherwise, the mobile station shall set  
18 TKZ\_MODE\_PENDING to YES.
  - 19 – If TKZ\_MODE\_ENABLED is equal to YES, the mobile station shall perform the  
20 following:
    - 21 + Initialize the tracking zone list (TKZ\_LIST) to contain TKZ\_ID<sub>s</sub>.
    - 22 + Enable the tracking zone update timer with an initial value of infinity if  
23 TKZ\_UPDATE\_PRD<sub>s</sub> is equal to '1111'; otherwise, the mobile station shall  
24 enable the tracking zone update timer with an initial value of  
25 2<sup>TKZ\_UPDATE\_PRD<sub>s</sub></sup> + 6 seconds.
- 26 • If TKZ\_MODE\_ENABLED<sub>r</sub> is included and equal to '0', and TKZ\_MODE\_ENABLED  
27 is equal to YES, the mobile station shall perform the following:
- 28 – The mobile station shall disable the tracking zone update timer and set  
29 TKZ\_MODE\_ENABLED to NO.
- 30 If ORDQ<sub>r</sub> is equal to '00000000' (base station request for mobile station to operate in a fast  
31 call setup mode), the mobile station shall respond with a *Fast Call Setup Order* (ORDQ =  
32 '00000001') as follows:
- 33 • If RSC\_MODE\_SUPPORTED<sub>r</sub> is equal to '1' and the mobile station accepts  
34 operation in the reduced slot cycle mode, the mobile station shall set the  
35 RSC\_MODE\_IND field to '1' and perform the following:
    - 36 – Set RSC\_MODE\_ENABLED to YES.
    - 37 – Set the RSC\_END\_TIME\_UNIT and RSC\_END\_TIME\_VALUE fields as specified  
38 in 2.7.3.6, and store the system time specified by these fields as

1 RSC\_END\_TIME. The value of RSC\_END\_TIME shall be no later than the  
 2 system time specified by MAX\_RSC\_END\_TIME\_UNIT<sub>r</sub> and  
 3 MAX\_RSC\_END\_TIME\_VALUE<sub>r</sub>.

4 – Set the RSCI field as specified in 2.7.3.6 and store it as RSCI<sub>s</sub>; if RSCI<sub>s</sub> is equal  
 5 to '0111', set SLOTTED<sub>s</sub> to NO.

6 – Set IGNORE\_QPCH<sub>s</sub> to IGNORE\_QPCH<sub>r</sub>.

7 • Otherwise, the mobile station shall set the RSC\_MODE\_IND field to '0'.

8 If ORDQ<sub>r</sub> is equal to '00000001' (base station response to mobile station's request to  
 9 operate in a fast call setup mode), the mobile station shall perform the following:

10 • If RSC\_MODE\_SUPPORTED<sub>r</sub> is equal to '1', the mobile station shall perform the  
 11 following:– Set RSC\_END\_TIME to the earlier of the current value of  
 12 RSC\_END\_TIME, and the system time specified by MAX\_RSC\_END\_TIME\_UNIT<sub>r</sub>  
 13 and MAX\_RSC\_END\_TIME\_VALUE<sub>r</sub>.

14 – Set IGNORE\_QPCH<sub>s</sub> to IGNORE\_QPCH<sub>r</sub>.

15 • If RSC\_MODE\_SUPPORTED<sub>r</sub> is equal to '0', the mobile station shall set  
 16 RSC\_MODE\_ENABLED to NO and set SLOTTED<sub>s</sub> to YES.

17

## 18 2.6.13 Mobile Station BCMC Operation

19 This section specifies the mobile station requirements for monitoring BCMC flows. If the  
 20 mobile station supports BCMC, the requirements in this section apply in addition to all  
 21 other requirements in the Mobile Station Idle State, System Access State, and Mobile  
 22 Station Control on the Traffic Channel State.

23 The operations performed by a mobile station that supports BCMC are as follows:

24 • Procedures for commencing reception of a BCMC flow while in Mobile Station Idle  
 25 State or System Access State (see 2.6.13.1)

26 • Procedures while monitoring a Forward Supplemental Channel in *Mobile Station*  
 27 *Idle State* or *System Access State* (see 2.6.13.2)

28 • Procedures for BCMC registration while in Mobile Station Idle State or System  
 29 Access State (see 2.6.13.3)

30 • Procedures for Idle Handoff while Monitoring Forward Supplemental Channel while  
 31 in Mobile Station Idle State or System Access State (see 2.6.13.4)

32 • Procedures for stopping reception of a BCMC flow while in Mobile Station Idle State  
 33 or System Access State (see 2.6.13.5)

34 • Procedures for processing *BCMC Service Parameters Message Updates* while in  
 35 Mobile Station Idle State or System Access State (see 2.6.13.6)

36 • Procedures for Browsing BCMC flows while in Mobile Station Idle State or System  
 37 Access State (see 2.6.13.7)

- Procedures for BCMC Operation while in Mobile Station Control on the Traffic Channel State (see 2.6.13.8)
- Procedures for computation of Authorization Signature (see 2.6.13.9)
- Procedures for generating public long code mask for F-SCH *Mobile Station Idle State* or *System Access State* (see 2.6.13.10)

The following primitives can be received by Layer 3 from the BCMC Service Layer:

- *BCMC-Monitor.Request(BCMC\_FLOW\_ID<sup>45</sup>, priority)* - to request Layer 3 to commence monitoring the specified BCMC flow, where
  - *BCMC\_FLOW\_ID* identifies the BCMC flow to monitor.
  - *priority* is to be used when current BCMC flow(s) and the new BCMC flow cannot both be accommodated.
- *BCMC-Browse.Request* - to request Layer 3 to report all BCMC flows currently available.
- *BCMC-Stop-Monitor.Request(BCMC\_FLOW\_ID)* - to request Layer 3 to stop monitoring the specified BCMC flow, where
  - *BCMC\_FLOW\_ID* identifies the BCMC flow to stop monitoring.

The following primitives can be sent by Layer 3 to the BCMC Service Layer:

- *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result, cause, reason\_ind)* - response to the BCMC Service Layer for a request to monitor a BCMC flow or due to mobility, where
  - *BCMC\_FLOW\_ID* identifies the requested BCMC flow.
  - *result* indicates the result of the request and can be one of following:
    - + SUCCESS indicates the request was successful
    - + FAILURE indicates the request was unsuccessful
  - *cause* indicates the reason for failure when the request was unsuccessful and can be one of the following
    - + FLOW\_NOT\_AVAILABLE which indicates the requested BCMC flow is not available in this base station
    - + CANNOT\_ACCOMMODATE which indicates the requested BCMC flow cannot be monitored due to monitoring other higher priority BCMC flow(s)
    - + UNSUPPORTED\_BEARER\_CONFIG which indicates that the requested

---

<sup>45</sup> Although the primitive is modeled to allow the Upper Layer to request for a single BCMC\_FLOW\_ID at a time, this procedure can be implemented such that multiple BCMC\_FLOW\_IDs can be requested simultaneously.

- 1 BCMC flow cannot be monitored due to a physical channel capability
- 2 mismatch
- 3 + FLOW\_NOT\_TRANSMITTED which indicates that the requested BCMC flow
- 4 is not being transmitted by this base station although it is configured for
- 5 transmission.
- 6 + FLOW\_TRANSMITTED\_IN\_IDLE which indicates that the requested BCMC
- 7 flow is being transmitted by this base station in idle state.
- 8 + CALL\_RELEASED which indicates that the call was released.
- 9 - *reason\_ind* is included when the request is unsuccessful and can be one of the
- 10 following
- 11 + CURRENT\_SYS to indicate it occurred in current system
- 12 + MOBILITY to indicate it occurred due to idle handoff
- 13 • *BCMC-Browse.Response(result, {BCMC\_FLOW\_IDs})* - response to the BCMC Service
- 14 Layer for a request to browse for BCMC flows, where
- 15 - *result* indicates the result of the request and can be one of following:
- 16 + SUCCESS indicates current sector is configured to transmit one or more
- 17 BCMC flows and this list of BCMC flows is passed as {BCMC\_FLOW\_IDs}
- 18 + FAILURE indicates current sector is not configured to transmit any BCMC
- 19 flows.

20 The following primitives are sent by Layer 3 to Multiplex sublayer:

- 21 • *BMAC-Start-Deliver.Request(FSCH\_ID, BSR\_ID)* - to request the Multiplex sublayer
- 22 to start delivering the data blocks corresponding to the specified BCMC flow, where
- 23 - *FSCH\_ID* identifies the physical channel on which this BCMC flow is being
- 24 carried
- 25 - *BSR\_ID* identifies the BCMC Service Reference Identifier being used by this
- 26 BCMC flow on this physical channel
- 27 • *BMAC-Stop-Deliver.Request(FSCH\_ID, BSR\_ID)* - to request the Multiplex sublayer to
- 28 stop delivering the data blocks corresponding to the specified BCMC flow, where
- 29 - *FSCH\_ID* identifies the physical channel on which this BCMC flow is being
- 30 carried
- 31 - *BSR\_ID* identifies the BCMC Service Reference Identifier being used by this
- 32 BCMC flow on this physical channel

33 If the mobile station is currently not monitoring a BCMC flow, the mobile station shall

34 perform the following:

- 35 • If Layer 3 receives a *BCMC-Monitor.Request(BCMC\_FLOW\_ID, priority)* from the
- 36 BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.1 to
- 37 commence reception of the BCMC flow.

- If Layer 3 receives a *BCMC-Browse.Request* from the BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.7 to determine which BCMC flows are currently available.

#### 2.6.13.1 Procedures for commencing reception of a BCMC Flow

If Layer 3 is requested by the BCMC Service Layer to commence reception of a BCMC flow (see 2.6.13), the mobile station shall perform the following procedures in the order specified:

- If SENDING\_BSPM<sub>s</sub> equals '0', Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause = FLOW\_NOT\_AVAILABLE, reason\_ind = CURRENT\_SYS)* to the BCMC Service Layer and shall not perform the remaining procedures in this section.
- If the stored *BCMC Service Parameters Message* parameters do not include this BCMC\_FLOW\_ID (See section 2.6.13.11) and FULL\_BSPM\_IND = '0', the mobile station shall monitor the overhead channel to receive the *BCMC Service Parameters Message* as specified in 2.6.2.2.18 until its stored *BCMC Service Parameters Message* parameters include this BCMC\_FLOW\_ID, or until FULL\_BSPM\_IND = '1'
- The mobile station shall perform the following:
  - If FLOW\_INFO\_ON\_OTHER\_FREQ equals '1', the mobile station shall perform the following:
    - + If FREQ\_CHG\_REG\_REQUIRED<sub>s</sub> equals '1', the mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 to indicate change in the frequency where the mobile station will reside to receive the *BCMC Service Parameters Message*.
    - + The mobile station shall tune to the frequency specified by BSPM\_CDMA\_FREQ and BSPM\_BAND\_CLASS; the mobile station should tune to the new frequency only after performing BCMC registration specified above (if any). If FREQ\_CHG\_REG\_TIMER<sub>s</sub> is not equal to NULL and the BCMC frequency registration timer for the previous frequency is not enabled or has expired, the mobile station shall start the BCMC frequency registration timer for the previous frequency with a value of FREQ\_CHG\_REG\_TIMER<sub>s</sub>.
    - + The mobile station shall monitor the overhead channel to receive the *BCMC Service Parameters Message* as specified in 2.6.2.2.18, and shall perform the following:
      - o If SENDING\_BSPM<sub>s</sub> equals '0', Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause = FLOW\_NOT\_AVAILABLE, reason\_ind = CURRENT\_SYS)* to the BCMC Service Layer and shall not perform the remaining procedures in this section.

o Otherwise, the mobile station shall perform the remaining procedures in this section.

- If the stored *BCMC Service Parameters Message* parameters do not include this *BCMC\_FLOW\_ID* (See section 2.6.13.11) and *AUTO\_REQ\_ALLOWED\_IND<sub>s</sub>* equals '0', Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause = FLOW\_NOT\_AVAILABLE, reason\_ind = CURRENT\_SYS)* to the BCMC Service Layer and shall not perform the remaining procedures in this section.
- If the *BCMC Service Parameters Message* includes the BCMC flow indicated by *BCMC\_FLOW\_ID*, *BCMC\_FLOW\_ON\_IND* corresponding to this BCMC flow equals '1', and *BCMC\_FLOW\_ON\_TRAFFIC\_IND* corresponding to this BCMC flow equals '1', the mobile station shall either perform Mobile Station Origination Operation as specified in 2.6.2.5 to request this flow in the *Mobile Station Control on the Traffic Channel State* or monitor the flow in the *Mobile Station Idle State* as specified in 2.6.13.2.
- If the stored *BCMC Service Parameters Message* does not include this *BCMC\_FLOW\_ID* (See section 2.6.13.11), *AUTO\_REQ\_ALLOWED\_IND<sub>s</sub>* equals '1' and *BCMC\_ON\_TRAFFIC\_SUP<sub>s</sub>* equals '1'; or the *BCMC Service Parameters Message* includes the BCMC flow indicated by *BCMC\_FLOW\_ID*, *BCMC\_FLOW\_ON\_IND* corresponding to this BCMC flow equals '0', and *BCMC\_FLOW\_ON\_TRAFFIC\_IND* corresponding to this BCMC flow equals '1', the mobile station shall perform the following:
  - + The mobile station shall perform Mobile Station Origination Operation as specified in 2.6.2.5 to request transmission of this BCMC flow. The mobile station shall include the *BCMC\_FLOW\_ID* (See section 2.6.13.11) in the *Origination Message*.
- If the stored *BCMC Service Parameters Message* parameters do not include this *BCMC\_FLOW\_ID* (See section 2.6.13.11), *AUTO\_REQ\_ALLOWED\_IND<sub>s</sub>* equals '1', and *BCMC\_ON\_TRAFFIC\_SUP<sub>s</sub>* equals '0'; or the stored *BCMC Service Parameters Message* parameters include the BCMC flow indicated by *BCMC\_FLOW\_ID*, *BCMC\_FLOW\_ON\_IND* corresponding to this BCMC flow equals '0', and *BCMC\_FLOW\_ON\_TRAFFIC\_IND* corresponding to this BCMC flow equals '0', the mobile station shall perform the following:
  - + The mobile station shall send a *Registration Message* to request transmission of this BCMC flow. Upon receiving conformation of delivery of the *Registration Message*, the mobile station shall enable the BCMC wait timer with a value of *BSPM\_WAIT\_TIME* seconds and shall wait for an updated *BCMC Service Parameters Message*.
  - + If the BCMC wait timer expires, Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause = FLOW\_NOT\_TRANSMITTED, reason\_ind = CURRENT\_SYS)* to the BCMC Service Layer, and shall not perform the remaining procedures in this section.

- 1           + If the mobile station receives a *BCMC Order* from the base station prior to  
2           the expiration of the BCMC wait timer, the mobile station shall perform the  
3           following:
- 4           o If *CLEAR\_ALL\_RETRY\_DELAY<sub>r</sub>* equals '1', the mobile station shall delete  
5           the currently stored BCMC Retry Delay List.
  - 6           o If *CLEAR\_RETRY\_DELAY<sub>r</sub>* equals '1', the mobile station shall delete the  
7           entry in the *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i]* corresponding to  
8           *BCMC\_FLOW\_ID* (See section 2.6.13.11) in this message.
  - 9           o If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON<sub>r</sub>* equals '0000', Layer 3 shall  
10          send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE,*  
11          *cause = FLOW\_NOT\_AVAILABLE, reason\_ind = CURRENT\_SYS)* for each  
12          of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service Layer, and  
13          shall not perform the remaining procedures in this section for the  
14          corresponding *BCMC\_FLOW\_ID*.
  - 15          o If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON<sub>r</sub>* equals '0001', Layer 3 shall  
16          send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE,*  
17          *cause = FLOW\_NOT\_TRANSMITTED, reason\_ind = CURRENT\_SYS)* for  
18          each of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service Layer,  
19          and shall not perform the remaining procedures in this section for the  
20          corresponding *BCMC\_FLOW\_ID*.
  - 21          o If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON<sub>r</sub>* equals '0011', Layer 3 shall  
22          send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = SUCCESS,*  
23          *reason\_ind = REGISTRATION\_ACCEPTED)* for each of the corresponding  
24          *BCMC\_FLOW\_ID* to the BCMC Service Layer and shall not perform the  
25          remaining procedures in this section for the corresponding  
26          *BCMC\_FLOW\_ID*.
  - 27          o If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON* equals '0100', Layer 3 shall  
28          send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE,*  
29          *cause = AUTHORIZATION\_FAILURE, reason\_ind = CURRENT\_SYS)* for  
30          each of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service Layer,  
31          and shall not perform the remaining procedures in this section for the  
32          corresponding *BCMC\_FLOW\_ID*.
  - 33          o If *ALL\_BCMC\_REASON<sub>r</sub>* or *BCMC\_REASON* equals '0101', the mobile  
34          station shall perform the following:
    - 35              • Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result*  
36              *= FAILURE, cause = RETRY\_LATER, reason\_ind = CURRENT\_SYS)* for  
37              each of the corresponding *BCMC\_FLOW\_ID* to the BCMC Service  
38              Layer.
    - 39              • For each of the corresponding *BCMC\_FLOW\_ID*, if there is a  
40              *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].BCMC\_FLOW\_ID* which is same as  
41              *BCMC\_FLOW\_ID* (See section 2.6.13.11), the mobile station shall set  
42              *BCMC\_RETRY\_DELAY\_LIST<sub>s</sub>[i].RETRY\_DELAY* to current system



- time plus  $ALL\_BCMC\_RETRY\_DELAY_r / BCMC\_RETRY\_DELAY_r$ ;  
 otherwise, Layer 3 shall add new  $BCMC\_RETRY\_DELAY\_LIST_s[i]$  to  
 the BCMC Retry Delay List and shall set  
 $BCMC\_RETRY\_DELAY\_LIST_s[i].BCMC\_FLOW\_ID$  to  $BCMC\_FLOW\_ID$ ,  
 $BCMC\_RETRY\_DELAY\_LIST_s[i].RETRY\_DELAY$  to current system  
 time plus  $ALL\_BCMC\_RETRY\_DELAY_r / BCMC\_RETRY\_DELAY_r$ .
- The mobile station shall not perform the remaining procedures in  
 this section for the corresponding  $BCMC\_FLOW\_ID$ .
  - o If the BCMC flow corresponding to this  $BCMC\_FLOW\_ID$  (See section  
 2.6.13.11) is included in the stored *BCMC Service Parameters Message*  
 parameters and  $BCMC\_FLOW\_ON\_IND$  corresponding to this BCMC flow  
 changes to '1' prior to the expiration of the BCMC wait timer, the mobile  
 station shall disable the BCMC wait timer and perform the remaining  
 procedures in this section.
  - The mobile station shall determine the Forward Supplemental Channel  
 corresponding to this  $BCMC\_FLOW\_ID$  from  $BCMC\_FLOW\_LIST_s$ . If the BCMC flow  
 corresponding to this  $BCMC\_FLOW\_ID$  is configured for transmission in the mobile  
 station's hash-to-frequency, the mobile station shall choose the mobile station's  
 hash-to-frequency; otherwise, the mobile station shall use the hash algorithm  
 specified in 2.6.7.1 and the number of CDMA channels on which this  
 $BCMC\_FLOW\_ID$  is configured for transmission to choose the frequency to monitor.  
 The mobile station shall perform the following:
    - The mobile station shall determine the Band Class ( $FSCH\_BAND\_CLASS$ ) and  
 the CDMA channel ( $FSCH\_FREQ$ ) corresponding to the selected Forward  
 Supplemental Channel from  $FBSCH\_LIST_s$ . If  $FSCH\_BAND\_CLASS$  is not equal  
 to  $CDMA\_BAND_s$  or  $FSCH\_FREQ$  is not equal to  $CDMACH_s$  and the mobile  
 station is currently monitoring one or more BCMC flows in the current  
 frequency that have a higher priority than the requested BCMC flow, Layer 3  
 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause =*  
*CANNOT\_ACCOMMODATE, reason\_ind = CURRENT\_SYS)* to the BCMC Service  
 Layer, and shall not perform the remaining procedures in this section.
    - If the mobile station will not be able to monitor the Forward Supplemental  
 Channel on which the BCMC flow is being transmitted due to a capability  
 mismatch, Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result*  
*= FAILURE, cause = UNSUPPORTED\_BEARER\_CONFIG, reason\_ind =*  
*CURRENT\_SYS)* to the BCMC Service Layer, and shall not perform the  
 remaining procedures in this section.
  - If  $FSCH\_BAND\_CLASS$  is not equal to  $CDMA\_BAND_s$  or  $FSCH\_FREQ$  is not equal to  
 $CDMACH_s$ , the mobile station shall perform the following:
    - If  $FREQ\_CHG\_REG\_REQUIRED_s$  equals '1', the mobile station shall perform  
 BCMC registration procedures as specified in 2.6.13.3 to indicate change in the  
 frequency where the mobile station will reside while monitoring this BCMC flow.

- 1       – The mobile station shall tune to FSCH\_FREQ in FSCH\_BAND\_CLASS; the  
2       mobile station should tune to the new frequency only after performing BCMC  
3       registration specified above (if any). If FREQ\_CHG\_REG\_TIMER<sub>s</sub> is not equal to  
4       NULL and the BCMC frequency registration timer for the previous frequency is  
5       not enabled or has expired, the mobile station shall start the BCMC frequency  
6       registration timer for the previous frequency with a value of  
7       FREQ\_CHG\_REG\_TIMER<sub>s</sub>.
- 8       – For each BCMC flow in current frequency that can no longer be monitored in  
9       new frequency, the mobile station shall perform the following:
  - 10      + Layer 3 shall send a *BCMC-Monitor.Response*(BCMC\_FLOW\_ID, result =  
11      *FAILURE*, cause = *CANNOT\_ACCOMMODATE*, reason\_ind = *CURRENT\_SYS*)  
12      to the BCMC Service Layer.
  - 13      + Layer 3 shall send a *BMAC-Stop-Deliver.Request*(FSCH\_ID, BSR\_ID) to the  
14      multiplex sublayer where FSCH\_ID and BSR\_ID are the values in  
15      BCMC\_FLOW\_LIST<sub>s</sub> corresponding to this BCMC\_FLOW\_ID.
- 16      • The mobile station shall set the Forward Supplemental Channel parameters as  
17      given in FBSCH\_LIST<sub>s</sub> and shall start to monitor the Forward Supplemental  
18      Channel.
- 19      • The mobile station shall send a *BMAC-Start-Deliver.Request*(FSCH\_ID, BSR\_ID) to  
20      the multiplex sublayer where FSCH\_ID and BSR\_ID are the values in  
21      BCMC\_FLOW\_LIST<sub>s</sub> corresponding to the logical-to-physical mapping selected for  
22      this BCMC\_FLOW\_ID.
- 23      • The mobile station shall send a *BCMC-Monitor.Response*(BCMC\_FLOW\_ID,  
24      result=*SUCCESS*) to the BCMC Service Layer.
- 25      • The mobile station shall perform the procedures as specified in 2.6.13.2 while  
26      monitoring the Forward Supplemental Channel

#### 27   2.6.13.2 Procedures while monitoring an Forward Supplemental Channel

28   While monitoring a Forward Supplemental Channel, the mobile station shall perform the  
29   following:

- 30      • The mobile station shall determine the hash-to frequency based on received CDMA  
31      Channel List Message or the Extended CDMA Channel List Message but shall not  
32      tune to the hash-to frequency. If FREQ\_CHG\_REG\_REQUIRED<sub>s</sub> equals '1' and the  
33      mobile station determines that the hash-to frequency has changed and the mobile  
34      station currently resides in the previous hash-to frequency, the mobile station shall  
35      perform BCMC registration procedures as specified in 2.6.13.3 to indicate current  
36      frequency.
- 37      • If the mobile station performs an idle handoff (see 2.6.2.1.4), the mobile station  
38      shall perform the procedures as specified in 2.6.13.4. If the idle handoff results in  
39      the mobile station residing in a frequency other than the frequency prior to the idle  
40      handoff, the mobile station shall perform the following:

- 1       – If `FREQ_CHG_REG_REQUIREDs` equals '1', the mobile station shall perform
- 2       BCMC registration procedures as specified in 2.6.13.3 to indicate change in the
- 3       frequency where the mobile station will reside while monitoring this BCMC flow.
- 4       If `FREQ_CHG_REG_TIMERs` is not equal to NULL and the BCMC frequency
- 5       registration timer for the previous frequency is not enabled or is enabled and
- 6       has not expired, the mobile station shall start the BCMC frequency registration
- 7       timer for the previous frequency with a value of `FREQ_CHG_REG_TIMERs`.
- 8       • If the `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG` is equal to '1' for any
- 9       BCMC flow being monitored by the mobile station, then the mobile station shall
- 10      perform BCMC registration procedures as specified in 2.6.13.3 if any of the
- 11      following conditions are true:
  - 12      – The mobile station determines that
  - 13      `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG` was set to '0' since the last
  - 14      time the mobile station initiated registration procedures due to
  - 15      `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG`.
  - 16      – The mobile station cannot determine that
  - 17      `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG` was not set to '0' since the
  - 18      last time the mobile station initiated registration procedures due to
  - 19      `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG`.
- 20      • If Layer 3 receives a *BCMC-Stop-Monitor.Request(BCMC\_FLOW\_ID)* from the BCMC
- 21      Service Layer, Layer 3 shall stop monitoring this BCMC flow as specified in
- 22      2.6.13.5.
- 23      • If Layer 3 receives a *BCMC-Monitor.Request(BCMC\_FLOW\_ID, priority)* from the
- 24      BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.1 to
- 25      commence reception of the BCMC flow.
- 26      • If the mobile station determines that the content of the *BCMC Service Parameters*
- 27      *Message* has changed, Layer 3 shall perform the procedures as specified in
- 28      2.6.13.6.
- 29      • If the BCMC frequency registration timer for the frequency where the mobile station
- 30      is currently residing expires, the mobile station shall perform BCMC registration
- 31      procedures as specified in 2.6.13.3 to indicate current frequency.

### 32   2.6.13.3 Procedures for BCMC Registration

33   If the mobile station is to perform BCMC registration due to the  
 34   `REGISTRATION_REQ_FLAG` indicator being set, the mobile station shall perform the  
 35   following:

- 36      • If this is the first time `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG` is set to
- 37      '1' for this BCMC flow received after an idle handoff, the mobile station shall
- 38      perform a BCMC registration immediately.
- 39      • Otherwise, if the BCMC registration required timer is not enabled, the mobile
- 40      station shall perform the following:

- 1           – Enable the BCMC registration required timer with the initial value set to a  
2 pseudorandom value between 0 and REGISTRATION\_REQ\_TIMER\_MAX.
- 3           – Subsequently, if the BCMC\_FLOW\_LIST<sub>s[i]</sub>.REGISTRATION\_REQ\_FLAG for all  
4 BCMC flows being monitored by the mobile station are equal to '0', the mobile  
5 station shall disable the BCMC registration required timer.
- 6           – Otherwise, when the BCMC registration required timer expires, the mobile  
7 station shall perform a BCMC registration.

8 If the mobile station is to perform BCMC registration due to a frequency change, layer 3  
9 shall perform the following:

- 10           • If the BCMC frequency registration timer for target frequency is enabled and has  
11 not expired, the mobile station shall not perform the remaining procedures in this  
12 section.
- 13           • Otherwise, the mobile station shall enter the System Access State with a  
14 registration indication.

#### 15 2.6.13.4 Procedures for Idle Handoff while Monitoring Forward Supplemental Channel

16 While monitoring a Forward Supplemental Channel, if the conditions for performing an  
17 idle handoff are detected (see 2.6.2.1.4), the mobile station shall perform an idle handoff as  
18 specified in this section.

19 When the mobile station performs an idle handoff the BCMC registration required timer  
20 shall be disabled.

21 While performing an idle handoff, the mobile station should not begin operating in non-  
22 slotted mode after the idle handoff if all of the following conditions hold:

- 23           • The mobile station supports the Quick Paging Channel;
- 24           • The mobile station has knowledge that the new base station supports configuration  
25 change indicators;
- 26           • The mobile station determines that the Quick Paging Channel configuration change  
27 indicator for the new Quick Paging Channel is set to "OFF" (see 2.6.2.1.2.1); and
- 28           • No more than  $T_{31m}$  seconds have elapsed since the mobile station last received a  
29 valid message on the new Paging Channel or Forward Common Control  
30 Channel/Primary Broadcast Control Channel.

31 Otherwise, the mobile station shall operate in non-slotted mode until the mobile station  
32 has received at least one valid configuration message or mobile station-addressed page on  
33 the new Paging Channel or Forward Common Control Channel/Primary Broadcast Control  
34 Channel. Following the reception of this message the mobile station may resume slotted  
35 mode operation in accordance with 2.6.2.1.1.3. After performing an idle handoff, the  
36 mobile station shall discard all unprocessed messages received on the old Paging Channel  
37 or Forward Common Control Channel/Primary Broadcast Control Channel.

38 If the new base station is listed in NGHBR\_REC\_LIST for the old base station (see  
39 2.6.2.2.3, 2.6.2.2.7, and 2.6.2.1.4.1), the mobile station shall use the corresponding 3-bit

1 NGHBR\_CONFIG field to determine the actions required to transition to the new base  
 2 station. If the new base station is not listed in NGHBR\_REC\_LIST for the old base station,  
 3 the mobile station shall perform the handoff operation using the same procedure as for a  
 4 pilot in NGHBR\_REC\_LIST with the NGHBR\_CONFIG field set to '011'.

5 If the new base station is listed in BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k]  
 6 record of the current base station, the mobile station shall use the corresponding 3-bit  
 7 NGHBR\_BCMC\_CONFIG field to determine the actions required to monitor the Forward  
 8 Supplemental Channel of the new base station. If the new base station is not listed in  
 9 BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k] record for the current base station,  
 10 the mobile station shall determine the actions required to monitor the Forward  
 11 Supplemental Channel of the new base station using the same procedure as for a pilot in  
 12 BCMC\_FLOW\_LIST<sub>s</sub>[i].LPM\_INFO[j].NGHBR\_INFO[k] record with the  
 13 NGHBR\_BCMC\_CONFIG field set to '000'.

14 If the mobile station is currently monitoring the Paging Channel and selected a neighbor  
 15 base station for idle handoff which supports Primary Broadcast Control Channel, the  
 16 mobile station shall perform the following:

- 17 • If the mobile station has not received parameters for the Primary Broadcast Control  
 18 Channel of the neighbor base station from the *BCMC System ParametersMessage*,  
 19 the mobile station shall enter the System Determination Substate of the Mobile  
 20 Station Initialization State with a new system indication, upon performing idle  
 21 handoff to this neighbor base station.
- 22 – Upon entering the Mobile Station Idle State of the new system, the mobile  
 23 station shall resume monitoring the BCMC flow(s) as specified in 2.6.13.6.
- 24 – The mobile station shall not perform any of the remaining procedures in this  
 25 section.

26 If the NGHBR\_CONFIG field is '011', the mobile station shall perform the following:

- 27 • Enter the System Determination Substate of the Mobile Station Initialization State  
 28 with a new system indication (see 2.6.1.1)
- 29 • Upon entering the Mobile Station Idle State of the new system, the mobile station  
 30 shall resume monitoring the BCMC flow(s) as specified in 2.6.13.6.
- 31 • The mobile station shall not perform any of the remaining procedures in this  
 32 section.

33 If the NGHBR\_BCMC\_CONFIG field is '000' or '011', the mobile station shall perform the  
 34 following:

- 35 • The mobile station shall perform idle handoff according to the procedures in  
 36 2.6.2.1.4.1 just as if the mobile station is currently not monitoring a Forward  
 37 Supplemental Channel.
- 38 • Upon completing the idle handoff, the mobile station shall resume monitoring the  
 39 BCMC flow as specified in 2.6.13.6.

40 If the NGHBR\_BCMC\_CONFIG field is '001' or '010', the mobile station shall perform the

1 following:

- 2 • If the mobile station has monitored the Paging Channel before the idle handoff, or  
3 the mobile station has monitored the Forward Common Control Channel/Primary  
4 Broadcast Control Channel before the idle handoff and NGHBR\_CONFIG field is set  
5 to '001', the mobile station shall perform the following:
  - 6 – The mobile station shall set ACC\_MSG\_SEQ<sub>S</sub> and CURR\_ACC\_MSG\_SEQ to  
7 NULL and shall set PILOT\_PN<sub>S</sub> to the pilot offset index of the base station  
8 transmitting the new Paging Channel.
  - 9 – If the stored information for any of the Paging Channels on the associated  
10 NGHBR\_FSCH\_FREQ of the new base station is current, the mobile station  
11 shall perform the following:
    - 12 + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select  
13 a new Paging Channel number in the range 1 to PAGE\_CHAN<sub>S</sub>, where  
14 PAGE\_CHAN<sub>S</sub> is the value stored for the Paging Channel whose stored  
15 information is current. The mobile station shall store the new Paging  
16 Channel number as PAGECH<sub>S</sub>. The mobile station shall perform the  
17 following:
      - 18 o If the mobile station has not stored configuration parameters for the new  
19 Paging Channel, or if the stored parameters are not current (see 2.6.2.2),  
20 the mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub>, SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
21 NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
22 GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
23 EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>,  
24 PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, and  
25 EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
26 FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, and GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub> to  
27 NULL.
      - 28 o If the stored information for the new Paging Channel is current, the  
29 mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub> to the stored information  
30 for the new Paging Channel and set NGHBR\_REC\_LIST, FBSCCH\_LIST<sub>S</sub>,  
31 and BCMC\_FLOW\_LIST<sub>S</sub> to the stored information for the new Paging  
32 Channel.
    - 33 + If the mobile station has monitored the Forward Common Control  
34 Channel/Primary Broadcast Control Channel before the idle handoff, the  
35 mobile station shall set PRAT<sub>S</sub> = '00'.
    - 36 + If CDMACH<sub>S</sub> is not equal to NGHBR\_FSCH\_FREQ, the mobile station shall  
37 set CDMACH<sub>S</sub> to NGHBR\_FSCH\_FREQ and tune to the new CDMA Channel.  
38 The mobile station shall begin monitoring the new Paging Channel and the  
39 Forward Supplemental Channel of the new base station.

- 1       – If none of the Paging Channel stored information on the associated  
2       NGHBR\_FSCH\_FREQ of the new base station are current, the mobile station  
3       shall perform the following:
  - 4       + The mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub>, SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
5       NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, EXT\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>,  
6       GEN\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub>, CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
7       EXT\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>,  
8       EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
9       FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and  
10       PRI\_NGHBR\_LST\_MSG\_SEQ<sub>S</sub> to NULL.
  - 11       + If the mobile station has monitored the Forward Common Control  
12       Channel/Primary Broadcast Control Channel before the idle handoff, the  
13       mobile station shall set PRAT<sub>S</sub> = '00'.
  - 14       + The mobile station shall set PAGE\_CHAN<sub>S</sub> to '1' and PAGECH<sub>S</sub> to the  
15       Primary Paging Channel. If CDMACH<sub>S</sub> is not equal to NGHBR\_FSCH\_FREQ,  
16       the mobile station shall set CDMACH<sub>S</sub> to NGHBR\_FSCH\_FREQ and tune to  
17       the new CDMA Channel. The mobile station shall begin monitoring the  
18       Primary Paging Channel and Forward Supplemental Channel of the new  
19       base station.
  - 20       – If PACA<sub>S</sub> is equal to enabled, the mobile station shall enter the *Update*  
21       *Overhead Information Substate* of the *System Access State* (see 2.6.3) with an  
22       origination indication within T<sub>33m</sub> seconds to re-originate the PACA call using  
23       the new base station.
- 24       • If the mobile station has monitored the Forward Common Control Channel/Primary  
25       Broadcast Control Channel before the idle handoff or if the mobile station has  
26       monitored the Paging Channel before the idle handoff, and selected a neighbor base  
27       station for idle handoff which supports Primary Broadcast Control Channel and the  
28       mobile station has received parameters for the Primary Broadcast Control Channel  
29       of the neighbor base station from the *BCMC System Parameters Message*, the  
30       mobile station shall perform the following:
  - 31       – The mobile station shall set ACC\_MSG\_SEQ<sub>S</sub> and CURR\_ACC\_MSG\_SEQ to  
32       NULL and shall set PILOT\_PN<sub>S</sub> to the pilot offset index of the base station  
33       transmitting the new Forward Common Control Channel/Primary Broadcast  
34       Control Channel.
  - 35       – If the stored information for any of the Forward Common Control Channels and  
36       Primary Broadcast Control Channel on the associated NGHBR\_FSCH\_FREQ of  
37       the new base station is current, the mobile station shall perform the following:
    - 38       + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select  
39       a new Forward Common Control Channel number in the range 1 to  
40       NUM\_FCCCH<sub>S</sub>, where NUM\_FCCCH<sub>S</sub> is the stored value. The mobile station  
41       shall store the new Forward Common Control Channel number as  
42       FCCCH\_ID<sub>S</sub>. The mobile station shall perform the following:

- 1           o If the mobile station has not stored configuration parameters for the new  
2 Forward Common Control Channel and Primary Broadcast Control  
3 Channel, or if the stored parameters are not current (see 2.6.2.2), the  
4 mobile station shall set CONFIG\_MSG\_SEQ<sub>S</sub>,  
5 A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>, UNI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub>,  
6 MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>, EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>,  
7 EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
8 USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and PRI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub> to  
9 NULL.
- 10           o If the stored information for the new Forward Common Control Channel  
11 and Primary Broadcast Control Channel is current, the mobile station  
12 shall set CONFIG\_MSG\_SEQ<sub>S</sub> to the stored information for the new  
13 Forward Common Control Channel and Primary Broadcast Control  
14 Channel and set NGHR\_REC\_LIST to the stored information for the  
15 new Forward Common Control Channel and Primary Broadcast Control  
16 Channel.
- 17           + If CDMACH<sub>S</sub> is not equal to NGHR\_FSCH\_FREQ, the mobile station shall  
18 set CDMACH<sub>S</sub> to NGHR\_FSCH\_FREQ and tune to the new CDMA Channel.  
19 The mobile station shall begin monitoring the new Forward Common  
20 Control Channel/Primary Broadcast Control Channel and the Forward  
21 Supplemental Channel of the new base station.
- 22           – If none of the Forward Common Control Channel and Primary Broadcast  
23 Control Channel stored information on the associated NGHR\_FSCH\_FREQ of  
24 the new base station are current, the mobile station shall perform the following:
- 25           + The mobile station shall set the mobile station shall set  
26 CONFIG\_MSG\_SEQ<sub>S</sub>, A41\_SYS\_PAR\_MSG\_SEQ<sub>S</sub>,  
27 UNI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub>, MC\_RR\_PAR\_MSG\_SEQ<sub>S</sub>,  
28 EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ<sub>S</sub>, EXT\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>,  
29 FD\_CHAN\_LST\_MSG\_SEQ<sub>S</sub>, USER\_ZONE\_ID\_MSG\_SEQ<sub>S</sub>, and  
30 PRI\_NGHR\_LST\_MSG\_SEQ<sub>S</sub> to NULL.
- 31           + If CDMACH<sub>S</sub> is not equal to NGHR\_FSCH\_FREQ, the mobile station shall  
32 set CDMACH<sub>S</sub> to NGHR\_FSCH\_FREQ and tune to the new CDMA Channel.  
33 The mobile station shall begin monitoring the Primary Broadcast Control  
34 Channel of the new base station, using the same rate, code rate, and code  
35 channel. The mobile station shall begin monitoring the Forward  
36 Supplemental Channel of the new base station.
- 37           – If PACA<sub>S</sub> is equal to enabled, the mobile station shall enter the *Update*  
38 *Overhead Information Substate* of the *System Access State* (see 2.6.3) with an  
39 origination indication within T<sub>33m</sub> seconds to re-originate the PACA call using  
40 the new base station.



### 1 2.6.13.5 Procedures for stopping reception of a BCMC Flow

2 If Layer 3 is requested by the BCMC Service Layer to stop monitoring a BCMC flow given  
3 by BCMC\_FLOW\_ID, the mobile station perform the following:

- 4 • Layer 3 shall send a *BMAC-Stop-Deliver.Request(FSCH\_ID, BSR\_ID)* to the multiplex  
5 sublayer where *FSCH\_ID* and *BSR\_ID* are the values in BCMC\_FLOW\_LIST<sub>s</sub>  
6 corresponding to this BCMC\_FLOW\_ID.
- 7 • If this is the only BCMC flow being monitored on this Forward Supplemental  
8 Channel, the mobile station shall stop monitoring this Forward Supplemental  
9 Channel.
- 10 • If this is the only BCMC flow being monitored on this frequency, the mobile station  
11 shall return to the hash-to frequency as follows:
  - 12 – If the mobile station is currently monitoring the Paging Channel, the mobile  
13 station shall monitor the CDMA Channel List Message or Extended CDMA  
14 Channel List Message to determine the hash-to frequency as specified in  
15 2.6.2.2.4 and 2.6.2.2.12.1 respectively.
  - 16 – If the mobile station is currently monitoring the Primary Broadcast Control  
17 Channel/Forward Common Control Channel, the mobile station shall monitor  
18 the *Extended CDMA Channel List Message* to determine the hash-to frequency  
19 as specified in 2.6.2.2.12.2.
  - 20 – If this results in the mobile station residing in a frequency other than the  
21 frequency prior to stopping BCMC flow reception, the mobile station shall  
22 perform BCMC registration procedures as specified in 2.6.13.3 to indicate  
23 change in the frequency.

### 24 2.6.13.6 Procedures for Handling *BCMC Service Parameters Message* Updates

25 If the mobile station determines that the contents of the *BCMC Service Parameters*  
26 *Message* has changed or that the *BCMC Service Parameters Message* is not being  
27 transmitted anymore, the mobile station shall perform the following:

- 28 • If SENDING\_BSPM<sub>s</sub> equals '0', the mobile station shall perform the following:
  - 29 – For each BCMC flow currently being monitored, Layer 3 shall send a *BCMC-*  
30 *Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause =*  
31 *FLOW\_NOT\_AVAILABLE, reason\_ind)* to the BCMC Service Layer, where  
32 *reason\_ind* is set to MOBILITY if this is due to idle handoff or to CURRENT\_SYS  
33 otherwise.
  - 34 – For each BCMC flow currently being monitored, Layer 3 shall send a *BMAC-*  
35 *Stop-Deliver.Request(FSCH\_ID, BSR\_ID)* to the multiplex sublayer where  
36 *FSCH\_ID* and *BSR\_ID* are the values in the previous BCMC\_FLOW\_LIST  
37 corresponding to this BCMC\_FLOW\_ID.
  - 38 – The mobile station shall not perform the remaining procedures in this section.

- 1       • For each BCMC flow that the mobile station is currently monitoring, if the mobile  
2 station determines that the base station is not transmitting this BCMC flow  
3 anymore, the mobile station shall perform the following:
  - 4       – Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result=FAILURE,*  
5 *cause= FLOW\_NOT\_AVAILABLE, reason\_ind)* to the BCMC Service Layer, where  
6 *reason\_ind* is set to MOBILITY if this is due to idle handoff or to CURRENT\_SYS  
7 otherwise, and shall stop monitoring this BCMC flow as specified in 2.6.13.5.
- 8       • For each BCMC flow that the mobile station is currently monitoring, if the mobile  
9 station determines that this BCMC flow is being transmitted on a different Forward  
10 Supplemental Channel than currently transmitted, the mobile station shall perform  
11 the following:
  - 12       – If more than one BCMC flows that the mobile station is currently monitoring are  
13 still available, then the mobile station shall choose the frequency based on the  
14 BCMC flow with the highest priority; if the BCMC flow is configured for  
15 transmission in the mobile station's hash-to-frequency, the mobile station shall  
16 choose the mobile station's hash-to-frequency; otherwise, the mobile station  
17 shall use the hash algorithm specified in 2.6.7.1 and the number of CDMA  
18 channels on which this BCMC\_FLOW\_ID is configured for transmission to  
19 choose the frequency to monitor.
  - 20       – Layer 3 shall send a *BMAC-Stop-Deliver.Request(FSCH\_ID, BSR\_ID)* to the  
21 multiplex sublayer where *FSCH\_ID* and *BSR\_ID* are the values in the previous  
22 BCMC\_FLOW\_LIST corresponding to this BCMC\_FLOW\_ID.
  - 23       – The mobile station shall determine the band class (*FSCH\_BAND\_CLASS*) and  
24 CDMA channel (*FSCH\_FREQ*) corresponding to the selected Forward  
25 Supplemental Channel from *FBSCH\_LIST<sub>s</sub>*. If *FSCH\_BAND\_CLASS* is not equal  
26 to *CDMA\_BAND<sub>s</sub>* or *FSCH\_FREQ* is not equal to *CDMACH<sub>s</sub>* and the mobile  
27 station is currently monitoring one or more BCMC flows in the current  
28 frequency that have a higher priority than this BCMC flow, Layer 3 shall send a  
29 *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause =*  
30 *CANNOT\_ACCOMMODATE, reason\_ind)* to the BCMC Service Layer, where  
31 *reason\_ind* is set to MOBILITY if this is due to idle handoff or to CURRENT\_SYS  
32 otherwise, and shall not perform the remaining procedures in this section.
  - 33       – If the mobile station will not be able to monitor the Forward Supplemental  
34 Channel on which the BCMC flow is being transmitted due to a capability  
35 mismatch, Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result*  
36 *= FAILURE, cause = UNSUPPORTED\_BEARER\_CONFIG, reason\_ind)* to the  
37 BCMC Service Layer, where *reason\_ind* is set to MOBILITY if this is due to idle  
38 handoff or to CURRENT\_SYS otherwise, and shall not perform the remaining  
39 procedures in this section for this BCMC flow.
  - 40       – If *FSCH\_BAND\_CLASS* is not equal to *CDMA\_BAND<sub>s</sub>* or *FSCH\_FREQ* is not  
41 equal to *CDMACH<sub>s</sub>*, the mobile station shall perform the following:
    - 42       + If *FREQ\_CHG\_REG\_REQUIRED<sub>s</sub>* equals '1', the mobile station shall perform  
43 BCMC registration procedures as specified in 2.6.13.3 to indicate change in

- 1 the frequency where the mobile station will reside while monitoring this  
2 BCMC flow.
- 3 + The mobile station shall tune to FSCH\_FREQ in FSCH\_BAND\_CLASS; the  
4 mobile station should tune to the new frequency only after performing  
5 BCMC registration (if any) specified above. If FREQ\_CHG\_REG\_TIMER<sub>S</sub> is  
6 not equal to NULL and the BCMC frequency registration timer for the  
7 previous frequency is not enabled or is enabled and has not expired, the  
8 mobile station shall start the BCMC frequency registration timer for the  
9 previous frequency with a value of FREQ\_CHG\_REG\_TIMER<sub>S</sub>.
- 10 + For each BCMC flow in current frequency that can no longer be monitored  
11 in new frequency, the mobile station shall perform the following:
- 12 o Layer 3 shall send a *BCMC-Monitor.Response*(BCMC\_FLOW\_ID,  
13 *result=FAILURE*, *cause= CANNOT\_ACCOMMODATE*, *reason\_ind*) to the  
14 BCMC Service Layer, where *reason\_ind* is set to MOBILITY if this is due  
15 to idle handoff or to CURRENT\_SYS otherwise.
- 16 o Layer 3 shall send a *BMAC-Stop-Deliver.Request*(FSCH\_ID, BSR\_ID) to the  
17 multiplex sublayer where FSCH\_ID and BSR\_ID are the values in  
18 BCMC\_FLOW\_LIST<sub>S</sub> corresponding to this BCMC\_FLOW\_ID.
- 19 - The mobile station shall set the Forward Supplemental Channel parameters as  
20 given in FBSCH\_LIST<sub>S</sub> and shall start to monitor the Forward Supplemental  
21 Channel.
- 22 - The mobile station shall send a *BMAC-Start-Deliver.Request*(FSCH\_ID, BSR\_ID)  
23 to the multiplex sublayer where FSCH\_ID and BSR\_ID are the values in  
24 BCMC\_FLOW\_LIST<sub>S</sub> corresponding to the logical-to-physical mapping selected  
25 for this BCMC\_FLOW\_ID.
- 26 • For any BCMC flow that the mobile station is currently monitoring, if the mobile  
27 station determines to monitor this BCMC flow on a traffic channel (e.g.,  
28 BCMC\_FLOW\_ON\_IND corresponding to this BCMC flow equals '0', and  
29 BCMC\_FLOW\_ON\_TRAFFIC\_IND corresponding to this BCMC flow equals '1'), the  
30 mobile station shall perform the following:
- 31 - For each BCMC flow currently being monitored in the *Mobile Station Idle State*,  
32 Layer 3 shall send a *BCMC-Monitor.Response*(BCMC\_FLOW\_ID, *result=FAILURE*,  
33 *cause= CANNOT\_ACCOMMODATE*, *reason\_ind*) to the BCMC Service Layer,  
34 where *reason\_ind* is set to MOBILITY if this is due to idle handoff or to  
35 CURRENT\_SYS otherwise, and shall stop monitoring this BCMC flow as  
36 specified in 2.6.13.5.
- 37 - The mobile station shall perform Mobile Station Origination Operation as  
38 specified in 2.6.2.5 to request monitoring of this BCMC flow on the *Traffic*  
39 *Channel Substate*. The mobile station shall include the BCMC\_FLOW\_ID (See  
40 section 2.6.13.11) in the *Origination Message*.

### 2.6.13.7 Procedures for Browsing BCMC Flows

If Layer 3 is requested by the BCMC Service Layer to report list of all available BCMC flows (see 2.6.13), the mobile station shall perform the following procedures in the order specified:

- If SENDING\_BSPM<sub>s</sub> equals '0', Layer 3 shall send a *BCMC-Browse.Response(result=FAILURE)* to the BCMC Service Layer.
- Otherwise, if FULL\_BSPM\_IND = '0', the mobile station shall monitor the overhead channel to receive the *BCMC Service Parameters Message* as specified in 2.6.2.2.18 or until FULL\_BSPM\_IND = '1', and shall perform the following:
  - Layer 3 shall send a *BCMC-Browse.Response(result = SUCCESS, {BCMC\_FLOW\_IDs})* to the BCMC Service Layer where {BCMC\_FLOW\_IDs} is a list of all unique BCMC flows configured for transmission in this sector as determined from the stored *BCMC Service Parameters Message* parameters.

### 2.6.13.8 Procedures for BCMC Operation while on Traffic Channel

This section specifies the mobile station requirements for BCMC feature while in the Mobile Station Control on the Traffic Channel State.

If Layer 3 is requested by the BCMC Service Layer to commence reception of a BCMC flow (see 2.6.13), the mobile station shall send *Enhanced Origination Message* as specified in 2.6.4.3.

If Layer 3 is requested by the BCMC Service Layer to stop monitoring a BCMC flow (see 2.6.13), the mobile station shall release a BCMC call as specified in 2.6.4.3.

If the mobile station is monitoring BCMC flow on traffic channel, when traffic channel is released and the BCMC Service Layer has not requested to stop monitoring the BCMC flow, the mobile station shall either continue monitoring the BCMC flow in idle state (see 2.6.13) or the Layer 3 shall send a *BCMC-Monitor.Response(BCMC\_FLOW\_ID, result = FAILURE, cause = CALL\_RELEASED)* to the BCMC Service Layer.

### 2.6.13.9 Procedures for Computation of Authorization Signature

For each BCMC flow included in the *Registration Message*, *Origination Message*, *Page Response Message* and *Enhanced Origination Message*, if BCMC\_FLOW\_LIST<sub>s</sub>[i].AUTH\_SIGNATURE\_REQ\_IND equals '1', then the mobile station shall compute the Authorization Signature value for the BCMC flow as follows:

- The mobile station shall create an input working buffer to EHMACSHA as shown in Table 2.6.13.9 1.

**Table 2.6.13.9-1. Subfields of the input working buffer**

Subfield	Length (bits)
TIME_STAMP_LONG	TIME_STAMP_LONG_LENGTH <sub>s</sub>

1

2 **TIME\_STAMP\_LONG** The mobile station shall set this field to the LSBs of the CDMA  
 3 System Time, in units of  $2^{\text{TIME\_STAMP\_UNIT}_s}$  slots, corresponding to a  
 4 time that is not later than when the Physical Layer will begin  
 5 transmission of the *Registration Message*, *Origination Message*,  
 6 *Page Response Message*, or *Enhanced Origination Message* that  
 7 will carry this Authorization Signature. The mobile station shall  
 8 use the same TIME\_STAMP\_LONG field for computing all  
 9 Authorization Signature parameters included in a *Registration*  
 10 *Message*, *Origination Message*, *Page Response Message* or a  
 11 *Enhanced Origination Message*.

- 12 • The mobile terminal shall compute the Authorization Signature value as follows  
 13 using the EHMACHA procedure as specified in [43], section 3.3.
- 14 – The KEY parameter of EHMACHA shall be set to BAK.
- 15 – The L\_KEY parameter of EHMACHA shall be set to 16, identifying the length of  
 16 BAK in octets.
- 17 – The MESSAGE parameter of EHMACHA shall be set to the pointer to the most  
 18 significant bit of the input working buffer.
- 19 – The MESSAGE\_OFFSET parameter of EHMACHA shall be set to 0.
- 20 – The MESSAGE\_LENGTH parameter of EHMACHA shall be set to the number  
 21 of bits of data in the input working buffer
- 22 – The HMAC parameter of EHMACHA shall be set to the pointer to the most  
 23 significant bit of the output buffer that will contain the computed MAC value.
- 24 – The L\_HMAC parameter of EHMACHA shall be set to 4, identifying the length  
 25 of the output in octets.

26 The mobile station shall set the AUTH\_SIGNATURE field to the 32 least significant bits  
 27 of the Message Digest computed MAC value obtained in the previous step.

#### 28 2.6.13.10 Procedures for Public Long Code Mask schemes

##### 29 2.6.13.10.1 Procedures for BCMC Flow ID based autonomous PLCM generation

30 The Public Long Code Mask of the Forward Supplemental Channel to be received in idle  
 31 state is determined as follows:

- 32 • If the first occurrence of the BCMC\_FLOW\_ID (see section 2.6.13.11) in the *BCMC*  
 33 *Service Parameters Message* multiplexed on this Forward Supplemental Channel is  
 34 16bits, FIRST\_FLOW\_ID shall be set as follows.
- 35
- 36 – The 16 MSBs shall be set to sixteen '0's.
- 37 – The 16 LSBs shall be set to the BCMC\_FLOW\_ID.

- 1 • If the first occurrence of the BCMC\_FLOW\_ID (see section 2.6.13.11) in the *BCMC*
- 2 *Service Parameters Message* multiplexed on this Forward Supplemental Channel is
- 3 24bits, FIRST\_FLOW\_ID shall be set as follows.
- 4 - The 8 MSBs shall be set to eight '0's.
- 5 - The 24 LSBs shall be set to the BCMC\_FLOW\_ID.
- 6 • If the first occurrence of the BCMC\_FLOW\_ID (see section 2.6.13.11) in the *BCMC*
- 7 *Service Parameters Message* multiplexed on this Forward Supplemental Channel is
- 8 32bits, FIRST\_FLOW\_ID shall be set to the BCMC\_FLOW\_ID.
- 9 • Set the FIRST\_BSR\_ID to the BSR\_ID corresponding to the FIRST\_FLOW\_ID in the
- 10 *BCMC Service Parameters Message* multiplexed on this Forward Supplemental
- 11 Channel.
- 12 • PLCM\_42 is set as follows.
- 13 - Bits P41 through P35 shall be set to '1100111'.
- 14 - Bits P34 through P3 shall be set to FIRST\_FLOW\_ID.
- 15 - Bits P2 through P0 shall be set to FIRST\_BSR\_ID.

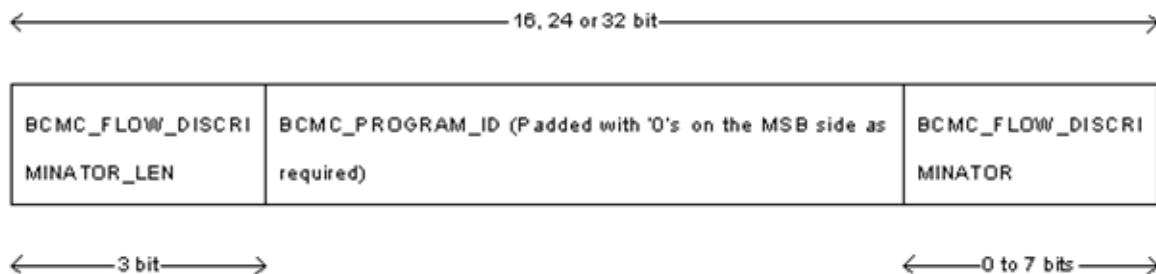
#### 16 2.6.13.10.2 Procedures for index based PLCM generation

17 The Public Long Code Mask of the Forward Supplemental Channel to be received in idle  
18 state is determined as follows:

- 19 • PLCM\_42 is set as follows.
- 20 - Bits P41 through P24 shall be set to '110011100110111000'.
- 21 - Bits P23 through P16 shall be set to FSCH\_PLCM\_INDEX<sub>S</sub>.
- 22 - Bits P15 through P0 shall be set to '0000000000000000'.

#### 23 2.6.13.11 BCMC\_FLOW\_ID generation

24 The BCMC\_FLOW\_ID structure is shown in Figure 2.6.13.11-1.



**Figure 2.6.13.11-1. Structure of BCMC\_FLOW\_ID**

BCMC\_FLOW\_ID is obtained by concatenating the BCMC\_FLOW\_DISCRIMINATOR\_LEN field, the BCMC\_PROGRAM\_ID field, and BCMC\_FLOW\_DISCRIMINATOR fields as follows:

- The exact contents of the 3 bit BCMC\_FLOW\_DISCRIMINATOR\_LEN field,
- The unsigned binary value of the BCMC\_PROGRAM\_ID field padded with '0's on the most significant bits as necessary to satisfy the following:
  - If the sum of the lengths of the BCMC\_FLOW\_DISCRIMINATOR\_LEN, BCMC\_PROGRAM\_ID, and BCMC\_FLOW\_DISCRIMINATOR fields is less than or equal to 16 bits, then the BCMC\_FLOW\_ID shall be of 16 bits length.
  - If the sum of the lengths of the BCMC\_FLOW\_DISCRIMINATOR\_LEN, BCMC\_PROGRAM\_ID, and BCMC\_FLOW\_DISCRIMINATOR fields is less than or equal to 24 bits but greater than 16 bits, then the BCMC\_FLOW\_ID shall be of 24 bits length.
  - If the sum of the lengths of the BCMC\_FLOW\_DISCRIMINATOR\_LEN, BCMC\_PROGRAM\_ID, and BCMC\_FLOW\_DISCRIMINATOR fields is less than or equal to 32 bits but greater than 24 bits, then the BCMC\_FLOW\_ID shall be of 32 bits length.
- and the exact content of the BCMC\_FLOW\_DISCRIMINATOR field, where the length of this field is specified by the value of BCMC\_FLOW\_DISCRIMINATOR\_LEN.

The length of a BCMC\_FLOW\_ID shall be 16, 24, or 32 bits.

#### 2.6.13.12 BCMC TDM

Base station may multiplex multiple BCMC flows on a single F-SCH. Time Division Multiplexing (TDM) is an optional feature that supports BCMC. When multiple flows are multiplexed on a single F-SCH, the base station may include TDM related parameters. Mobile station can use TDM related parameters to save battery, by waking up only when BCMC\_FLOW that MS is interested in is transmitted.

TDM related parameters are included in *BCMC Service Parameters Message*. TDM related parameters are TDM\_STRUCTURE\_IND, TDM\_SLOT\_LENGTH, TDM\_SUPER\_PERIOD\_MASK\_LEN, TDM\_MEGA\_PERIOD\_MASK\_LEN, TDM\_USED\_IND, TDM\_MASK, TDM\_SUPER\_PERIOD\_MASK\_INCL, TDM\_SUPER\_PERIOD\_MASK, TDM\_MEGA\_PERIOD\_MASK\_INCL, TDM\_MEGA\_PERIOD\_MASK.

TDM parameters include 3 levels TDM masks TDM\_MASK, TDM\_SUPER\_PERIOD\_MASK and TDM\_MEGA\_PERIOD\_MASK. These masks indicate BCMC flow to F-SCH time slot mapping.

Each bit of TDM\_MASK indicates presence of a flow on a slot. Length of a slot is defined by TDM\_SLOT\_LENGTH. Each bit of TDM\_SUPER\_PERIOD\_MASK indicates presence of a flow on a super slot. Super slot length is equal to slot length multiplied by number of bits in TDM\_MASK. Each bit of TDM\_MEGA\_PERIOD\_MASK indicates presence of a flow on a mega slot. Super slot length is equal to super slot length multiplied by number of bits in TDM\_SUPER\_PERIOD\_MASK.

When outer coding is used TDM\_SUPER\_PERIOD\_MASK length is always 16 bits, but only partial mask (first part) is included in the *BCMC Service Parameters Message*. Remaining bits in the mask that are not included in the *BCMC Service Parameters Message* are “don’t care” bits, and the mobile station can decide if remaining slots need to be received based on outer coding algorithm.

Subsection 2.6.13.12.1 defines how TDM period is aligned with system time.

#### 2.6.13.12.1 BCMC TDM period alignment requirement

Each TDM period for a BCMC flow on a particular Forward Supplemental Channel starts when the system time (t) in 20 ms units satisfies the following equation:

- If outer coding is used for the FSCH where this BCMC flow is transmitted (i.e. FSCH\_OUTER\_CODE\_INCL for the FSCH is equal to ‘1’)

$$t \bmod (\text{TDM period}) = \text{FSCH\_OUTERCODE\_OFFSET}$$

where FSCH\_OUTERCODE\_OFFSET is the outer coding buffer offset for the FSCH where this BCMC flow is transmitted

- Otherwise

$$t \bmod (\text{TDM period}) = 0$$

Here, TDM period is calculated as following:

- If TDM\_MEGA\_PERIOD\_MASK\_INCL for the BCMC flow on this particular Forward Supplemental Channel is equal to ‘1’

$$\text{TDM period} = (\text{duration of mega slot in 20 ms units}) \times (\text{length of TDM\_MEGA\_PERIOD\_MASK in bits})$$

- Otherwise

$$\text{TDM period} = \text{duration of mega slot in 20 ms units}$$

#### 2.6.14 Common Procedures for Processing r-csch Messages

This section describes the common procedures for processing messages sent on the r-csch.

##### 2.6.14.1 Reporting Band Class – Band Subclass Capabilities

If the FD\_CHAN\_LST\_IND<sub>s</sub> is set to ‘0’ and CAND\_BAND\_INFO\_REQ<sub>r</sub> is set to ‘1’ in the *Extended System Parameters Message* or in the *MC-RR Parameters Message*, the mobile station shall report band subclass capabilities via the *Registration Message*, *Origination Message* or *Page Response Message*. If the FD\_CHAN\_LST\_IND<sub>s</sub> is set to ‘1’ and CAND\_BAND\_INFO\_REQ<sub>r</sub> is set to ‘1’ the mobile station shall use *General Extension Message* to carry the the *Registration Message*, *Origination Message* or *Page Response Message* and include Supported Band Class - Subclass Record. The mobile station shall perform the following procedures when reporting band class:

- In the procedures below, the following assumptions apply:

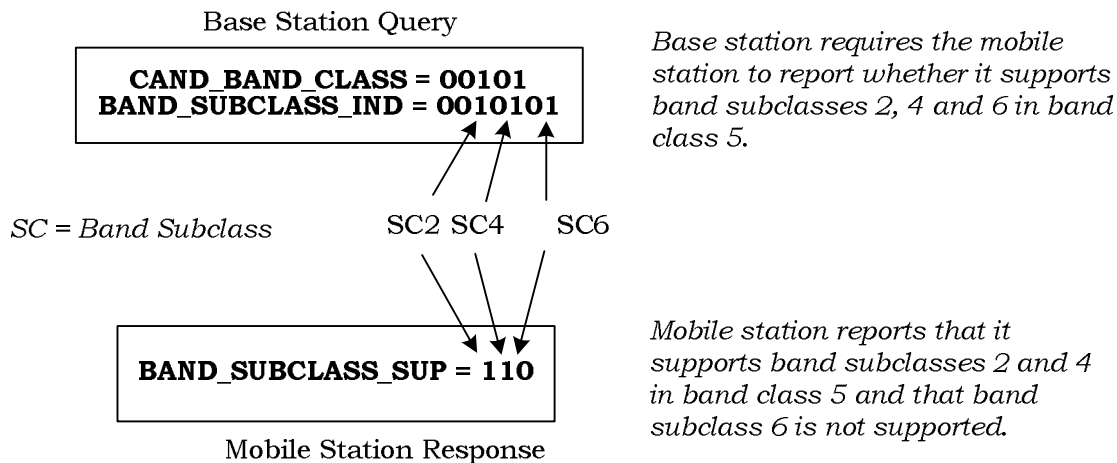


- 1       – For band classes defined with multiple band subclasses, the mobile station
- 2       shall indicate support of this band class if at least one band subclass is
- 3       supported.
- 4       – If the mobile station supports a candidate band class but it is not aware of any
- 5       band subclass definition for that band class, the mobile station shall report its
- 6       capabilities as if it supports band subclass 0 of that band class.
- 7       • If the mobile station supports at least one band class and band subclass (if
- 8       applicable) combination queried by the base station, the mobile station shall set
- 9       BAND\_SUB\_REP\_INCL to '1'; otherwise, the mobile station shall set this field to '0'
- 10      and shall not perform the remaining procedures.
- 11      • The mobile station shall initialize NUM\_BAND\_SUBCLASS to '0000'.
- 12      • If the mobile station supports all candidate band class and band subclass (if
- 13      applicable) combinations queried by the base station, the mobile station shall not
- 14      perform the remaining procedures; otherwise, for i = 1 to
- 15      NUM\_CAND\_BAND\_CLASSES, the mobile station shall perform the following:
- 16      – If CAND\_BAND\_CLASS\_REC[i]. SUBCLASS\_INFO\_INCL is equal to '0', the
- 17      mobile station shall perform the following:
- 18          + The mobile station shall include one instance of the BAND\_SUBCLASS\_SUP
- 19          field and set it as follows. If the mobile station supports the candidate band
- 20          class CAND\_BAND\_CLASS\_REC[i].CAND\_BAND\_CLASS, the mobile station
- 21          shall set this field to '1'; otherwise, it shall set it to '0'.
- 22          + The mobile station shall increment NUM\_BAND\_SUBCLASS by 1.
- 23      – Otherwise, for j = 0 to CAND\_BAND\_CLASS\_REC[i].SUBCLASS\_REC\_LEN, if
- 24      CAND\_BAND\_CLASS\_REC[i].BAND\_SUBCLASS\_IND\_REC[j] is equal to '1', the
- 25      mobile station shall perform the following:
- 26          + The mobile station shall include one instance of the BAND\_SUBCLASS\_SUP
- 27          field and set it as follows. If the mobile station supports the band subclass
- 28          CAND\_BAND\_CLASS\_REC[i].BAND\_SUBCLASS\_IND\_REC[j], the mobile
- 29          station shall set this field to '1'; otherwise, it shall set it to '0'.
- 30          + The mobile station shall increment NUM\_BAND\_SUBCLASS by 1.

31      Figure 2.6.14.1-1 illustrates the relationship between the base station

32      CAND\_BAND\_CLASS, BAND\_SUBCLASS\_IND fields and the mobile station

33      BAND\_SUBCLASS\_SUP fields for one possible scenario.



**Figure 2.6.14.1-1. Illustration of Band Class - Band Subclass Reporting**

#### 2.6.15 MEID procedures when communicating with P\_REV 6, 7, 8, 10 Base Stations

The mobile station shall conform to the requirements in [47] when communicating with a P\_REV 6, 7, 8, or 10 base station.

#### 2.6.16 Initialization of RC parameters

The mobile station shall initialize the RC parameters as follows:

- The mobile station shall set FOR\_FCH\_ACK\_MASK\_RL\_BLANKING<sub>S</sub> to '0001 1001 1001 1000' and set FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>S</sub> to '0000 1010 1010 1010'.
- The mobile station shall set REV\_FCH\_ACK\_MASK<sub>S</sub> to '0000 1010 1010 1010'.
- The mobile station shall set FOR\_SCH\_ACK\_MASK\_RL\_BLANKING<sub>S</sub> to '0000 0000 0001 1000' and set FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING<sub>S</sub> to '0000 0000 0010 1000'.
- The mobile station shall set REV\_SCH\_ACK\_MASK<sub>S</sub> to '0000 0000 0010 1010'.
- The mobile station shall set FOR\_N2M\_IND<sub>S</sub> to '001' (4 bad frames).
- The mobile station shall set RPC\_MODE<sub>S</sub> to '00' (200 to 400 bps).
- The mobile station shall set PWR\_CNTL\_STEP\_ZERO\_RATE<sub>S</sub> to '000' (1 dB).
- The mobile station shall set FOR\_FCH\_BLANKING\_DUTYCYCLE<sub>S</sub> to '001' (N=4).
- The mobile station shall set REV\_FCH\_BLANKING\_DUTYCYCLE<sub>S</sub> to '001' (N=4).
- The mobile station shall set \_FCH\_BLANKING\_DUTYCYCLE\_IN\_USE to '001' (N=4).
- The mobile station shall set REV\_ACKCH\_GAIN\_ADJ\_ACS1<sub>S</sub> to '0000 000'.
- The mobile station shall set REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS<sub>S</sub> to '0000 000'.

- The mobile station shall initialize RC\_PARAMS\_RECORD<sub>s</sub> to have entry RC\_PARAMS\_RECORD<sub>s</sub>[i] for each of the PILOT\_PNs assigned to mobile and initialize corresponding fields of each of the RC\_PARAMS\_RECORD<sub>s</sub>[i] record as follows:
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].QOF\_SET\_IN\_USE set to '000'.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_CH\_WALSH[00] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_BIT[00] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_CH\_WALSH[01] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_BIT[01] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].FOR\_FCH\_CCSH\_INTERLEAVER\_TYPE to '0'.

#### 2.6.17 RC\_PARAMS\_RECORD update procedures

The mobile station shall update RC\_PARAMS\_RECORD in Traffic Channel Substate as follows:

- When a pilot is added to the active set for which there is no entry present in RC\_PARAMS\_RECORD<sub>s</sub>, the mobile station shall update RC\_PARAMS\_RECORD<sub>s</sub> to add an entry RC\_PARAMS\_RECORD<sub>s</sub>[i] and perform the following:
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].PILOT\_PN to the PILOT\_PN of the added pilot.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].QOF\_SET\_IN\_USE to '000'.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_CH\_WALSH[00] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_BIT[00] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_CH\_WALSH[01] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].REV\_SCH\_ACK\_BIT[01] to NULL.
  - Set RC\_PARAMS\_RECORD<sub>s</sub>[i].FOR\_FCH\_CCSH\_INTERLEAVER\_TYPE to '0'.
- When a pilot is removed from the active set for which there was an entry present in RC\_PARAMS\_RECORD<sub>s</sub>, the mobile station shall update RC\_PARAMS\_RECORD<sub>s</sub> to remove the entry.
- When an *Radio Configuration Parameters Message* is received, the mobile station shall update RC\_PARAMS\_RECORD<sub>s</sub> as described in section 2.6.4.3.

#### 2.6.18 Processing of General Extension Message

The base station may extend layer 3 messages with additional fields using the *General Extension Message*. The mobile station shall process this message at the action time:

- Explicitly specified in the message carried in the MESSAGE\_REC field, or

- At the action time explicitly specified in the general extension record when the message carried in the MESSAGE\_REC field does not carry action time explicitly, or
- implicitly specified by the message carried in the MESSAGE\_REC field when action time is not carried explicitly in the general extension record or the message carried in the MESSAGE\_REC field

The mobile station shall process this message as follows:

- The mobile station shall store the *i*th occurrence of the GE\_REC\_TYPE<sub>r</sub> in GE\_REC\_TYPE<sub>s</sub>[*i*].
- The mobile station shall store the *i*th occurrence of the GE\_REC\_LEN<sub>r</sub> in GE\_REC\_LEN<sub>s</sub>[*i*].
- If any General Extension Record type is not supported, the mobile station shall send a *Mobile Station Reject Order* with ORDQ equal to 00011101.
- If any field value in any of the General Extension Records is outside its permissible range, the mobile station shall send a *Mobile Station Reject Order* with ORDQ equal to 00011110.
- If any field value in any of the General Extension Records is not supported, the mobile station shall send a *Mobile Station Reject Order* with ORDQ equal to 00011111.
- The mobile station shall store the *i*th occurrence of the GE\_REC<sub>r</sub> as follows.
  - If GE\_REC\_TYPE<sub>s</sub>[*i*] is equal to '00000000' the mobile station shall store the BAND\_CLASS<sub>r</sub> field in the GE\_REC<sub>r</sub> as BAND\_CLASS<sub>s</sub> and REV\_CHAN<sub>r</sub> field in the GE\_REC<sub>r</sub> as REV\_CHAN<sub>s</sub>. The mobile station shall use the REV\_CHAN<sub>s</sub> channel number of BAND\_CLASS<sub>s</sub> as the associated reverse link for the channel carried in the message carried by the MESSAGE\_REC field.
  - If GE\_REC\_TYPE<sub>s</sub>[*i*] is equal to '00000001' the mobile station shall store and use the fields included in the Radio Configuration Parameters Record at the action time. If the USE\_TIME field in the Radio Configuration Parameters Record is set to '0', the mobile station shall process the message contained in the MESSAGE\_REC and then update the RC\_PARAMS\_RECORDs by the values of the fields included in the Radio Configuration Parameters Record.
- The mobile station shall use the MESSAGE\_TYPE field as specified in [4] and process the reception of layer 3 message carried in the MESSAGE\_REC field.

## 1    2.7 PDU Formats for Mobile Stations

2    This section describes the formats of the PDUs corresponding to the messages sent by the  
3    mobile station.

4    In any multi-bit field in the following messages, the most significant bit (MSB) shall be  
5    transmitted first.

6    Some bits in the PDUs are marked as RESERVED. These bits allow extension of the PDUs  
7    for future features and capabilities. The mobile station sets all reserved bits to '0'. Some  
8    fields include values marked as reserved. The mobile station shall not set a field to a value  
9    that is marked as reserved.

10

1    2.7.1 r-csch

2    This section describes the messages and their PDU formats sent by the mobile station on  
3    the r-csch.

4    2.7.1.1 Reserved

5    2.7.1.2 Reserved

6    2.7.1.3 PDU Formats on r-csch

7    The messages sent on the r-csch are summarized in Table 2.7.1.3-1.

8

1

**Table 2.7.1.3-1. Messages on r-csch**

<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>P_REV_IN_USE<sup>1</sup></b>
<i>Registration Message</i>	RGM	2.7.1.3.2.1	All
<i>Order Message</i>	ORDM	2.7.1.3.2.2	All
<i>Data Burst Message</i>	DBM	2.7.1.3.2.3	All
<i>Origination Message</i>	ORM	2.7.1.3.2.4	All
<i>Page Response Message</i>	PRM	2.7.1.3.2.5	All
<i>Authentication Challenge Response Message</i>	AUCRM	2.7.1.3.2.6	All
<i>Status Response Message</i>	STRPM	2.7.1.3.2.7	1, 3
<i>TMSI Assignment Completion Message</i>	TACM	2.7.1.3.2.8	1, $\geq 4$
<i>PACA Cancel Message</i>	PACNM	2.7.1.3.2.9	$\geq 4$
<i>Extended Status Response Message</i>	ESTRPM	2.7.1.3.2.10	$\geq 4$
<i>Device Information Message</i>	DIM	2.7.1.3.2.11	$\geq 7$
<i>Security Mode Request Message</i>	SMRM	2.7.1.3.2.12	$\geq 7$
<i>Authentication Response Message</i>	AURSPM	2.7.1.3.2.13	$\geq 10$
<i>Authentication Resynchronization Message</i>	AURSYNM	2.7.1.3.2.14	$\geq 10$
<i>Reconnect Message</i>	RCNM	2.7.1.3.2.15	$\geq 9$
<i>Radio Environment Message</i>	REM	2.7.1.3.2.16	$\geq 11$
<i>Call Recovery Request Message</i>	CRRM	2.7.1.3.2.17	$\geq 12$
<i>General Extension Message</i>	GEM	2.7.1.3.2.18	$\geq 12$

2 2.7.1.3.1 Reserved

3 2.7.1.3.2 PDU Contents

4 The following sections specify the contents of the PDU for each message that may be sent  
5 on the r-csch.

6

---

<sup>1</sup> P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.

## 1 2.7.1.3.2.1 Registration Message

2 MSG\_TAG: RGM

3

<b>Field</b>	<b>Length (bits)</b>
REG_TYPE	4
SLOT_CYCLE_INDEX	3
MOB_P_REV	8
SCM	8
MOB_TERM	1
RETURN_CAUSE	4
QPCH_SUPPORTED	0 or 1
ENHANCED_RC	0 or 1
UZID_INCL	0 or 1
UZID	0 or 16
GEO_LOC_INCL	0 or 1
GEO_LOC_TYPE	0 or 3
OTD_SUPPORTED	0 or 1
STS_SUPPORTED	0 or 1
3X_CCH_SUPPORTED	0 or 1
WLL_INCL	0 or 1
WLL_DEVICE_TYPE	0 or 3
HOOK_STATUS	0 or 4
ENC_INFO_INCL	0 or 1
SIG_ENCRYPT_SUP	0 or 8
C_SIG_ENCRYPT_REQ	0 or 1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8
UI_ENCRYPT_SUP	0 or 8
MSG_INT_INFO_INCL	0 or 1
SIG_INTEGRITY_SUP_INCL	0 or 1

(continues on next page)

4



Field	Length (bits)
SIG_INTEGRITY_SUP	0 or 8
SIG_INTEGRITY_REQ	0 or 3
NEW_KEY_ID	0 or 2
NEW_SSEQ_H_INCL	0 or 1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8
SIGN_SLOT_CYCLE_INDEX	0 or 1
BCMC_FREQ_INFO_INCL	0 or 1
BCMC_BAND_CLASS	0 or 5
BCMC_CDMA_FREQ	0 or 11
NUM_BCMC_PROGRAMS	0 or 6
AUTH_SIGNATURE_INCL	0 or 1
TIME_STAMP_SHORT_LENGTH	0 or 8
TIME_STAMP_SHORT	Variable

NUM\_BCMC\_PROGRAMS occurrences of the following field:

*{ (NUM\_BCMC\_PROGRAMS)*

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	BCMC_PROGRAM_ID_LEN + 1
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
AUTH_SIGNATURE_IND	0 or 1
AUTH_SIGNATURE_SAME_IND	0 or 1
BAK_ID	0 or 4

AUTH_SIGNATURE	0 or 32
----------------	---------

} (NUM\_FLOW\_DISCRIMINATOR+1) or 1

} (NUM\_BCMC\_PROGRAMS)

BAND_SUB_REP_INCL	0 or 1
NUM_BAND_SUBCLASS	0 or 4

NUM\_BAND\_SUBCLASS occurrences of the following field:

{ (NUM\_BAND\_SUBCLASS)

BAND_SUBCLASS_SUP	1
-------------------	---

} (NUM\_BAND\_SUBCLASS)

ADD_GEO_LOC_INCL	0 or 1
ADD_GEO_LOC_TYPE_LEN_IND	0 or 1
ADD_GEO_LOC_TYPE	0 or 16 or 24

1  
2  
3  
4  
5  
6  
7  
8

REG\_TYPE – Registration type.

This field indicates which type of event generated the registration attempt.

The mobile station shall set this field to the REG\_TYPE value shown in Table 2.7.1.3.2.1-1 corresponding to the event that caused this registration to occur (see 2.6.5.1).

1

**Table 2.7.1.3.2.1-1. Registration Type (REG\_TYPE) Codes**

<b>REG_TYPE (binary)</b>	<b>Type of Registration</b>
0000	Timer-based (see 2.6.5.1.3)
0001	Power-up (see 2.6.5.1.1)
0010	Zone-based (see 2.6.5.1.5)
0011	Power-down (see 2.6.5.1.2)
0100	Parameter-change (see 2.6.5.1.6)
0101	Ordered (see 2.6.5.1.7)
0110	Distance-based (see 2.6.5.1.4)
0111	User Zone-based (see 2.6.5.1.10)
1000	Encryption Re-sync required (see 2.6.5.1.11)
1001	BCMC Registration (see 2.6.13.3)
All other REG_TYPE values are reserved.	

2

3 SLOT\_CYCLE\_INDEX

- Slot cycle index.

4

5

6

If P\_REV\_IN\_USE<sub>s</sub> is less than 11, or if MIN\_SLOT\_CYCLE\_INDEX is equal to '0', the mobile station shall perform the following:

7

8

9

10

- If the mobile station is configured for slotted mode operation, the mobile station shall set this field to max (0, SLOT\_CYCLE\_INDEX<sub>p</sub>) (see 2.6.2.1.1). Otherwise, the mobile station shall set this field to '000'.

11

Otherwise, the mobile station shall perform the following:

12

13

14

15

16

17

18

19

- If the mobile station is configured for slotted mode operation, the mobile station shall set this field to the absolute value of the preferred slot cycle index, SLOT\_CYCLE\_INDEX<sub>p</sub> (see 2.6.2.1.1); otherwise, the mobile station shall set this field to '000'. The sign of the preferred slot cycle index, SLOT\_CYCLE\_INDEX<sub>p</sub>, is specified in the SIGN\_SLOT\_CYCLE\_INDEX field of this message (see Table 2.7.1.3.2.1-8).

20

MOB\_P\_REV

- Protocol revision of the mobile station.

21

The mobile station shall set this field to '00001100'.

22

SCM

- Station class mark.

23

The mobile station shall set this field to its station class mark. See 2.3.3.

24

**MOB\_TERM** – Mobile terminated calls accepted indicator.

If the mobile station is configured to accept mobile terminated calls while operating with the current roaming status (see 2.6.5.3), the mobile station shall set this bit to '1'. Otherwise, the mobile station shall set this bit to '0'.

**RETURN\_CAUSE** – Reason of the mobile station registration or access.

The mobile station shall set this field to the RETURN\_CAUSE value shown in Table 2.7.1.3.2.1-2 corresponding to the service redirection failure condition (see 2.6.1.1).

**Table 2.7.1.3.2.1-2. RETURN\_CAUSE Codes**

<b>RETURN_CAUSE (binary)</b>	<b>Redirect Failure Condition</b>
0000	Normal access.
0001	Service redirection failed as a result of system not found.
0010	Service redirection failed as a result of protocol mismatch.
0011	Service redirection failed as a result of registration rejection.
0100	Service redirection failed as a result of wrong SID.
0101	Service redirection failed as a result of wrong NID.
All other RETURN_CAUSE values are reserved.	

**QPCH\_SUPPORTED** – Quick Paging Channel supported indicator.

If P\_REV\_IN\_USE<sub>s</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports the Quick Paging Channel, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**ENHANCED\_RC** – Enhanced radio configuration supported indicator.

If P\_REV\_IN\_USE<sub>s</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports any radio configuration in the Radio Configuration Class 2 (see 1.1.1), the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

1	UZID_INCL	-	User Zone Identifier included indicator.
2			If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
3			omit this field; otherwise, the mobile station shall include
4			this field and set it as follows.
5			If the message is to contain the User Zone Identifier, the
6			mobile station shall set this field to '1'; otherwise, the mobile
7			station shall set this field to '0'.
8	UZID	-	User Zone Identifier.
9			If the UZID_INCL is included in the message and is set to '1',
10			the mobile station shall include this field and set it to UZID <sub>S</sub> ;
11			otherwise, the mobile station shall omit this field.
12	GEO_LOC_INCL	-	Geo-location included indicator.
13			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
14			omit this field; otherwise, the mobile station shall include
15			this field and set it as follows.
16			If the message is to contain the GEO_LOC_TYPE field, the
17			mobile station shall set this field to '1'; otherwise, the mobile
18			station shall set this field to '0'.
19	GEO_LOC_TYPE	-	Geo-Location Type.
20			If GEO_LOC_INCL is included in the message and is set to '1',
21			the mobile station shall include this field and shall set it to
22			the value shown in Table 2.7.1.3.2.4-7; otherwise, the mobile
23			station shall omit this field.
24	OTD_SUPPORTED	-	Orthogonal Transmit Diversity supported.
25			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
26			omit this field; otherwise, the mobile station shall include
27			this field and set it as follows.
28			The mobile station shall set this field to '1' if Orthogonal
29			Transmit Diversity is supported; otherwise, the mobile station
30			shall set this field to '0'.
31	STS_SUPPORTED	-	Space Time Spreading Transmit Diversity supported.
32			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
33			omit this field; otherwise, the mobile station shall include
34			this field and set it as follows.
35			The mobile station shall set this field to '1', if Space Time
36			Spreading Transmit Diversity is supported; otherwise, the
37			mobile station shall set this field to '0'.
38	3X_CCH_SUPPORTED	-	3X Common Channels supported.

If P\_REV\_IN\_USE<sub>s</sub> is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to '1' if the mobile station supports the Spreading Rate 3 common channels (3X BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile station shall set this field to '0'.

WLL\_INCL – WLL information included indicator.

If P\_REV\_IN\_USE<sub>s</sub> is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station is a Wireless Local Loop device, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

WLL\_DEVICE\_TYPE – WLL device type indicator.

If WLL\_INCL is not included, or if WLL\_INCL is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field as follows.

The mobile station shall set this field to the WLL\_DEVICE\_TYPE value shown in Table 2.7.1.3.2.1-3 corresponding to the mobile station device type.

**Table 2.7.1.3.2.1-3. WLL Device Types**

<b>WLL_DEVICE_TYPE (binary)</b>	<b>Description</b>
000	Wireless Local Loop terminal with no mobility
001	Wireless Local Loop terminal with limited mobility
010	Wireless Local Loop terminal with full mobility
011 - 111	Reserved

HOOK\_STATUS – WLL terminal hook status.

If WLL\_INCL is not included, or if WLL\_INCL is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to the value shown in Table 2.7.1.3.2.1-4 corresponding to the hook state.

1

**Table 2.7.1.3.2.1-4. Hook Status Values**

<b>HOOK_STATUS (binary)</b>	<b>Description</b>
0000	Subscriber terminal is on-hook
0001	Subscriber terminal is off-hook
0010	Subscriber terminal is stuck off-hook
0011 – 1111	Reserved

2

3

ENC\_INFO\_INCL – Encryption fields included.

4

5

6

If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

7

8

9

10

11

12

The mobile station shall set this field to '1' if the encryption related fields are included; otherwise the mobile station shall set this field to '0'. The mobile station shall set this field to '0' if the base station does not support encryption or the mobile station does not support any of the encryption modes supported by the base station.

13

SIG\_ENCRYPT\_SUP – Signaling encryption supported indicator.

14

15

16

17

18

If ENC\_INFO\_INCL is included and is set to '1', the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to indicate which signaling encryption algorithms are supported by the mobile station.

This field consists of the subfields shown in Table 2.7.1.3.2.1-5.

**Table 2.7.1.3.2.1-5. Encoding of the SIG\_ENCRYPT\_SUP Field**

Subfield	Length (bits)	Subfield Description
CMEA	1	Support of Cellular Message Encryption Algorithm
ECMEA	1	Support of Enhanced Cellular Message Encryption Algorithm
REA	1	Support of the Rijndael Encryption Algorithm
RESERVED	5	Reserved bits

If this field is included, the mobile station shall set the subfields as follows:

The mobile station shall set the CMEA subfield to '1'.

The mobile station shall set each other subfield to '1' if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to '0'.

The mobile station shall set the RESERVED subfield to '00000'.

**C\_SIG\_ENCRYPT\_REQ** – Common Channel signaling message encryption request indicator.

If ENC\_INFO\_INCL is included and is set to '1', the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to '1' to request signaling encryption to be turned on for signaling messages sent on f-csch and r-csch, and to '0' to request signaling encryption to be turned off for signaling messages sent on f-csch and r-csch.

**NEW\_SSEQ\_H** – The 24-bit value used to initialize the 24 MSB of the crypto-sync.

If SIG\_ENCRYPT\_SUP is included and the ECMEA or REA subfield in SIG\_ENCRYPT\_SUP is set to '1', the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to a 24-bit value that will be used as the initial value of the 24 MSB of the crypto-sync for both forward and reverse link message encryption and integrity (if message integrity is performed).

**NEW\_SSEQ\_H\_SIG** – The signature of NEW\_SSEQ\_H



1			If NEW_SSEQ_H is included, the mobile station shall include
2			this field; otherwise, the mobile station shall omit this field. If
3			this field is included, the mobile station shall set this field to
4			the digital signature of the NEW_SSEQ_H computed as
5			described in 2.3.12.4.5.
6	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
7			If ENC_INFO_INCL is included and is set to '1', the mobile
8			station shall include this field; otherwise, the mobile station
9			shall omit this field. If this field is included, the mobile
10			station shall set this field to indicate the supported user
11			information encryption algorithms.
12			This field consists of the subfields shown in Table
13			2.7.1.3.2.4-9.
14			The mobile station shall set each subfield to '1' if the
15			corresponding user information encryption algorithm is
16			supported by the mobile station; otherwise, the mobile
17			station shall set the subfield to '0'.
18			The mobile station shall set the RESERVED subfield to
19			'000000'.
20	MSG_INT_INFO_INCL	-	Signaling message integrity information included indicator.
21			If P_REV_IN_USE <sub>S</sub> is less than nine, the mobile station shall
22			omit this field; otherwise, the mobile station shall include
23			this field and set it as follows.
24			If MSG_INTEGRITY_SUP <sub>S</sub> is equal to '0', the mobile station
25			shall set this field to '0'; otherwise, the mobile station shall
26			set this field to '1'.
27	SIG_INTEGRITY_SUP_INCL	-	Signaling message integrity information included
28			indicator.
29			If MSG_INT_INFO_INCL is included and is set to '1', the
30			mobile station shall include this field and set it as follows;
31			otherwise, the mobile station shall omit this field.
32			If the mobile station supports other integrity algorithm(s) in
33			addition to the default integrity algorithm, the mobile station
34			shall set this field to '1'; otherwise, the mobile station shall
35			set this field to '0'.
36	SIG_INTEGRITY_SUP	-	Signaling integrity algorithm supported by the mobile station.
37			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
38			mobile station shall set this field as follows; otherwise, the
39			mobile station shall omit this field.
40			The mobile station shall set this field to indicate the
41			supported message integrity algorithms in addition to the
42			default integrity algorithm.

This field consists of the subfields shown in Table 2.7.1.3.2.1-6.

The mobile station shall set each subfield to '1' if the corresponding message integrity algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to '0'.

**Table 2.7.1.3.2.1-6. Encoding of the SIG\_INTEGRITY\_SUP Field**

Subfield	Length (bits)	Subfield Description
RESERVED	8	Reserved bits

The mobile station shall set the RESERVED subfield to '00000000'.

**SIG\_INTEGRITY\_REQ** - Signaling message integrity algorithm requested by the mobile station.

If SIG\_INTEGRITY\_SUP\_INCL is included and is set to '1', the mobile station shall set this field as follows; otherwise, the mobile station shall omit this field.

The mobile station shall include this field and set it to the value corresponding to the message integrity algorithm requested as shown in Table 2.7.1.3.2.1-7.

**Table 2.7.1.3.2.1-7. Encoding of the SIG\_INTEGRITY\_REQ Field**

SIG_INTEGRITY_REQ	Value	Description
DEFAULT_UIA	'000'	Default message integrity algorithm
RESERVED	'001' - '111'	Reserved

**NEW\_KEY\_ID** - New key identifier.

If MSG\_INT\_INFO\_INCL is included and is set to '1', the mobile station shall include this field and set it as follows; otherwise, the mobile station shall omit this field.

The mobile station shall set this field as follows:

- If LAST\_2G\_KEY\_ID equals '00', the mobile station shall set this field to '01'.

- If LAST\_2G\_KEY\_ID equals '01', the mobile station shall set this field to '00'.

**NEW\_SSEQ\_H\_INCL** - The 24-bit value used to initialize the 24 MSB of crypto-sync.

If MSG\_INT\_INFO\_INCL is included and is set to '1', the mobile station shall include this field and set it as follows; otherwise, the mobile station shall omit this field.

The mobile station shall set this field to '0' if any of the following is true:



1

**Table 2.7.1.3.2.1-8. Slot Cycle Index Values**

<b>Slot Cycle Index Value</b>	<b>SIGN_SLOT _ CYCLE_INDEX</b>	<b>SLOT_CYCLE_INDEX</b>	<b>RSCI, REQ_RSCI</b>	<b>Slot Cycle Length</b>
-7	N/A	N/A	0111	Non-slotted
-4	0	100	0100	0.08s (1 slot)
-3	0	011	0011	0.16s (2 slots)
-2	0	010	0010	0.32s (4 slots)
-1	0	001	0001	0.64s (8 slots)
0	omitted	000	0000	1.28s (16 slots)
1	1	001	1001	2.56s (32 slots)
2	1	010	1010	5.12s (64 slots)
3	1	011	1011	10.24s (128 slots)
4	1	100	1100	20.48s (256 slots)
5	1	101	1101	40.96s (512 slots)
6	1	110	1110	81.92s (1024 slots)
7	1	111	N/A	163.84s (2048 slots)
All other values reserved.				

2

3

1	BCMC_FREQ_INFO_INCL-	BCMC frequency information included indicator.
2		If the REG_TYPE field is not set to '1001', the mobile station
3		shall omit this field; otherwise, the mobile station shall
4		include this field and set it as follows:
5		If the BCMC band class and frequency fields are included in
6		this message, the mobile station shall set this field to '1';
7		otherwise, the mobile station shall set this field to '0'.
8		If this Registration Message is being sent only to request
9		transmission of BCMC flows, the mobile station shall set this
10		field to '0'.
11	BCMC_BAND_CLASS-	BCMC Band Class.
12		If the BCMC_FREQ_INFO_INCL field is not included or is
13		included and is set to '0', the mobile station shall omit this
14		field; otherwise, the mobile station shall include this field and
15		set it as follows:
16		The mobile station shall set this field to the CDMA band
17		class, as specified in [30], corresponding to the CDMA
18		frequency assignment for the CDMA Channel containing the
19		Forward Broadcast Supplemental Channel that the mobile
20		station will tune to upon receiving confirmation of delivery of
21		this message.
22	BCMC_CDMA_FREQ-	BCMC Frequency.
23		If the BCMC_FREQ_INFO_INCL field is not included or is
24		included and is set to '0', the mobile station shall omit this
25		field; otherwise, the mobile station shall include this field and
26		set it as follows:
27		The mobile station shall set this field to the CDMA Channel
28		number corresponding to the CDMA frequency assignment
29		for the CDMA Channel containing the Forward Broadcast
30		Supplemental Channel that the mobile station will tune to
31		upon receiving confirmation of delivery of this message.
32	NUM_BCMC_PROGRAMS	- Number of BCMC programs being registered.
33		If the REG_TYPE field is not set to '1001', the mobile station
34		shall omit this field; otherwise, the mobile station shall
35		include this field and set it as follows:
36		The mobile station shall set this field to the number of BCMC
37		programs included in this message.
38	AUTH_SIGNATURE_INCL	- Authorization signature included indication.

1		If the REG_TYPE field is not set to '1001', the mobile station
2		shall omit this field; otherwise, the mobile station shall
3		include this field and set it as follows:
4		The mobile station shall set this field to '1' to indicate that
5		the authorization signature is included in this message for
6		some of the BCMC flows included in this message; otherwise,
7		the mobile station shall set this field to '0'.
8	TIME_STAMP_SHORT_LENGTH	- Length of time stamp included in this message.
9		If the AUTH_SIGNATURE_INCL field is not included or is
10		included and is set to '0', the mobile station shall omit this
11		field; otherwise, the mobile station shall include this field and
12		set it as follows:
13		The mobile station shall set this field to the length of the time
14		stamp, in units of bits, included in this message.
15	TIME_STAMP_SHORT	- Time stamp short.
16		If the AUTH_SIGNATURE_INCL field is not included or is
17		included and is set to '0', the mobile station shall omit this
18		field; otherwise, the mobile station shall include this field and
19		set it as follows:
20		The mobile station shall set this field to the
21		TIME_STAMP_SHORT_LENGTH least significant bits of the
22		time stamp parameter used to generate the Authorization
23		signature included in this message.
24	The mobile station shall include NUM_BCMC_PROGRAMS occurrences of the following	
25	fields:	
26	BCMC_PROGRAM_ID_LEN	- Length of BCMC_PROGRAM_ID field
27		The mobile station shall set this field to one less than the
28		length, in bits, of the BCMC_PROGRAM_ID of this program.
29	BCMC_PROGRAM_ID	- BCMC program Identifier
30		The length of this field shall be one more than the value of
31		BCMC_PROGRAM_ID_LEN bits.
32		The mobile station shall set this field to the identifier of the
33		BCMC program corresponding to one or more flows that the
34		mobile station will continue to monitor or start to monitor
35		upon receiving confirmation of delivery of this message or is
36		requesting transmission.

1	BCMC_FLOW_DISCRIMINATOR_LEN	-	Length of BCMC_FLOW_DISCRIMINATOR field
2			The mobile station shall set this field to the length, in bits, of
3			the BCMC_FLOW_DISCRIMINATOR of this program. To
4			request all flows associated with this BCMC_PROGRAM_ID,
5			the mobile station may set this field to '000'.
6	NUM_FLOW_DISCRIMINATOR	-	Number of BCMC flow discriminators.
7			The length of this field shall be determined by the value of the
8			BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
9			BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
10			is omitted; otherwise, the length of this field shall be
11			BCMC_FLOW_DISCRIMINATOR_LEN bits.
12			The mobile station shall set this field to the number of flow
13			discriminators included for this program minus one.
14	If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include		
15	NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;		
16	otherwise, the mobile station shall include 1 occurrence of the following variable length		
17	record:		
18	BCMC_FLOW_DISCRIMINATOR	-	BCMC Flow discriminator.
19			The length of this field shall be determined by the value of the
20			BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
21			BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
22			is omitted; otherwise, the length of this field shall be
23			BCMC_FLOW_DISCRIMINATOR_LEN bits.
24			The mobile station shall set this field to the discriminator of
25			the BCMC flow that the mobile station will continue to
26			monitor or start to monitor upon receiving confirmation of
27			delivery of this message or is requesting transmission.
28	AUTH_SIGNATURE_IND	-	Authorization signature indicator.
29			If the AUTH_SIGNATURE_INCL field is not included or is
30			included and is set to '0', the mobile station shall omit this
31			field; otherwise, the mobile station shall include this field and
32			set it as follows:
33			The mobile station shall set this field to '1' to indicate that
34			the authorization signature is included in this message for
35			this BCMC flow; otherwise, the mobile station shall set this
36			field to '0'.
37	AUTH_SIGNATURE_SAME_IND	-	Authorization signature same as previous BCMC
38			flow indicator.

1			If the AUTH_SIGNATURE_IND field is not included or is
2			included and is set to '0', the mobile station shall omit this
3			field; otherwise, the mobile station shall include this field and
4			set it as follows:
5			The mobile station shall set this field to '1' to indicate that
6			the authorization signature generated for this BCMC flow is
7			the same as the one generated for the BCMC flow listed prior
8			to this BCMC flow in this message; otherwise, the mobile
9			station shall set this field to '0'.
10			For the first BCMC flow listed in this message, the mobile
11			station shall set this field to '0'.
12	BAK_ID	-	BAK identifier.
13			If the AUTH_SIGNATURE_SAME_IND field is not included or
14			is included and is set to '1', the mobile station shall omit this
15			field; otherwise, the mobile station shall include this field and
16			set it as follows:
17			The mobile station shall set this field to BAK identifier used
18			to generate the Authorization signature included in this
19			message.
20	AUTH_SIGNATURE	-	Authorization signature.
21			If the AUTH_SIGNATURE_SAME_IND field is not included or
22			is included and is set to '1', the mobile station shall omit this
23			field; otherwise, the mobile station shall include this field and
24			set it as follows:
25			The mobile station shall set this field to the Authorization
26			signature computed for this BCMC flow as specified in
27			2.6.13.9.
28	BAND_SUB_REP_INCL	-	Band class - band subclass report included
29			If P_REV_IN_USE <sub>S</sub> is less than eleven, the mobile station
30			shall omit this field; otherwise, the mobile station shall
31			include this field and set it as follows:
32			If CAND_BAND_INFO_REQ <sub>S</sub> is equal to '1' and the mobile
33			station supports at least 1 band class and band subclass (if
34			applicable) combination queried by the base station, the
35			mobile station shall set this field to '1'; otherwise, the mobile
36			station shall set this field to '0'.
37			



1    NUM\_BAND\_SUBCLASS – Number of band class - band subclass capabilities reported  
2                                    If BAND\_SUB\_REP\_INCL is set to '0' or is not included, this  
3                                    field shall be omitted; otherwise, the mobile station shall  
4                                    include this field and set it as follows:  
5                                    If the mobile station supports all candidate band class and  
6                                    band subclass (if applicable) combinations queried by the  
7                                    base station, the mobile station shall set this field to '0000';  
8                                    otherwise, the mobile station shall set this field to the  
9                                    number of band class-band subclass capabilities reported.

10   If the NUM\_BAND\_SUBCLASS field is included in this message, the mobile station shall  
11   include NUM\_BAND\_SUBCLASS occurrences of the BAND\_SUBCLASS\_SUP field:

12   BAND\_SUBCLASS\_SUP – Band class - Band subclass supported indicator  
13                                    The mobile station shall set this field as specified in section  
14                                    2.6.14.1.

15   ADD\_GEO\_LOC\_INCL – Additional Geo-location included indicator.  
16                                    If P\_REV\_IN\_USE<sub>S</sub> is less than twelve, the mobile station shall  
17                                    omit this field; otherwise, the mobile station shall include  
18                                    this field and set it as follows.  
19                                    If the message is to contain the ADD\_GEO\_LOC\_TYPE field,  
20                                    the mobile station shall set this field to '1'; otherwise, the  
21                                    mobile station shall set this field to '0'.

22   ADD\_GEO\_LOC\_TYPE\_LEN\_IND – Additional Geo-Location Type Length Indicator.  
23                                    If ADD\_GEO\_LOC\_INCL is included in the message and is set  
24                                    to '1', the mobile station shall include this field and shall set  
25                                    it as described below; otherwise, the mobile station shall omit  
26                                    this field.  
27                                    The mobile station shall set this field to '0' to indicate length  
28                                    of the ADD\_GEO\_LOC\_TYPE field is 16 bits. The mobile  
29                                    station shall set this field to '1' to indicate length of the  
30                                    ADD\_GEO\_LOC\_TYPE field is 24 bits.

31   ADD\_GEO\_LOC\_TYPE – Additional Geo-Location Type.  
32                                    If ADD\_GEO\_LOC\_INCL is included in the message and is set  
33                                    to '1', the mobile station shall include this field and shall set  
34                                    it as described below; otherwise, the mobile station shall omit  
35                                    this field.  
36                                    This field consists of the subfields shown in 2.7.4.46-1.  
37                                    The mobile station shall set each subfield to '1' if the  
38                                    corresponding capability is supported by the mobile station;  
39                                    otherwise, the mobile station shall set the subfield to '0'.  
40  
41  
42

## 1 2.7.1.3.2.2 Order Message

2 MSG\_TAG: ORDM

3

Field	Length (bits)
ORDER	6
ADD_RECORD_LEN	3
Order-specific fields (if used)	$8 \times \text{ADD\_RECORD\_LEN}$

4

5 ORDER – Order code.

6 The mobile station shall set this field to the ORDER code  
7 (see 2.7.3) for this type of *Order Message*.

8 ADD\_RECORD\_LEN – Additional record length.

9 The mobile station shall set this field to the number of octets  
10 in the order-specific fields included in this message.

11 order-specific fields – Order-specific fields.

12 The mobile station shall include order-specific fields as  
13 specified in 2.7.3.  
14

## 1 2.7.1.3.2.3 Data Burst Message

2 MSG\_TAG: DBM

3

Field	Length (bits)
MSG_NUMBER	8
BURST_TYPE	6
NUM_MSGS	8
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	8
-------------------	---

} (NUM\_FIELDS)

4

5 MSG\_NUMBER - Message number within the data burst stream.

6 The mobile station shall set this field to the number of this  
7 message within the data burst stream.

8 BURST\_TYPE - Data burst type.

9 The mobile station shall set the value of this field for the type  
10 of this data burst as defined in [30]. If the mobile station sets  
11 this field equal to '111110', it shall set the first two CHAR<sub>i</sub>  
12 fields of this message equal to  
13 EXTENDED\_BURST\_TYPE\_INTERNATIONAL as described in  
14 the definition of CHAR<sub>i</sub> below. If the mobile station sets this  
15 field equal to '111111', it shall set the first two CHAR<sub>i</sub> fields of  
16 this message equal to the EXTENDED\_BURST\_TYPE as  
17 described in the definition of CHAR<sub>i</sub> below.

18 NUM\_MSGS - Number of messages in the data burst stream.

19 The mobile station shall set this field to the number of  
20 messages within this data burst stream.

21 NUM\_FIELDS - Number of characters in this message.

22 The mobile station shall set this field to the number of CHAR<sub>i</sub>  
23 fields included in this message.

24 CHAR<sub>i</sub> - Character.

25 The mobile station shall include NUM\_FIELDS occurrences of  
26 this field. The mobile station shall set these fields to the  
27 corresponding octet of the data burst stream.

If the BURST\_TYPE field of this message is equal to '111110', the first two CHARi octets shall represent a 16 bit EXTENDED\_BURST\_TYPE\_INTERNATIONAL field, which is encoded as shown below. The first ten bits of this field contain a binary mapping of the Mobile Country Code (MCC). Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the EXTENDED\_BURST\_TYPE\_INTERNATIONAL field shall specify the COUNTRY\_BURST\_TYPE. The mobile station shall set the value of the COUNTRY\_BURST\_TYPE according to the type of this data burst as defined in standards governed by the country where this data burst type is to be used.

Field	Length (bits)
Mobile Country Code	10
COUNTRY_BURST_TYPE	6
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$

If the BURST\_TYPE field of this message is equal to '111111', the first two CHARi octets shall represent a single, 16 bit, EXTENDED\_BURST\_TYPE field, as shown below. The mobile station shall set the value of the EXTENDED\_BURST\_TYPE according to the type of this data burst as defined in [30].

Field	Length (bits)
EXTENDED_BURST_TYPE (first two CHARi fields)	16
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$

## 1 2.7.1.3.2.4 Origination Message

2 MSG\_TAG: ORM

3

Field	Length (bits)
MOB_TERM	1
SLOT_CYCLE_INDEX	3
MOB_P_REV	8
SCM	8
REQUEST_MODE	3
SPECIAL_SERVICE	1
SERVICE_OPTION	0 or 16
PM	1
DIGIT_MODE	1
NUMBER_TYPE	0 or 3
NUMBER_PLAN	0 or 4
MORE_FIELDS	1
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	4 or 8
-------------------	--------

} (NUM\_FIELDS)

NAR_AN_CAP	1
PACA_REORIG	1
RETURN_CAUSE	4
MORE_RECORDS	1
ENCRYPTION_SUPPORTED	0 or 4
PACA_SUPPORTED	1
NUM_ALT_SO	3

NUM\_ALT\_SO occurrences of the following field:

{ (NUM\_ALT\_SO)

ALT_SO	16
--------	----

} (NUM\_ALT\_SO)

(continues on next page)

4

1

<b>Field</b>	<b>Length (bits)</b>
DRS	0 or 1
UZID_INCL	0 or 1
UZID	0 or 16
CH_IND	0 or 2
SR_ID	0 or 3
OTD_SUPPORTED	0 or 1
QPCH_SUPPORTED	0 or 1
ENHANCED_RC	0 or 1
FOR_RC_PREF	0 or 5
REV_RC_PREF	0 or 5
FCH_SUPPORTED	0 or 1
FCH Capability Type-specific fields	0 or variable
DCCH_SUPPORTED	0 or 1
DCCH Capability Type-specific fields	0 or variable
GEO_LOC_INCL	0 or 1
GEO_LOC_TYPE	0 or 3
REV_FCH_GATING_REQ	0 or 1
ORIG_REASON	0 or 1
ORIG_COUNT	0 or 2
STS_SUPPORTED	0 or 1
3X_CCH_SUPPORTED	0 or 1
WLL_INCL	0 or 1
WLL_DEVICE_TYPE	0 or 3
GLOBAL_EMERGENCY_CALL	0 or 1
MS_INIT_POS_LOC_IND	0 or 1
QOS_PARMS_INCL	0 or 1
QOS_PARMS_LEN	0 or 5

(continues on next page)

2

3

<b>Field</b>	<b>Length (bits)</b>
QOS_PARMS	0 or variable
QOS_RESERVED	0 - 7
ENC_INFO_INCL	0 or 1
SIG_ENCRYPT_SUP	0 or 8
D_SIG_ENCRYPT_REQ	0 or 1
C_SIG_ENCRYPT_REQ	0 or 1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8
UI_ENCRYPT_REQ	0 or 1
UI_ENCRYPT_SUP	0 or 8
SYNC_ID_INCL	0 or 1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
PREV_SID_INCL	0 or 1
PREV_SID	0 or 15
PREV_NID_INCL	0 or 1
PREV_NID	0 or 16
PREV_PZID_INCL	0 or 1
PREV_PZID	0 or 8
SO_BITMAP_IND	0 or 2
SO_GROUP_NUM	0 or 5
SO_BITMAP	0 or 2 <sup>(1+SO_BITMAP_IND)</sup>
SDB_DESIRED_ONLY	0 or 1
ALT_BAND_CLASS_SUP	0 or 1
MSG_INT_INFO_INCL	0 or 1
SIG_INTEGRITY_SUP_INCL	0 or 1

(continues on next page)

Field	Length (bits)
SIG_INTEGRITY_SUP	0 or 8
SIG_INTEGRITY_REQ	0 or 3
NEW_KEY_ID	0 or 2
NEW_SSEQ_H_INCL	0 or 1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8
FOR_PDCH_SUPPORTED	0 or 1
FOR_PDCH Capability Type-specific fields	0 or variable
EXT_CH_IND	0 or 5
SIGN_SLOT_CYCLE_INDEX	0 or 1
ADD_SERV_INSTANCE_INCL	0 or 1
NUM_ADD_SERV_INSTANCE	0 or 3

NUM\_ADD\_SERV\_INSTANCE occurrences of the following record:

{ (NUM\_ADD\_SERV\_INSTANCE)

ADD_SR_ID	3
ADD_DRS	1
ADD_SERVICE_OPTION_INCL	0 or 1
ADD_SERVICE_OPTION	0 or 16
ADD_QOS_PARMs_INCL	0 or 1
ADD_QOS_PARMs_LEN	0 or 5
ADD_QOS_PARMs	0 or variable
ADD_QOS_RESERVED	0 to 7 (as needed)

} (NUM\_ADD\_SERV\_INSTANCE)

BCMC_INCL	0 or 1
BCMC_ORIG_ONLY_IND	0 or 1
FUNDICATED_BCMC_SUPPORTED	0 or 1
FUNDICATED_BCMC Capability Type-specific fields	0 or variable
AUTH_SIGNATURE_INCL	0 or 1
TIME_STAMP_SHORT_LENGTH	0 or 8
TIME_STAMP_SHORT	0 or Variable



Field	Length (bits)
NUM_BCMC_PROGRAMS	0 or 3

NUM\_BCMC\_PROGRAMS+1 occurrences of the following variable length record:

*{ (NUM\_BCMC\_PROGRAMS+1)*

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	Variable (Value of BCMC_PROGRAM_ID_LEN + 1)
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
AUTH_SIGNATURE_IND	0 or 1
AUTH_SIGNATURE_SAME_IND	0 or 1
BAK_ID	0 or 4
AUTH_SIGNATURE	0 or 32

*} (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

*} (NUM\_BCMC\_PROGRAMS+1)*

REV_PDCH_SUPPORTED	0 or 1
REV_PDCH Capability Type-specific fields	0 or variable
BAND_SUB_REP_INCL	0 or 1
NUM_BAND_SUBCLASS	0 or 4

(continues on next page)

Field	Length (bits)
NUM_BAND_SUBCLASS occurrences of the following field: { (NUM_BAND_SUBCLASS)	
BAND_SUBCLASS_SUP	1
} (NUM_BAND_SUBCLASS)	
ADD_GEO_LOC_INCL	0 or 1
ADD_GEO_LOC_TYPE_LEN_IND	0 or 1
ADD_GEO_LOC_TYPE	0 or 16 or 24

- 1
- 2           **MOB\_TERM**    – Mobile terminated calls accepted indicator.
- 3                        If the mobile station is configured to accept mobile
- 4                        terminated calls while operating with the current roaming
- 5                        status (see 2.6.5.3), the mobile station shall set this bit to '1';
- 6                        otherwise, the mobile station shall set this bit to '0'.
- 7           **SLOT\_CYCLE\_INDEX**   – Slot cycle index.
- 8                        If P\_REV\_IN\_USE<sub>s</sub> is less than 11, or if
- 9                        MIN\_SLOT\_CYCLE\_INDEX is equal to '0', the mobile station
- 10                      shall perform the following:
- 11                      • If the mobile station is configured for slotted mode
- 12                      operation, the mobile station shall set this field to max (0,
- 13                      SLOT\_CYCLE\_INDEX<sub>p</sub>) (see 2.6.2.1.1). Otherwise, the
- 14                      mobile station shall set this field to '000'.
- 15                      Otherwise, the mobile station shall perform the following:
- 16                      • If the mobile station is configured for slotted mode
- 17                      operation, the mobile station shall set this field to the
- 18                      absolute value of the preferred slot cycle index,
- 19                      SLOT\_CYCLE\_INDEX<sub>p</sub> (see 2.6.2.1.1); otherwise, the
- 20                      mobile station shall set this field to '000'. The sign of the
- 21                      preferred slot cycle index, SLOT\_CYCLE\_INDEX<sub>p</sub>, is
- 22                      specified in the SIGN\_SLOT\_CYCLE\_INDEX field of this
- 23                      message (see Table 2.7.1.3.2.1-8).
- 24           **MOB\_P\_REV**    – Protocol revision of the mobile station.
- 25                        The mobile station shall set this field to '00001100'.
- 26                        **SCM**    – Station class mark.
- 27                        The mobile station shall set this field to the station class
- 28                        mark of the mobile station. See 2.3.3.
- 29           **REQUEST\_MODE**   – Requested mode code.

The mobile station shall set this field to the value shown in Table 2.7.1.3.2.4-1 corresponding to its current configuration.

**Table 2.7.1.3.2.4-1. REQUEST\_MODE Codes**

Value (binary)	Requested Mode
000	Reserved
001	CDMA only
010	Reserved (Previously: Wide analog only)
011	Reserved (Previously: Either wide analog or CDMA only)
100	Reserved (Previously: Narrow analog only)
101	Reserved (Previously: Either narrow analog or CDMA only)
110	Reserved (Previously: Either narrow analog or wide analog only)
111	Reserved (Previously: Narrow analog or wide analog or CDMA)

**SPECIAL\_SERVICE** – Special service option indicator.

To request a special service option, the mobile station shall set this field to '1'. To request the default service option (Service Option 1), the mobile station shall set this field to '0'.

**SERVICE\_OPTION** – Requested service option for this origination.

If the SPECIAL\_SERVICE field is set to '1', the mobile station shall set this field to the value specified in [30], corresponding to the requested service option. If the SPECIAL\_SERVICE field is set to '0', the mobile station shall omit this field.

**PM** – Privacy mode indicator.

To request voice privacy, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**DIGIT\_MODE** – Digit mode indicator.

This field indicates whether the dialed digits are 4-bit DTMF codes or 8-bit ASCII codes using a specified numbering plan.

To originate the call using the binary representation of DTMF digits (i.e., CHARi fields are represented in Table 2.7.1.3.2.4-4), the mobile station shall set this field to '0'. To originate the call using ASCII characters, the mobile station shall set this field to '1'.

NUMBER\_TYPE – Type of number.

The mobile station shall set this field to the NUMBER\_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the number as defined in [7], Section 4.5.9. If the DIGIT\_MODE field is set to '0' and P\_REV\_IN\_USE<sub>s</sub> is less than 11, the mobile station shall omit this field.

If this field is included and the mobile station determines that the user has entered an international number (for example, with a leading "+" as specified in [39] for Plus Code Dialing or an international access code), the mobile station should set this field to '001'.

**Table 2.7.1.3.2.4-2. Number Types**

Description	NUMBER_TYPE (binary)
Unknown	000
International number	001
National number	010
Network-specific number	011
Subscriber number	100
Reserved	101
Abbreviated number	110
Reserved for extension	111

NUMBER\_PLAN – Numbering plan.

If the DIGIT\_MODE field is set to '1', the mobile station shall set this field to the NUMBER\_PLAN value shown in Table 2.7.1.3.2.4-3 corresponding to the requested numbering plan as defined in [7], Section 4.5.9. If the DIGIT\_MODE field is set to '0', the mobile station shall omit this field.

1

**Table 2.7.1.3.2.4-3. Numbering Plan Identification**

<b>Description</b>	<b>NUMBER_PLAN (binary)</b>
Unknown	0000
ISDN/Telephony numbering plan ([17] and [16])	0001
Data numbering plan ([20])	0011
Telex numbering plan ([19])	0100
Private numbering plan	1001
Reserved for extension	1111
All other NUMBER_PLAN codes are reserved.	

2

3

**MORE\_FIELDS** – More dialed digits indicator.

4

5

This field indicates whether additional dialed digits will be sent in a later *Origination Continuation Message*.

6

7

8

If all dialed digits will fit into this message, the mobile station shall set this field to '0'. If not, the mobile station shall set this field to '1'.

9

**NUM\_FIELDS** – Number of dialed digits in this message.

10

11

The mobile station shall set this field to the number of dialed digits included in this message.

12

**CHARi** – A dialed digit or character.

13

14

15

16

17

18

19

20

The mobile station shall include NUM\_FIELDS occurrences of this field. If the DIGIT\_MODE field is set to '0', the mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the DIGIT\_MODE field is set to '1', the mobile station shall set each occurrence of this field to the ASCII representation corresponding to the dialed digit, as specified in [9], with the most significant bit set to '0'.

21

**Table 2.7.1.3.2.4-4. Representation of DTMF Digits**

<b>Digit</b>	<b>Code (binary)</b>	<b>Digit</b>	<b>Code (binary)</b>
1	0001	7	0111
2	0010	8	1000
3	0011	9	1001
4	0100	0	1010
5	0101	*	1011
6	0110	#	1100
All other codes are reserved.			

**NAR\_AN\_CAP** – Narrow analog capability.

If the mobile station is capable of narrow analog operation, the mobile station shall set this bit to '1'; otherwise, the mobile station shall set this bit to '0'. The mobile station shall set this bit to '0'.

**PACA\_REORIG** – PACA re-origination.

If this is a user directed origination, the mobile station shall set this field to '0'. If this is a PACA re-origination, the mobile station shall set this field to '1'.

**RETURN\_CAUSE** – Reason for the mobile station registration or access.

The mobile station shall set this field to the RETURN\_CAUSE value shown in Table 2.7.1.3.2.1-2 corresponding to the service redirection failure condition (see 2.6.1.1).

**MORE\_RECORDS** – More records indicator.

This field indicates whether information records will be sent in a later *Origination Continuation Message*. If information records will be sent, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**ENCRYPTION\_SUPPORTED** – Encryption algorithms supported by the mobile station.

If P\_REV\_IN\_USE<sub>s</sub> is greater than or equal to seven or AUTH\_MODE is equal to '00', the mobile station shall omit the ENCRYPTION\_SUPPORTED field. If P\_REV\_IN\_USE<sub>s</sub> is less than seven and AUTH\_MODE is not equal to '00', the mobile station shall set this field as specified in Table 2.7.1.3.2.4-5.

1

**Table 2.7.1.3.2.4-5. Encryption Algorithms Supported**

<b>Description</b>	<b>ENCRYPTION_SUPPORTED (binary)</b>
Basic encryption supported	0000
Basic and Enhanced encryption supported	0001
Reserved	0010 - 1111

2

3

PACA\_SUPPORTED – CDMA PACA support indication.

4

5

This field identifies the mobile station's support for PACA in CDMA mode. The mobile station shall set this field to '1'.

6

NUM\_ALT\_SO – Number of alternative service options.

7

8

9

10

11

If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall set this field to the number of alternative service options it supports other than the one specified in the SERVICE\_OPTION field. The mobile station shall set this field to a value less than or equal to MAX\_NUM\_ALT\_SO<sub>S</sub>.

12

13

14

15

16

17

18

19

If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall set this field to the number of alternate service options, which either have no service option group number assigned or do not belong to the same service option group whose bitmap is being included. The alternate service option numbers are other than the one specified in the SERVICE\_OPTION field. The mobile station shall set this field to a value less than or equal to MAX\_NUM\_ALT\_SO<sub>S</sub>.

20

ALT\_SO – Alternative service option.

21

22

23

24

25

If P\_REV\_IN\_USE<sub>S</sub> is less than 7, the mobile station shall include NUM\_ALT\_SO occurrences of this field. The mobile station shall set this field to the value specified in [30], corresponding to the alternative service option supported by the mobile station.

26

27

28

29

30

31

32

If P\_REV\_IN\_USE<sub>S</sub> is equal to or greater than seven, the mobile station shall include NUM\_ALT\_SO occurrences of this field. The mobile station shall set this field to the service option number defined in [30] corresponding to the alternate service options which either have no service option group number assigned or do not belong to the same service option group whose bitmap is included in this message.

33

DRS – Data Ready to Send.

34

35

36

If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the service instance corresponding to SR\_ID has data to send, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**UZID\_INCL** – User Zone Identifier included indicator.

If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the message is to contain the User Zone Identifier, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**UZID** – User Zone Identifier.

If the UZID\_INCL field is included in the message and is set to '1', the mobile station shall include this field and set it to UZID<sub>S</sub>; otherwise, the mobile station shall omit this field.

**CH\_IND** – Channel indicator.

If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it, as shown in Table 2.7.1.3.2.4-6, to request physical resources.

**Table 2.7.1.3.2.4-6. Channel Indicator**

<b>CH_IND (binary)</b>	<b>Channel(s) Requested</b>
00	Refer to EXT_CH_IND
01	Fundamental Channel
10	Dedicated Control Channel
11	Fundamental Channel and Dedicated Control Channel



1	SR_ID	-	Service reference identifier.
2			If P_REV_IN_USE <sub>s</sub> is less than six, the mobile station shall
3			omit this field; otherwise, the mobile station shall include
4			this field and set it as follows:
5			If the SYNC_ID_INCL field is not included or is included and
6			is set to '0', the mobile station shall set this field as follows:
7		o	If the service instance provides a service reference
8			identifier, the mobile station shall set this field to the
9			service reference identifier specified by the service
10			instance. If the service instance does not provide a service
11			reference identifier, the mobile station shall set this field
12			to the smallest unused service reference identifier value
13			between 1 and 6 (inclusive).
14			Otherwise, the mobile station shall set this field as follows:
15		o	If the mobile station requests the restoration of a single
16			service option connection from the stored service
17			configuration, the mobile station shall set this field to the
18			corresponding service reference identifier.
19		o	If the mobile station requests the restoration of more than
20			one but not all service option connections from the stored
21			service configuration, the mobile station shall set this
22			field to the service reference identifier corresponding to
23			one of the service option connections to be restored.
24		o	Otherwise (that is, the mobile station requests the
25			restoration of all the service option connections from the
26			stored service configuration), the mobile station shall set
27			this field to '111'.
28	OTD_SUPPORTED	-	Orthogonal Transmit Diversity supported indicator.
29			If P_REV_IN_USE <sub>s</sub> is less than six, the mobile station shall
30			omit this field; otherwise, the mobile station shall include
31			this field and set it as follows.
32			If the mobile station supports orthogonal transmit diversity, it
33			shall set this field to '1'; otherwise, the mobile station shall
34			set this field to '0'.
35	QPCH_SUPPORTED	-	Quick Paging Channel supported indicator.
36			If P_REV_IN_USE <sub>s</sub> is less than six, the mobile station shall
37			omit this field; otherwise, the mobile station shall include
38			this field and set it as follows.

1			If the mobile station supports the Quick Paging Channel, the
2			mobile station shall set this field to '1'; otherwise, the mobile
3			station shall set this field to '0'.
4	ENHANCED_RC	-	Enhanced radio configuration supported indicator.
5			If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
6			omit this field; otherwise, the mobile station shall include
7			this field and set it as follows.
8			If the mobile station supports any radio configuration in the
9			Radio Configuration Class 2 (see 1.1.1), the mobile station
10			shall set this field to '1'; otherwise, the mobile station shall
11			set this field to '0'.
12	FOR_RC_PREF	-	Forward Radio Configuration preference.
13			If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
14			omit this field; otherwise, the mobile station shall include
15			this field and set this field as follows.
16			The mobile station shall set this field to its preferred Radio
17			Configuration for the Forward Fundamental Channel and/or
18			Forward Dedicated Control Channel.
19	REV_RC_PREF	-	Reverse Radio Configuration Preference.
20			If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
21			omit this field; otherwise, the mobile station shall include
22			this field and set it as follows.
23			The mobile station shall set this field to its preferred Radio
24			Configuration for the Reverse Fundamental Channel and/or
25			Reverse Dedicated Control Channel.
26	FCH_SUPPORTED	-	Fundamental Channel supported indicator.
27			If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
28			omit this field; otherwise, the mobile station shall include
29			this field and set it as follows.
30			The mobile station shall set this field to '1' if the mobile
31			station supports Fundamental Channel; otherwise, the
32			mobile station shall set this field to '0'.
33	FCH Capability		
34	Type-specific fields	-	Fundamental Channel capability information.
35			If the FCH_SUPPORTED field is included and is set to '1', the
36			mobile station shall include this field and set it as defined in
37			2.7.4.27.1; otherwise, the mobile station shall omit this field.
38	DCCH_SUPPORTED	-	Dedicated Control Channel supported indicator.
39			If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
40			omit this field; otherwise the mobile station shall include this
41			field and set it as follows.
42			The mobile station shall set this field to '1' if the mobile
43			station supports Dedicated Control Channel; otherwise, the
44			mobile station shall set this field to '0'.

## 1        DCCH Capability

2        Type specific fields    -    Dedicated Control Channel capability information.

3        If the DCCH\_SUPPORTED field is included and is set to '1',  
 4        the mobile station shall include this field and set it as defined  
 5        in 2.7.4.27.2; otherwise, the mobile station shall omit this  
 6        field.

7        GEO\_LOC\_INCL    -    Geo-location included indicator.

8        If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall  
 9        omit this field. If P\_REV\_IN\_USE<sub>S</sub> is equal to six, the mobile  
 10       station shall set this field to '0'. Otherwise, the mobile station  
 11       shall include this field and set it as follows.

12       If the message is to contain the GEO\_LOC\_TYPE field, the  
 13       mobile station shall set this field to '1'; otherwise, the mobile  
 14       station shall set this field to '0'.

15       GEO\_LOC\_TYPE    -    Geo-Location Type.

16       If GEO\_LOC\_INCL is included in the message and is set to '1',  
 17       the mobile station shall include this field and shall set it to  
 18       the value shown in Table 2.7.1.3.2.4-7; otherwise, the mobile  
 19       station shall omit this field.

20

**Table 2.7.1.3.2.4-7. Geo-location Types**

<b>GEO_LOC_ TYPE (binary)</b>	<b>Type of Geo-location</b>
000	No mobile station assisted geo-location capabilities
001	IS-801 capable (Advanced Forward Link Triangulation only (AFLT))
010	IS-801 capable (Advanced Forward Link Triangulation and Global Positioning Systems)
011	Global Positioning Systems only
All other GEO_LOC_TYPE values are reserved.	

21       REV\_FCH\_GATING\_REQ -    Reverse Fundamental Channel eighth gating mode request  
 22       indicator.

23       If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall  
 24       omit this field; otherwise, the mobile station shall include  
 25       this field and set it as follows:

26       If the mobile station requests to turn on the reverse  
 27       Fundamental Traffic Channel gating mode in Radio  
 28       Configurations 3, 4, 5, and 6, the mobile station shall set this  
 29       field to '1'; otherwise, the mobile station shall set this field to  
 30       '0'.

31       ORIG\_REASON    -    Re-Origination reason indicator.

If P\_REV\_IN\_USE<sub>s</sub> is less than or equal to six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to '1' if the mobile station initiates a silent-retry, i.e. an autonomous access re-attempt to re-originate this call without user interaction, after the mobile station received an access attempt failure from the ARQ Sublayer for a user initiated origination; otherwise, the mobile station shall set this field to '0'.

ORIG\_COUNT - Re-Origination count.

If P\_REV\_IN\_USE<sub>s</sub> is less than or equal to six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the ORIG\_REASON is set to '1', the mobile station shall set this field to the number of consecutive silent-retry, i.e. an autonomous access re-attempt that were made to re-originate the call, without user interaction, that were due to the mobile receiving an access attempt failure from the ARQ Sublayer. If the number of consecutive silent-retry is greater than three, the mobile station shall set this field to '11'.

If the ORIG\_REASON is set to '0', the mobile station shall set this field according to Table 2.7.1.3.2.4-8 depending on the number of autonomous re-connection attempts for the desired service (specified by SERVICE\_OPTION) that have failed since the last successful connection of that desired service<sup>2</sup>. The count shall only include attempts since the last power-up.

**Table 2.7.1.3.2.4-8. ORIG\_COUNT field for ORIG\_REASON = '0'**

Number of autonomous re-origination attempts for the desired service that have failed since the last successful connection	ORIG_COUNT (binary)
0	'00'
1, 2, 3 or 4	'01'
5, 6, 7 or 8	'10'
9 or more	'11'

STS\_SUPPORTED - STS supported indicator.

<sup>2</sup> For example, if the mobile station requests SO<sub>x</sub> in the *Origination Message* and SO<sub>y</sub> is granted by the base station, the counter associated with SO<sub>x</sub> is reset.

1			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
2			omit this field; otherwise, the mobile station shall include
3			this field and set it as follows.
4			The mobile station shall set this field to '1' if the mobile
5			station supports Space Time Spreading Transmit Diversity;
6			otherwise, the mobile station shall set this field to '0'.
7	3X_CCH_SUPPORTED	-	3X Common Channels supported.
8			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
9			omit this field; otherwise, the mobile station shall include
10			this field and set it as follows.
11			The mobile station shall set this field to '1' if the mobile
12			station supports the Spreading Rate 3 common channels (3X
13			BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile
14			station shall set this field to '0'.
15	WLL_INCL	-	WLL information included indicator.
16			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
17			omit this field; otherwise, the mobile station shall include
18			this field and set it as follows.
19			If the mobile station is a Wireless Local Loop device, the
20			mobile station shall set this field to '1'; otherwise, the mobile
21			station shall set this field to '0'.
22	WLL_DEVICE_TYPE	-	WLL device type indicator.
23			If WLL_INCL is not included, or if WLL_INCL is included and
24			is set to '0', the mobile station shall omit this field; otherwise,
25			the mobile station shall set this field as follows.
26			The mobile station shall set this field to the
27			WLL_DEVICE_TYPE value shown in Table 2.7.1.3.2.1-3
28			corresponding to the mobile station device type.
29	GLOBAL_EMERGENCY_CALL	-	Global Emergency Call indicator.
30			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
31			omit this field; otherwise, the mobile station shall include
32			this field and shall set it as follows:
33			The mobile station shall set this field to '1' if the mobile
34			station recognizes that this is an emergency call; otherwise,
35			the mobile station shall set this field to '0'.
36	MS_INIT_POS_LOC_IND	-	Mobile Initiated Position Location Session indicator.
37			If the GLOBAL_EMERGENCY_CALL field is not included in
38			this message or is included but is set to '0', the mobile station
39			shall omit this field; otherwise, the mobile station shall
40			include this field and shall set it as follows:
41			The mobile station shall set this field to '1' if
42			MS_INIT_POS_LOC_SUP_IND <sub>S</sub> is equal to '1' and if the mobile
43			station is to initiate a position location session associated
44			with this emergency call; otherwise, the mobile station shall
45			set this field to '0'.

1	QOS_PARMS_INCL	-	Presence indicator for the QoS parameters.
2			If P_REV_IN_USE <sub>s</sub> is less than seven, the mobile station shall
3			omit this field; otherwise the mobile station shall include this
4			field and set it as follows.
5			The mobile station shall set this field to '1', if QoS parameters
6			are included in the message for the service instance
7			corresponding to SR_ID; otherwise the mobile station shall
8			set this field to '0'. The mobile station shall not set this field
9			to '1', if MOB_QOS <sub>s</sub> is set to '0' or if the inclusion of the QoS
10			parameters would prevent the inclusion of all the dialed digits
11			in the message.
12	QOS_PARMS_LEN	-	Length of the block of QoS parameters.
13			If QOS_PARMS_INCL is included and is set to '1', the mobile
14			station shall include this field; otherwise, the mobile station
15			shall omit this field. If this field is included, the mobile
16			station shall set this field to the combined length in octets, of
17			the QOS_PARMS field and the immediately following
18			QOS_RESERVED field.
19	QOS_PARMS	-	QoS parameters block.
20			If QOS_PARMS_INCL is included and is set to '1', the mobile
21			station shall include this field; otherwise, the mobile station
22			shall omit this field. If this field is included, the mobile
23			station shall set it to the set of QoS parameter values as
24			defined in accordance with the requirements for the
25			requested service option and/or for the user, per
26			subscription.
27	QOS_RESERVED	-	QoS reserved bits.
28			If QOS_PARMS_INCL is included and is set to '1', the mobile
29			station shall include the minimum number of bits of '0', such
30			that the combined length of the QOS_PARMS field and of this
31			field is an integer number of octets; otherwise, the mobile
32			station shall omit this field.

- 1        ENC\_INFO\_INCL    -    Encryption fields included.
- 2        If P\_REV\_IN\_USE<sub>S</sub> is less than seven, the mobile station shall
- 3        omit this field; otherwise, the mobile station shall include
- 4        this field and set it as follows.
- 5        The mobile station shall set this field to '1' if the encryption
- 6        related fields are included; otherwise the mobile station shall
- 7        set this field to '0'. The mobile station shall set this field to '0'
- 8        if the base station does not support encryption or the mobile
- 9        station does not support any of the encryption modes
- 10       supported by the base station.
- 11       SIG\_ENCRYPT\_SUP    -    Signaling encryption supported indicator.
- 12       If ENC\_INFO\_INCL is included and is set to '1', the mobile
- 13       station shall include this field; otherwise, the mobile station
- 14       shall omit this field. If this field is included, this field
- 15       indicates which signaling encryption algorithms are
- 16       supported by the mobile station.
- 17       This field consists of the subfields shown in Table
- 18       2.7.1.3.2.1-5.
- 19       If this field is included, the mobile station shall set the
- 20       subfields as follows:
- 21       The mobile station shall set the CMEA subfield to '1'.
- 22       The mobile station shall set each other subfield to '1' if the
- 23       corresponding signaling encryption algorithm is supported by
- 24       the mobile station; otherwise, the mobile station shall set the
- 25       subfield to '0'.
- 26       The mobile station shall set the RESERVED subfield to
- 27       '00000'.
- 28       D\_SIG\_ENCRYPT\_REQ    -    Dedicated channel signaling encryption request indicator.
- 29       If ENC\_INFO\_INCL is included and is set to '1', the mobile
- 30       station shall include this field; otherwise, the mobile station
- 31       shall omit this field. If this field is included, the mobile
- 32       station shall set this field to '1' to request signaling
- 33       encryption to be turned on for signaling messages sent on f-
- 34       dsch and r-dsch, and to '0' to request signaling encryption to
- 35       be turned off for signaling messages sent on f-dsch and r-
- 36       dsch.
- 37       C\_SIG\_ENCRYPT\_REQ    -    Common channel signaling encryption request indicator.
- 38       If ENC\_INFO\_INCL is included and is set to '1', the mobile
- 39       station shall include this field; otherwise, the mobile station
- 40       shall omit this field. If this field is included, the mobile
- 41       station shall set this field to '1' to request signaling
- 42       encryption to be turned on for signaling messages sent on f-
- 43       csch and r-csch, and to '0' to request signaling encryption to
- 44       be turned off for signaling messages sent on f-csch and r-
- 45       csch.

1	NEW_SSEQ_H	-	The 24-bit value used to initialize the 24 MSB of the crypto-
2			sync.
3			If SIG_ENCRYPT_SUP is included and the ECMEA or REA
4			subfield in SIG_ENCRYPT_SUP is set to '1', the mobile station
5			shall include this field; otherwise, the mobile station shall
6			omit this field. If this field is included, the mobile station
7			shall set this field to a 24-bit value that will be used as the
8			initial value of the 24 MSB of the crypto-sync for both forward
9			and reverse link message encryption and integrity (if message
10			integrity is performed).
11	NEW_SSEQ_H_SIG	-	The signature of NEW_SSEQ_H
12			If NEW_SSEQ_H is included, the mobile station shall include
13			this field; otherwise, the mobile station shall omit this field. If
14			this field is included, the mobile station shall set this field to
15			the digital signature of the NEW_SSEQ_H as described in
16			2.3.12.4.5.
17	UI_ENCRYPT_REQ	-	Request for user information encryption on the traffic
18			channel indicator.
19			If ENC_INFO_INCL is included and is set to '1', the mobile
20			station shall include this field; otherwise, the mobile station
21			shall omit this field. If this field is included, the mobile
22			station shall set this field to '1' to request user information
23			encryption, and to '0' to request no user information
24			encryption.
25	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
26			If ENC_INFO_INCL is included and is set to '1', the mobile
27			station shall include this field; otherwise, the mobile station
28			shall omit this field. If this field is included, the mobile
29			station shall set this field to indicate the supported user
30			information encryption algorithms.



This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

**Table 2.7.1.3.2.4-9. Encoding of the UI\_ENCRYPT\_SUP Field**

Subfield	Length (bits)	Subfield Description
ORYX	1	Support for ORYX encryption algorithm
REA	1	Support for the Rijndael encryption algorithm used in extended encryption
RESERVED	6	Reserved bits

The mobile station shall set each subfield to '1' if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to '0'.

The mobile station shall set the RESERVED subfield to '000000'.

**SYNC\_ID\_INCL** - Service Configuration synchronization identifier included indicator.

If  $P\_REV\_IN\_USE_s$  is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

The mobile station shall set this field to '1' if the SYNC\_ID field is included in this message; otherwise, the mobile station shall set this field to '0'.

If  $SYNC\_ID\_SUPPORTED_s$  is equal to '0', the mobile station shall set this field to '0'.

**SYNC\_ID\_LEN** - Service Configuration synchronization identifier length indicator.

If the SYNC\_ID\_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the SYNC\_ID field included in this message.

**SYNC\_ID** - Service Configuration synchronization identifier.

If the SYNC\_ID\_INCL field is not included, or is included but is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as

1		follows:
2		The mobile station shall set this field to the Service
3		Configuration synchronization identifier corresponding to a
4		stored service configuration.
5	PREV_SID_INCL	- Previous System Identification (SID) included indicator.
6		If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
7		omit this field; otherwise, the mobile station shall include
8		this field and set it as follows:
9		The mobile station shall set this field to '1' if:
10		- The mobile station determines that the SID has been
11		changed after a packet data dormant handoff, and
12		- This message includes the main service instance (see
13		[42]).
14		Otherwise, the mobile station shall set this field to '0'.
15	PREV_SID	- Previous System Identification.
16		If PREV_SID_INCL is not included, or is included but is set to
17		'0', the mobile station shall omit this field; otherwise, the
18		mobile station shall include this field and set it as follows:
19		The mobile station shall set this field to the previous SID.
20	PREV_NID_INCL	- Previous Network Identification (NID) included indicator.
21		If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
22		omit this field; otherwise, the mobile station shall include
23		this field and set it as follows:
24		The mobile station shall set this field to '1' if:
25		- The mobile station determines that NID has been changed
26		after a packet data dormant handoff, and
27		- This message includes the main service instance (see
28		[42]).
29		Otherwise, the mobile station shall set this field to '0'.
30	PREV_NID	- Previous Network Identification.
31		If PREV_NID_INCL is not included, or is included but is set to
32		'0', the mobile station shall omit this field; otherwise, the
33		mobile station shall include this field and set it as follows:
34		The mobile station shall set this field to the previous NID.
35	PREV_PZID_INCL	- Previous Packet Zone ID (PZID) included indicator.
36		If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
37		omit this field; otherwise, the mobile station shall include
38		this field and set it as follows:

The mobile station shall set this field to '1' if:

- The mobile station determines that the Packet Zone ID has been changed after a packet data dormant handoff, and
- This message includes the main service instance (see [42]).

Otherwise, the mobile station shall set this field to '0'.

PREV\_PZID - Previous Packet Zone ID.

If PREV\_PZID\_INCL is not included, or is included but is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the previous PZID.

SO\_BITMAP\_IND - Service option bitmap indicator.

If P\_REV\_IN\_USE<sub>s</sub> is less than 7, the mobile station shall omit this field; otherwise, the mobile station shall set this field as defined in Table 2.7.1.3.2.4-10.

**Table 2.7.1.3.2.4-10. Encoding of the SO\_BITMAP\_IND Field**

SO_BITMAP_IND	Size of bitmap (in bits) included
00	0 bit (i.e., No bitmap included)
01	4 bits
10	8 bits
11	16 bits

SO\_GROUP\_NUM - Service option group number.

If SO\_BITMAP\_IND is included and not set to '00', the mobile station shall include this field and set this field to service option group number defined in [30], of the bitmap to be included in this message; otherwise, the mobile station shall omit this field.

SO\_BITMAP - Service option bitmap.

If the field SO\_BITMAP\_IND is included and is not set to '00', the mobile station shall include the bitmap of the service option group (SO\_GROUP\_NUM); otherwise, the mobile station shall omit this field.

When the service option bitmap is included, if there are more than  $(2^{(1+SO\_BITMAP\_IND)})$  service options defined in [30] for the service option group [SO\_GROUP\_NUM], the mobile station shall include the bitmap containing the least significant bits  $(2^{(1+SO\_BITMAP\_IND)})$  for the service option group.

1		The mobile station shall set a bit in this bitmap to '1', if the
2		mobile station is capable of supporting the service option for
3		which the bit represents; otherwise, the mobile station shall
4		set a bit in this bitmap to '0'.
5	SDB_DESIRED_ONLY	- Short Data Burst Desired Only.
6		If P_REV_IN_USE <sub>S</sub> is less than eight, the mobile station shall
7		omit this field; otherwise, the mobile station shall include
8		this field and set it as follows:
9		If the mobile station desires to exchange user data using only
10		Short Data Bursts on common channels, it shall set this field
11		to '1'; otherwise, it shall set this field to '0'.
12	ALT_BAND_CLASS_SUP	- Alternate band class support indicator.
13		If P_REV_IN_USE <sub>S</sub> is less than eight, then the mobile station
14		shall omit this field; otherwise, the mobile station shall
15		include this field and set it as follows:
16		If BAND_CLASS_INFO_REQ <sub>S</sub> is equal to '1' and the mobile
17		station supports the CDMA band class specified by
18		ALT_BAND_CLASS <sub>S</sub> , then the mobile station shall set this
19		field to '1'; otherwise, the mobile station shall set this field to
20		'0'.
21	MSG_INT_INFO_INCL	- Signaling message integrity information included indicator.
22		If P_REV_IN_USE <sub>S</sub> is less than nine, the mobile station shall
23		omit this field; otherwise, the mobile station shall include
24		this field and set it as follows.
25		If MSG_INTEGRITY_SUP <sub>S</sub> is set to '0', the mobile station shall
26		set this field to '0'; otherwise, the mobile station shall set this
27		field to '1'.
28	SIG_INTEGRITY_SUP_INCL	- Signaling message integrity information included
29		indicator.
30		If MSG_INT_INFO_INCL is included and is set to '1', the
31		mobile station shall include this field and set it as follows;
32		otherwise, the mobile station shall omit this field.
33		If the mobile station supports other integrity algorithm(s) in
34		addition to the default integrity algorithm, the mobile station
35		shall set this field to '1'; otherwise, the mobile station shall
36		set this field to '0'.
37	SIG_INTEGRITY_SUP	- Signaling integrity algorithm supported by the mobile station.
38		If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
39		mobile station shall set this field as follows; otherwise, the
40		mobile station shall omit this field.
41		The mobile station shall set this field to indicate the
42		supported message integrity algorithms in addition to the
43		default integrity algorithm.

1			This field consists of the subfields shown in Table
2			2.7.1.3.2.1-6.
3			The mobile station shall set each subfield to '1' if the
4			corresponding message integrity algorithm is supported by
5			the mobile station; otherwise, the mobile station shall set the
6			subfield to '0'.
7			The mobile station shall set the RESERVED subfield to
8			'00000000'.
9	SIG_INTEGRITY_REQ	-	Signaling message integrity algorithm requested by the
10			mobile station.
11			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
12			mobile station shall set this field as follows; otherwise, the
13			mobile station shall omit this field.
14			The mobile station shall include this field and set it to the
15			value corresponding to the message integrity algorithm
16			requested as shown in Table 2.7.1.3.2.1-7.
17	NEW_KEY_ID	-	New key identifier.
18			If MSG_INT_INFO_INCL is included and is set to '1', the
19			mobile station shall include this field and set it as follows;
20			otherwise, the mobile station shall omit this field.
21			The mobile station shall set this field as follows:
22		-	If LAST_2G_KEY_ID equals '00', the mobile station shall
23			set this field to '01'.
24		-	If LAST_2G_KEY_ID equals '01', the mobile station shall
25			set this field to '00'.
26	NEW_SSEQ_H_INCL	-	The include indicator of the 24 MSB of the security sequence
27			number.
28			If MSG_INT_INFO_INCL is included and is set to '1', the
29			mobile station shall include this field and set it as follows;
30			otherwise, the mobile station shall omit this field.
31			The mobile station shall set this field to '0' if any of the
32			following is true:
33		-	If SIG_ENCRYPT_SUP is included and the ECMEA or REA
34			subfield in SIG_ENCRYPT_SUP is set to '1'
35		-	RESTORE_KEYS is equal to '1'.
36			In all other cases, the mobile station shall set this field to '1'.
37	NEW_SSEQ_H	-	The 24-bit value used to initialize the 24 MSB of the crypto-
38			sync.
39			If NEW_SSEQ_H_INCL is included and is set to '1', the mobile
40			station shall include this field and set this field as follows;
41			otherwise, the mobile station shall omit this field.
42			The mobile station shall set this field to a 24-bit value that
43			will be used as the initial value of the 24 MSB of the crypto-
44			sync for both forward and reverse link message integrity.

1	NEW_SSEQ_H_SIG	-	The signature of NEW_SSEQ_H
2			If NEW_SSEQ_H_INCL is included and is set to '1', the mobile
3			station shall include this field and set this field as follows;
4			otherwise, the mobile station shall omit this field.
5			The mobile station shall set this field to the digital signature
6			of the NEW_SSEQ_H computed as described in 2.3.12.4.5.
7	FOR_PDCH_SUPPORTED	-	Forward Packet Data Channel supported indicator.
8			If P_REV_IN_USE <sub>s</sub> is less than nine, the mobile station shall
9			omit this field; otherwise, the mobile station shall include
10			this field and set it as follows.
11			If the mobile station supports the Forward Packet Data
12			Channel, then the mobile station shall set this field to '1';
13			otherwise, the mobile station shall set this field to '0'.
14	FOR_PDCH Capability		
15	Type-specific fields	-	Forward Packet Data Channel capability information.
16			If the FOR_PDCH_SUPPORTED field is included and is set to
17			'1', the mobile station shall include this field and set it as
18			defined in 2.7.4.27.5; otherwise, the mobile station shall omit
19			this field.
20	EXT_CH_IND	-	Extended Channel Indicator.
21			If the CH_IND field is not included or is included but is not
22			set to '00', the mobile station shall omit this field; otherwise,
23			the mobile station shall include this field and set it as
24			follows.
25			The mobile station shall set this field as shown in Table
26			2.7.1.3.2.4-11 to request a physical resource.
27			

1

**Table 2.7.1.3.2.4-11. Extended Channel Indicator**

<b>EXT_CH _IND (Binary)</b>	<b>Physical Resource(s) Requested</b>
00000	Reserved
00001	F-PDCH + F-CPCCH + R-FCH
00010	F-PDCH + F-CPCCH + R-DCCH
00011	F-PDCH + F-FCH + R-FCH
00100	F-PDCH + F-DCCH + R-DCCH
00101	F-PDCH + F-FCH + R-FCH + R-DCCH
00110	F-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH
00111	Reserved
01000	F-PDCH + R-PDCH + F-CPCCH
01001	F-PDCH + R-PDCH + F-CPCCH + R-FCH
01010	F-PDCH + R-PDCH + F-CPCCH + R-DCCH
01011	F-PDCH + R-PDCH + F-FCH + R-FCH
01100	F-PDCH + R-PDCH + F-DCCH + R-DCCH
01101	F-PDCH + R-PDCH + F-FCH + R-FCH + R-DCCH
01110	F-PDCH + R-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH

<b>EXT_CH _IND (Binary)</b>	<b>Physical Resource(s) Requested</b>
01111	F-PDCH + F-FCH + F-DCCH + R-DCCH
10000	F-PDCH + F-CPCCH + F-DCCH + R-DCCH
10001	F-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH
10010	F-PDCH + F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH
10011	F-PDCH + R-PDCH + F-FCH + F-DCCH + R-DCCH
10100	F-PDCH + R-PDCH + F-CPCCH + F-DCCH + R-DCCH
10101	F-PDCH + R-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH
10110	F-PDCH + R-PDCH + F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH
10111 ~11111	Reserved

1    **SIGN\_SLOT\_CYCLE\_INDEX** – Sign of the slot cycle index.

2 If P\_REV\_IN\_USE<sub>S</sub> is less than 11, or if the  
3 SLOT\_CYCLE\_INDEX field is set to '000', the mobile station  
4 shall omit this field; otherwise, the mobile station shall  
5 include this field and set it as follows:

6 The mobile station shall set this field as specified in Table  
7 2.7.1.3.2.1-8 to the sign of the preferred slot cycle index,  
8 SLOT\_CYCLE\_INDEX<sub>p</sub> (see 2.6.2.1.1). The absolute value of  
9 the preferred slot cycle index, SLOT\_CYCLE\_INDEX<sub>p</sub>, is  
0 specified in the SLOT\_CYCLE\_INDEX field of this message.



- 1    **ADD\_SERV\_INSTANCE\_INCL** - Additional service instances included indicator.
- 2                                If P\_REV\_IN\_USE<sub>s</sub> is less than 11 or if SR\_ID is included and
- 3                                set to '111', the mobile station shall omit this field; otherwise,
- 4                                the mobile station shall include this field and set it as
- 5                                follows:
- 6                                If at least one occurrence of the ADD\_SR\_ID field is included
- 7                                in this message, the mobile station shall set this field to '1';
- 8                                otherwise, the mobile station shall set this field to '0'.
- 9                                If SYNC\_ID\_INCL is equal to '0' and
- 10                                MAX\_ADD\_SERV\_INSTANCE<sub>s</sub> is equal to '0', the mobile
- 11                                station shall set this field to '0'.
- 12    **NUM\_ADD\_SERV\_INSTANCE** - Number of additional service instances included.
- 13                                If ADD\_SERV\_INSTANCE\_INCL is not included or is included
- 14                                and set to '0', the mobile station shall omit this field;
- 15                                otherwise, the mobile station shall include this field and set it
- 16                                to the number of additional service instances included in this
- 17                                message.
- 18                                If SYNC\_ID\_INCL is equal to '0', the mobile station shall set
- 19                                this field to a value less than or equal to
- 20                                MAX\_ADD\_SERV\_INSTANCE<sub>s</sub>.
- 21    If ADD\_SERV\_INSTANCE\_INCL is included and set to '1', the mobile station shall include
- 22    NUM\_ADD\_SERV\_INSTANCE occurrences of the following variable-field record:
- 23                    **ADD\_SR\_ID** - Additional service reference identifier.
- 24                                If SYNC\_ID\_INCL is set to '0', the mobile station shall set this
- 25                                field as follows:
- 26                                o If the service instance provides a service reference
- 27                                identifier, the mobile station shall set this field to the
- 28                                service reference identifier specified by the service
- 29                                instance. If the service instance does not provide a service
- 30                                reference identifier, the mobile station shall set this field
- 31                                to the smallest unused service reference identifier value
- 32                                between 1 and 6 (inclusive).
- 33                                Otherwise, the mobile station shall set this field to the service
- 34                                reference identifier corresponding to the service option
- 35                                connection that the mobile station requests to be restored
- 36                                from the stored service configuration.
- 37                    **ADD\_DRS** - Additional Data Ready to Send indicator.
- 38                                If the service instance corresponding to the ADD\_SR\_ID field
- 39                                of this record has data to send, the mobile station shall set
- 40                                this field to '1'; otherwise, the mobile station shall set this
- 41                                field to '0'.
- 42    **ADD\_SERVICE\_OPTION\_INCL** - Additional service option included indicator.

1		If SYNC_ID_INCL is set to '1', the mobile station shall omit
2		this field; otherwise, the mobile station shall include this field
3		and set it as follows:
4		The mobile station shall set this field to '0' if the requested
5		service option number of the service instance corresponding
6		to the ADD_SR_ID field of this record is the same as
7		SERVICE_OPTION; otherwise, the mobile station shall set
8		this field to '1'.
9	ADD_SERVICE_OPTION	- Additional service option number.
10		If the ADD_SERVICE_OPTION_INCL field of this record is not
11		included or is included and set to '0', the mobile station shall
12		omit this field; otherwise, the mobile station shall include
13		this field and set it to the value specified in [30],
14		corresponding to the requested service option number of the
15		service instance corresponding to the ADD_SR_ID field of this
16		record.
17	ADD_QOS_PARMS_INCL	- Additional QoS parameters included indicator.
18		If SYNC_ID_INCL is set to '1', the mobile station shall omit
19		this field; otherwise, the mobile station shall include this field
20		and set it as follows:
21		If QoS parameters for the service instance corresponding to
22		the ADD_SR_ID field of this record are included in this
23		message, the mobile station shall set this field to '1';
24		otherwise, the mobile station shall set this field to '0'.
25		The mobile station shall not set this field to '1' if MOB_QOS <sub>s</sub>
26		is set to '0'.
27	ADD_QOS_PARMS_LEN	- Additional Length of the block of QoS parameters.
28		If the ADD_QOS_PARMS_INCL field of this record is not
29		included or is included and is set to '0', the mobile station
30		shall omit this field; otherwise, the mobile station shall
31		include this field and set it to the combined length of the
32		ADD_QOS_PARMS field and the ADD_QOS_RESERVED field
33		of this record, in octets.
34	ADD_QOS_PARMS	- Additional QoS parameters block.
35		If the ADD_QOS_PARMS_INCL field of this record is not
36		included or is included and is set to '0', the mobile station
37		shall omit this field; otherwise, the mobile station shall
38		include this field and set it to the set of QoS parameter values
39		as defined in accordance with the requirements for the
40		requested service option and/or for the user, per
41		subscription.
42	ADD_QOS_RESERVED	- Additional QoS reserved bits.

1 If the ADD\_QOS\_PARMS\_INCL field of this record is not  
2 included or is included and is set to '0', the mobile station  
3 shall omit this field; otherwise, the mobile station shall  
4 include the minimum number of bits of '0', such that the  
5 combined length of the QOS\_PARMS field and of this field is  
6 an integer number of octets.

7 BCMC\_INCL - BCMC information included indicator

8 If the P\_REV\_IN\_USE<sub>s</sub> is less than eleven, the mobile station  
9 shall omit this field; otherwise, the mobile station shall  
10 include this field and set it as follows:

11 The mobile station shall set this field to '1' if one or more  
12 BCMC\_PROGRAM\_IDs are included in the message;  
13 otherwise, the mobile station shall set this field to '0'.

14 BCMC\_ORIG\_ONLY\_IND - BCMC origination only indicator

15 If the BCMC\_INCL field is not included or is included and is  
16 set to '0', the mobile station shall omit this field; otherwise,  
17 the mobile station shall include this field and set it as  
18 follows:

19 The mobile station shall set this field to '1' to indicate that  
20 this origination is only for BCMC and no point to point call is  
21 requested in this message; otherwise the mobile station shall  
22 set this field to '0'.

23 FUNDICATED\_BCMC\_SUPPORTED - Fundicated BCMC capability type-specific  
24 supported indicator.

25 If the BCMC\_INCL field is not included or is included and is  
26 set to '0', the mobile station shall omit this field; otherwise,  
27 the mobile station shall include this field and set it as  
28 follows.

29 If the mobile station supports Fundicated BCMC channel  
30 configurations, the mobile station shall set this field to '1';  
31 otherwise, the mobile station shall set this field to '0'.

32 FUNDICATED\_BCMC Capability

33 Type-specific fields - FUNDICATED\_BCMC capability information.

34 If the FUNDICATED\_BCMC\_SUPPORTED field is included  
35 and is set to '1', the mobile station shall include this field and  
36 set it as defined in 2.7.4.27.7; otherwise, the mobile station  
37 shall omit this field.

38 AUTH\_SIGNATURE\_INCL - Authorization signature included indication.

39 If the BCMC\_INCL field is not included or is included and is  
40 set to '0', the mobile station shall omit this field; otherwise,  
41 the mobile station shall include this field and set it as  
42 follows.

1		The mobile station shall set this field to '1' to indicate that
2		the authorization signature is included in this message for
3		some of the BCMC flows included in this message; otherwise,
4		the mobile station shall set this field to '0'.
5	TIME_STAMP_SHORT_LENGTH	- Length of time stamp included in this message.
6		If the AUTH_SIGNATURE_INCL field is not included or is
7		included and is set to '0', the mobile station shall omit this
8		field; otherwise, the mobile station shall include this field and
9		set it as follows:
10		The mobile station shall set this field to the length of the time
11		stamp, in units of bits, included in this message.
12	TIME_STAMP_SHORT	- Time stamp short.
13		If the AUTH_SIGNATURE_INCL field is not included or is
14		included and is set to '0', the mobile station shall omit this
15		field; otherwise, the mobile station shall include this field and
16		set it as follows:
17		The mobile station shall set this field to the
18		TIME_STAMP_SHORT_LENGTH least significant bits of the
19		time stamp parameter used to generate the Authorization
20		signature included in this message.
21	NUM_BCMC_PROGRAMS	- Number of BCMC Programs
22		If the BCMC_INCL field is not included or is included and is
23		set to '0', the mobile station shall omit this field; otherwise,
24		the mobile station shall include this field and set it as
25		follows:
26		The mobile station shall set this field to the number of BCMC
27		programs included in this message minus 1.
28	The mobile station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following	
29	variable length record:	
30	BCMC_PROGRAM_ID_LEN	- Length of BCMC_PROGRAM_ID field
31		The mobile station shall set this field to one less than the
32		length, in bits, of the BCMC_PROGRAM_ID of this program.
33	BCMC_PROGRAM_ID	- BCMC program Identifier
34		The length of this field shall be one more than the value of
35		BCMC_PROGRAM_ID_LEN bits.
36		The mobile station shall set this field to the identifier of the
37		BCMC program corresponding to one or more flows that the
38		mobile station will continue to monitor or start to monitor
39		upon receiving confirmation of delivery of this message or is
40		requesting transmission.

1	BCMC_FLOW_DISCRIMINATOR_LEN	-	Length of BCMC_FLOW_DISCRIMINATOR field
2			The mobile station shall set this field to the length, in bits, of
3			the BCMC_FLOW_DISCRIMINATOR of this program. To
4			request all flows associated with this BCMC_PROGRAM_ID,
5			the mobile station may set this field to '000'.
6	NUM_FLOW_DISCRIMINATOR	-	Number of BCMC flow discriminators
7			The length of this field shall be determined by the value of the
8			BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
9			BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
10			is omitted; otherwise, the length of this field shall be
11			BCMC_FLOW_DISCRIMINATOR_LEN bits.
12			The mobile station shall set this field to the number of flow
13			discriminators included for this program minus one.
14	If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include		
15	NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;		
16	otherwise, the mobile station shall include 1 occurrence of the following variable length		
17	record:		
18	BCMC_FLOW_DISCRIMINATOR	-	BCMC Flow discriminator.
19			The length of this field shall be determined by the value of the
20			BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
21			BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
22			is omitted; otherwise, the length of this field shall be
23			BCMC_FLOW_DISCRIMINATOR_LEN bits.
24			The mobile station shall set this field to the BCMC flow
25			discriminator requested.
26	AUTH_SIGNATURE_IND	-	Authorization signature indicator.
27			If the AUTH_SIGNATURE_INCL field is not included or is
28			included and is set to '0', the mobile station shall omit this
29			field; otherwise, the mobile station shall include this field and
30			set it as follows:
31			The mobile station shall set this field to '1' to indicate that
32			the authorization signature is included in this message for
33			this BCMC flow; otherwise, the mobile station shall set this
34			field to '0'.
35	AUTH_SIGNATURE_SAME_IND	-	Authorization signature same as previous BCMC
36			flow indicator.
37			If the AUTH_SIGNATURE_IND field is not included or is
38			included and is set to '0', the mobile station shall omit this
39			field; otherwise, the mobile station shall include this field and
40			set it as follows:

1		The mobile station shall set this field to '1' to indicate that
2		the authorization signature generated for this BCMC flow is
3		the same as the one generated for the BCMC flow listed prior
4		to this BCMC flow in this message; otherwise, the mobile
5		station shall set this field to '0'.
6		For the first BCMC flow listed in this message, the mobile
7		station shall set this field to '0'.
8	BAK_ID	- BAK identifier.
9		If the AUTH_SIGNATURE_SAME_IND field is not included or
10		is included and is set to '1', the mobile station shall omit this
11		field; otherwise, the mobile station shall include this field and
12		set it as follows:
13		The mobile station shall set this field to BAK identifier used
14		to generate the Authorization signature included in this
15		message.
16	AUTH_SIGNATURE	- Authorization signature.
17		If the AUTH_SIGNATURE_SAME_IND field is not included or
18		is included and is set to '1', the mobile station shall omit this
19		field; otherwise, the mobile station shall include this field and
20		set it as follows:
21		The mobile station shall set this field to the Authorization
22		signature computed for this BCMC flow as specified in
23		2.6.13.9.
24	REV_PDCH_SUPPORTED	- Reverse Packet Data Channel supported indicator.
25		If P_REV_IN_USE <sub>s</sub> is less than 11 or
26		FOR_PDCH_SUPPORTED is not included or is included and
27		is set to '0', the mobile station shall omit this field; otherwise,
28		the mobile station shall include this field and set it as
29		follows.
30		If the mobile station supports the Reverse Packet Data
31		Channel (R-PDCH), the mobile station shall set this field to
32		'1'; otherwise, the mobile station shall set this field to '0'.
33	REV_PDCH Capability	
34	Type-specific fields	- Reverse Packet Data Channel capability information.
35		If the REV_PDCH_SUPPORTED field is included and is set to
36		'1', the mobile station shall include this field and set it as
37		defined in 2.7.4.27.6; otherwise, the mobile station shall omit
38		this field.
39	BAND_SUB_REP_INCL	- Band class – band subclass report included

- 1 If P\_REV\_IN\_USE<sub>S</sub> is less than eleven, the mobile station  
 2 shall omit this field; otherwise, the mobile station shall  
 3 include this field and set it as follows:
- 4
- 5 If CAND\_BAND\_INFO\_REQ<sub>S</sub> is equal to '1' and the mobile  
 6 station supports at least 1 band class and band subclass (if  
 7 applicable) combination queried by the base station, the  
 8 mobile station shall set this field to '1'; otherwise, the mobile  
 9 station shall set this field to '0'.
- 10 NUM\_BAND\_SUBCLASS - Number of band class - band subclass capabilities reported
- 11 If BAND\_SUB\_REP\_INCL is set to '0' or is not included, this  
 12 field shall be omitted; otherwise, the mobile station shall  
 13 include this field and set it as follows:
- 14 If the mobile station supports all candidate band class and  
 15 band subclass (if applicable) combinations queried by the  
 16 base station, the mobile station shall set this field to '0000';  
 17 otherwise, the mobile station shall set this field to the  
 18 number of band class-band subclass capabilities reported.
- 19 If the NUM\_BAND\_SUBCLASS field is included in this message, the mobile station shall  
 20 include NUM\_BAND\_SUBCLASS occurrences of the BAND\_SUBCLASS\_SUP field:
- 21 BAND\_SUBCLASS\_SUP - Band class-band subclass supported indicator
- 22 The mobile station shall set this field as specified in section  
 23 2.6.14.1.
- 24 ADD\_GEO\_LOC\_INCL - Additional Geo-location included indicator.
- 25 If P\_REV\_IN\_USE<sub>S</sub> is less than twelve, the mobile station shall  
 26 omit this field; otherwise, the mobile station shall include  
 27 this field and set it as follows.
- 28 If the message is to contain the ADD\_GEO\_LOC\_TYPE field,  
 29 the mobile station shall set this field to '1'; otherwise, the  
 30 mobile station shall set this field to '0'.
- 31 ADD\_GEO\_LOC\_TYPE\_LEN\_IND - Additional Geo-Location Type Length Indicator.
- 32 If ADD\_GEO\_LOC\_INCL is included in the message and is set  
 33 to '1', the mobile station shall include this field and shall set  
 34 it as described below; otherwise, the mobile station shall omit  
 35 this field.
- 36 The mobile station shall set this field to '0' to indicate length  
 37 of the ADD\_GEO\_LOC\_TYPE field is 16 bits. The mobile  
 38 station shall set this field to '1' to indicate length of the  
 39 ADD\_GEO\_LOC\_TYPE field is 24 bits.
- 40 ADD\_GEO\_LOC\_TYPE - Additional Geo-Location Type.

1 If ADD\_GEO\_LOC\_INCL is included in the message and is set  
2 to '1', the mobile station shall include this field and shall set  
3 it as described below; otherwise, the mobile station shall omit  
4 this field.  
5 This field consists of the subfields shown in 2.7.4.46-1.  
6 The mobile station shall set each subfield to '1' if the  
7 corresponding capability is supported by the mobile station;  
8 otherwise, the mobile station shall set the subfield to '0'.  
9



1 2.7.1.3.2.5 Page Response Message

2 MSG\_TAG: PRM

3

Field	Length (bits)
MOB_TERM	1
SLOT_CYCLE_INDEX	3
MOB_P_REV	8
SCM	8
REQUEST_MODE	3
SERVICE_OPTION	16
PM	1
NAR_AN_CAP	1
ENCRYPTION_SUPPORTED	0 or 4
NUM_ALT_SO	3

NUM\_ALT\_SO occurrences of the following field:

{ (NUM\_ALT\_SO)

ALT_SO	16
--------	----

} (NUM\_ALT\_SO)

(continues on next page)

4

5

1

<b>Field</b>	<b>Length (bits)</b>
UZID_INCL	0 or 1
UZID	0 or 16
CH_IND	0 or 2
OTD_SUPPORTED	0 or 1
QPCH_SUPPORTED	0 or 1
ENHANCED_RC	0 or 1
FOR_RC_PREF	0 or 5
REV_RC_PREF	0 or 5
FCH_SUPPORTED	0 or 1
FCH Capability Type-specific fields	0 or variable
DCCH_SUPPORTED	0 or 1
DCCH Capability Type-specific fields	0 or variable
REV_FCH_GATING_REQ	0 or 1
STS_SUPPORTED	0 or 1
3X_CCH_SUPPORTED	0 or 1
WLL_INCL	0 or 1
WLL_DEVICE_TYPE	0 or 3
HOOK_STATUS	0 or 4
ENC_INFO_INCL	0 or 1
SIG_ENCRYPT_SUP	0 or 8
D_SIG_ENCRYPT_REQ	0 or 1
C_SIG_ENCRYPT_REQ	0 or 1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8
UI_ENCRYPT_REQ	0 or 1
UI_ENCRYPT_SUP	0 or 8

(continues on next page)

2  
3

1

<b>Field</b>	<b>Length (bits)</b>
SYNC_ID_INCL	0 or 1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or $(8 \times \text{SYNC\_ID\_LEN})$
SO_BITMAP_IND	0 or 2
SO_GROUP_NUM	0 or 5
SO_BITMAP	0 or $2^{(1+\text{SO\_BITMAP\_IND})}$
ALT_BAND_CLASS_SUP	0 or 1
MSG_INT_INFO_INCL	0 or 1
SIG_INTEGRITY_SUP_INCL	0 or 1
SIG_INTEGRITY_SUP	0 or 8
SIG_INTEGRITY_REQ	0 or 3
NEW_KEY_ID	0 or 2
NEW_SSEQ_H_INCL	0 or 1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8

FOR_PDCH_SUPPORTED	0 or 1
FOR_PDCH Capability Type-specific fields	0 or variable
EXT_CH_IND	0 or 5
SIGN_SLOT_CYCLE_INDEX	0 or 1
BCMC_INCL	0 or 1
BCMC_PREF_INCL	0 or 1
FUNDICATED_BCMC_SUPPORTED	0 or 1
FUNDICATED_BCMC Capability Type-specific fields	0 or variable
AUTH_SIGNATURE_INCL	0 or 1
TIME_STAMP_SHORT_LENGTH	0 or 8
TIME_STAMP_SHORT	0 or Variable
NUM_BCMC_PROGRAMS	0 or 3

NUM\_BCMC\_PROGRAMS+1 occurrences of the following variable length record:

{ (NUM\_BCMC\_PROGRAMS+1)

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	Variable (Value of BCMC_PROGRAM_ID_LEN + 1)
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
BCMC_PREF	0 or 1
AUTH_SIGNATURE_IND	0 or 1
AUTH_SIGNATURE_SAME_IND	0 or 1

BAK_ID	0 or 4
AUTH_SIGNATURE	0 or 32

} (NUM\_FLOW\_DISCRIMINATOR+1) or 1

} (NUM\_BCMC\_PROGRAMS+1)

REV_PDCH_SUPPORTED	0 or 1
REV_PDCH Capability Type-specific fields	0 or variable
BAND_SUB_REP_INCL	0 or 1
NUM_BAND_SUBCLASS	0 or 4

NUM\_BAND\_SUBCLASS occurrences of the following field:

{ (NUM\_BAND\_SUBCLASS)

BAND_SUBCLASS_SUP	1
-------------------	---

} (NUM\_BAND\_SUBCLASS)

- 1
- 2            MOB\_TERM    –   Mobile terminated calls accepted indicator.
- 3                            If the mobile station is configured to accept mobile
- 4                            terminated calls while operating with the current roaming
- 5                            status (see 2.6.5.3), the mobile station shall set this bit to '1'.
- 6                            Otherwise, the mobile station shall set this bit to '0'.
- 7            SLOT\_CYCLE\_INDEX    –   Slot cycle index.
- 8                            If P\_REV\_IN\_USE<sub>s</sub> is less than 11, or if
- 9                            MIN\_SLOT\_CYCLE\_INDEX is equal to '0', the mobile station
- 10                           shall perform the following:
- 11                           • If the mobile station is configured for slotted mode
- 12                           operation, the mobile station shall set this field to max (0,
- 13                           SLOT\_CYCLE\_INDEX<sub>p</sub>) (see 2.6.2.1.1). Otherwise, the
- 14                           mobile station shall set this field to '000'.
- 15                           Otherwise, the mobile station shall perform the following:
- 16                           • If the mobile station is configured for slotted mode
- 17                           operation, the mobile station shall set this field to the
- 18                           absolute value of the preferred slot cycle index,
- 19                           SLOT\_CYCLE\_INDEX<sub>p</sub> (see 2.6.2.1.1); otherwise, the
- 20                           mobile station shall set this field to '000'. The sign of
- 21                           SLOT\_CYCLE\_INDEX<sub>p</sub> is specified in the
- 22                           SIGN\_SLOT\_CYCLE\_INDEX field of this message (see
- 23                           Table 2.7.1.3.2.1-8).
- 24            MOB\_P\_REV    –   Protocol revision of the mobile station.
- 25                           The mobile station shall set this field to '00001100'.

1	SCM	-	Station class mark.
2			The mobile station shall set this field to the station class
3			mark of the mobile station. See 2.3.3.
4	REQUEST_MODE	-	Requested mode code. The mobile station shall set this field
5			to the value shown in Table 2.7.1.3.2.4-1 corresponding to its
6			current configuration.
7	SERVICE_OPTION	-	Service option.
8			If the mobile station accepts the service option specified by
9			the mobile-station-addressed page, it shall set this field as
10			follows:
11		•	If the page record to which the mobile station is
12			responding contained a SERVICE_OPTION field, the
13			mobile station shall set this field to the service option
14			number specified in the SERVICE_OPTION field of the
15			page record to which the mobile station is responding.
16		•	If the page record to which the mobile station is
17			responding did not contain a SERVICE_OPTION field, the
18			mobile station shall set this field to the default option
19			number '0000000000000001'.
20			If the mobile station does not accept the service option
21			specified by the mobile-station-addressed page to which the
22			mobile station is responding and the mobile station has an
23			alternative service option to request, the mobile station shall
24			set this field to the service option code specified in [30]
25			corresponding to the alternative service option.
26			If the mobile station does not accept the service option
27			specified by the mobile-station-addressed page to which the
28			mobile station is responding and the mobile station does not
29			have an alternative service option to request, the mobile
30			station shall set this field to '0000000000000000' to reject
31			the service option specified by the page record of the <i>General</i>
32			<i>Page Message</i> or <i>Universal Page Message</i> to which the mobile
33			station is responding.
34			If the mobile station is not responding to a page and the
35			service option for this call setup is not known, the mobile
36			station shall set this field to '0000000000000001' to indicate
37			the base station is not to use this field <sup>3</sup> .
38	PM	-	Privacy mode indicator.
39			To request voice privacy, the mobile station shall set this field
40			to '1'; otherwise, the mobile station shall set this field to '0'.
41	NAR_AN_CAP	-	Narrow analog capability.

---

<sup>3</sup> This scenario could occur only in a Direct Channel Assignment call setup.

1		If the mobile station is capable of narrow analog operation,
2		the mobile station shall set this bit to '1'; otherwise, the
3		mobile station shall set this bit to '0'. The mobile station shall
4		set this bit to '0'.
5	ENCRYPTION_SUPPORTED	- Encryption algorithms supported by the mobile station.
6		If P_REV_IN_USE <sub>S</sub> is greater than or equal to seven or
7		AUTH_MODE is equal to '00', the mobile station shall omit
8		this field. If P_REV_IN_USE <sub>S</sub> is less than seven and
9		AUTH_MODE is not equal to '00', then the mobile station
10		shall set this field as specified in table 2.7.1.3.2.4-5.
11	NUM_ALT_SO	- Number of alternative service options.
12		If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
13		set this field to the number of alternative service options it
14		supports other than the one specified in the
15		SERVICE_OPTION field. The mobile station shall set this
16		field to a value less than or equal to MAX_NUM_ALT_SO <sub>S</sub> .
17		If P_REV_IN_USE <sub>S</sub> is equal to or greater than seven, the
18		mobile station shall set this field to the number of alternate
19		service options, which either have no service option group
20		number assigned or do not belong to the same service option
21		group whose bitmap is being included. The alternate service
22		option numbers are other than the one specified in the
23		SERVICE_OPTION field. The mobile station shall set this field
24		to a value less than or equal to MAX_NUM_ALT_SO <sub>S</sub> .
25	ALT_SO	- Alternative service option.
26		The mobile station shall include NUM_ALT_SO occurrences of
27		this field. The mobile station shall set this field to the value
28		specified in [30], corresponding to the alternative service
29		option supported by the mobile station.
30		If P_REV_IN_USE <sub>S</sub> is equal to or greater than seven, the
31		mobile station shall include NUM_ALT_SO occurrences of in
32		this field. The mobile station shall set this field to the service
33		option number defined in [30] corresponding to the alternate
34		service options which either have no service option group
35		number assigned or do not belong to the same service option
36		group whose bitmap is included in this message.
37	UZID_INCL	- User Zone Identifier included indicator.
38		If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
39		omit this field; otherwise, the mobile station shall include
40		this field and set it as follows.
41		If the message is to contain the User Zone Identifier, the
42		mobile station shall set this field to '1'; otherwise, the mobile
43		station shall set this field to '0'.
44	UZID	- User Zone Identifier.

If the UZID\_INCL field is included in the message and is set to '1', the mobile station shall include this field and set it to UZID<sub>S</sub>; otherwise, the mobile station shall omit this field.

**CH\_IND** – Channel Indicator.

If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it, as shown in Table 2.7.1.3.2.5-1, to request physical resources.

**Table 2.7.1.3.2.5-1. Channel indicator**

<b>CH_IND (binary)</b>	<b>Channel(s) Requested</b>
00	Refer to EXT_CH_IND
01	Fundamental Channel
10	Dedicated Control Channel
11	Fundamental Channel and Dedicated Control Channel

**OTD\_SUPPORTED** – Orthogonal transmit diversity supported indicator

If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports orthogonal transmit diversity, it shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**QPCH\_SUPPORTED** – Quick Paging Channel supported indicator.

If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports the Quick Paging Channel, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**ENHANCED\_RC** – Enhanced radio configuration supported indicator.

If P\_REV\_IN\_USE<sub>S</sub> is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports any radio configuration in the Radio Configuration Class 2 (see 1.1.1), the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

**FOR\_RC\_PREF** – Forward Radio Configuration preference.



1		If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
2		omit this field; otherwise, the mobile station shall include
3		this field and set it as follows.
4		The mobile station shall set this field to its preferred Radio
5		Configuration for the Forward Fundamental Channel and/or
6		Forward Dedicated Control Channel.
7	REV_RC_PREF	- Reverse Radio Configuration preference.
8		If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
9		omit this field; otherwise, the mobile station shall include
10		this field and set it as follows.
11		The mobile station shall set this field to its preferred Radio
12		Configuration for the Reverse Fundamental Channel and/or
13		Reverse Dedicated Control Channel.
14	FCH_SUPPORTED	- Fundamental Channel supported indicator.
15		If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
16		omit this field; otherwise, the mobile station shall include
17		this field and set it as follows.
18		The mobile station shall set this field to '1' if the mobile
19		station supports Fundamental Channel; otherwise, the
20		mobile station shall set this field to '0'.
21	FCH Capability Type specific fields	- Fundamental Channel capability information.
22		If the FCH_SUPPORTED field is included and is set to '1', the
23		mobile station shall include this field and set it as described
24		in 2.7.4.27.1; otherwise, the mobile station shall omit this
25		field.
26	DCCH_SUPPORTED	- Dedicated Control Channel supported indicator.
27		If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
28		omit this field; otherwise, the mobile station shall include
29		this field and set it as follows.
30		The mobile station shall set this field to '1' if the mobile
31		station supports Dedicated Control Channel; otherwise, the
32		mobile station shall set this field to '0'.
33	DCCH Capability Type specific fields	- Dedicated Control Channel capability
34		information.
35		If DCCH_SUPPORTED is included and is set to '1', the mobile
36		station shall include this field and set it as defined in
37		2.7.4.27.2; otherwise, the mobile station shall omit this field.
38	REV_FCH_GATING_REQ	- Reverse Fundamental Channel eighth gating mode request
39		indicator.
40		If P_REV_IN_USE <sub>S</sub> is less than six, the mobile station shall
41		omit this field; otherwise, the mobile station shall include
42		this field and set it as follows:

1			If the mobile station requests to turn on the reverse
2			Fundamental Traffic Channel gating mode in Radio
3			Configurations 3, 4, 5, and 6, the mobile station shall set this
4			field to '1'; otherwise, the mobile station shall set this field to
5			'0'.
6	STS_SUPPORTED	-	STS supported indicator.
7			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
8			omit this field; otherwise, the mobile station shall include
9			this field and set it as follows.
10			The mobile station shall set this field to '1' if the mobile
11			station supports Space Time Spreading Transmit Diversity;
12			otherwise, the mobile station shall set this field to '0'.
13	3X_CCH_SUPPORTED	-	3X Common Channels supported.
14			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
15			omit this field; otherwise, the mobile station shall include
16			this field and set it as follows.
17			The mobile station shall set this field to '1' if the mobile
18			station supports the Spreading Rate 3 common channels (3X
19			BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile
20			station shall set this field to '0'.
21	WLL_INCL	-	WLL information included indicator.
22			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
23			omit this field; otherwise, the mobile station shall include this
24			field and set it as follows.
25			If the mobile station is a Wireless Local Loop device, the
26			mobile station shall set this field to '1'; otherwise, the mobile
27			station shall set this field to '0'.
28	WLL_DEVICE_TYPE	-	WLL device type indicator.
29			If WLL_INCL is not included, or if WLL_INCL is included and
30			is set to '0', the mobile station shall omit this field; otherwise,
31			the mobile station shall set this field as follows.
32			The mobile station shall set this field to the
33			WLL_DEVICE_TYPE value shown in Table 2.7.1.3.2.1-3
34			corresponding to the mobile station device type.
35	HOOK_STATUS	-	WLL terminal hook status.
36			If WLL_INCL is not included, or if WLL_INCL is included and
37			is set to '0', the mobile station shall omit this field; otherwise,
38			the mobile station shall set this field to the value shown in
39			Table 2.7.1.3.2.1-4 corresponding to the hook state.

1	ENC_INFO_INCL	-	Encryption fields included.
2			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
3			omit this field; otherwise, the mobile station shall include
4			this field and set it as follows:
5			The mobile station shall set this field to '1' if the encryption
6			related fields are included; otherwise the mobile station shall
7			set this field to '0'. The mobile station shall set this field to '0'
8			if the base station does not support encryption or the mobile
9			station does not support any of the encryption modes
10			supported by the base station.
11	SIG_ENCRYPT_SUP	-	Signaling encryption supported indicator.
12			If ENC_INFO_INCL is included and is set to '1', the mobile
13			station shall include this field; otherwise, the mobile station
14			shall omit this field. If this field is included, the mobile
15			station shall set this field to indicate which signaling
16			encryption algorithms are supported by the mobile station.
17			This field consists of the subfields shown in Table
18			2.7.1.3.2.1-5.
19			If this field is included, the mobile station shall set the
20			subfields as follows:
21			The mobile station shall set the CMEA subfield to '1'.
22			The mobile station shall set each other subfield to '1' if the
23			corresponding signaling encryption algorithm is supported by
24			the mobile station; otherwise, the mobile station shall set the
25			subfield to '0'.
26			The mobile station shall set the RESERVED subfield to
27			'00000'.
28	D_SIG_ENCRYPT_REQ	-	Dedicated channel signaling encryption request indicator.
29			If ENC_INFO_INCL is included and is set to '1', the mobile
30			station shall include this field; otherwise, the mobile station
31			shall omit this field. If this field is included, the mobile
32			station shall set this field to '1' to request signaling
33			encryption to be turned on for signaling messages sent on f-
34			dsch and r-dsch, and to '0' to request signaling encryption to
35			be turned off for signaling messages sent on f-dsch and r-
36			dsch.
37	C_SIG_ENCRYPT_REQ	-	Common channel signaling encryption request indicator.
38			If ENC_INFO_INCL is included and is set to '1', the mobile
39			station shall include this field; otherwise, the mobile station
40			shall omit this field. If this field is included, the mobile
41			station shall set this field to '1' to request signaling
42			encryption to be turned on for signaling messages sent on f-
43			csch and r-csch, and to '0' to request signaling encryption to
44			be turned off for signaling messages sent on f-csch and r-
45			csch.

1	NEW_SSEQ_H	-	The 24-bit value used to initialize the 24 MSB of the crypto-
2			sync.
3			If SIG_ENCRYPT_SUP is included and the ECMEA or REA
4			subfield in SIG_ENCRYPT_SUP is set to '1', the mobile station
5			shall include this field; otherwise, the mobile station shall
6			omit this field. If this field is included, the mobile station
7			shall set this field to a 24-bit value that will be used as the
8			initial value of the 24 MSB of the crypto-sync for both forward
9			and reverse link message encryption and integrity (if message
10			integrity is performed).
11	NEW_SSEQ_H_SIG	-	The signature of NEW_SSEQ_H
12			If the NEW_SSEQ_H field is included in the message, the
13			mobile station shall set this field to the digital signature of
14			the NEW_SSEQ_H as described in 2.3.12.4.5; otherwise, the
15			mobile station shall omit this field.
16	UI_ENCRYPT_REQ	-	Request for user information encryption on the traffic
17			channel indicator.
18			If ENC_INFO_INCL is included and is set to '1', the mobile
19			station shall include this field; otherwise, the mobile station
20			shall omit this field. If this field is included, the mobile
21			station shall set this field to '1' to request user information
22			encryption, and to '0' to request no user information
23			encryption.
24	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
25			If ENC_INFO_INCL is included and is set to '1', the mobile
26			station shall include this field; otherwise, the mobile station
27			shall omit this field. If this field is included, the mobile
28			station shall set this field to indicate the supported user
29			information encryption algorithms.
30			This field consists of the subfields shown in Table
31			2.7.1.3.2.4-9.
32			The mobile station shall set each subfield to '1' if the
33			corresponding user information encryption algorithm is
34			supported by the mobile station; otherwise, the mobile
35			station shall set the subfield to '0'.
36			The mobile station shall set the RESERVED subfield to
37			'000000'.
38	SYNC_ID_INCL	-	Service Configuration synchronization identifier included
39			indicator.
40			If P_REV_IN_USE <sub>S</sub> is less than seven, the mobile station shall
41			omit this field; otherwise, the mobile station shall include
42			this field and set it as follows.
43			The mobile station shall set this field to '1' if the SYNC_ID
44			field is included in this message; otherwise, the mobile
45			station shall set this field to '0'.

1			If SYNC_ID_SUPPORTED <sub>s</sub> is equal to '0', the mobile station
2			shall set this field to '0'.
3	SYNC_ID_LEN	-	Service Configuration synchronization identifier length
4			indicator.
5			If the SYNC_ID_INCL field is not included or is included and
6			is set to '0', the mobile station shall omit this field; otherwise
7			the mobile station shall include this field and set it as
8			follows:
9			The mobile station shall set this field to the length of the
10			SYNC_ID field included in this message.
11	SYNC_ID	-	Service Configuration synchronization identifier.
12			If the SYNC_ID_INCL field is not included, or is included and
13			is set to '0', the mobile station shall omit this field; otherwise,
14			the mobile station shall include this field and set it as
15			follows:
16			The mobile station shall set this field to the Service
17			Configuration synchronization identifier corresponding to the
18			stored service configuration.
19	SO_BITMAP_IND	-	SO bitmap indicator.
20			If P_REV_IN_USE <sub>s</sub> is less than 7, the mobile station shall
21			omit this field; otherwise, the mobile station shall include
22			this field and set this field as defined in Table 2.7.1.3.2.4-10.
23	SO_GROUP_NUM	-	The service option group number.
24			If SO_BITMAP_IND is included and not set to '00', the mobile
25			station shall include this field and set this field to service
26			option group number of the bitmap to be included in this
27			message; otherwise, the mobile station shall omit this field.
28	SO_BITMAP	-	Service option bitmap.
29			If the field SO_BITMAP_IND field is included and is not set to
30			'00', the mobile station shall include the bitmap of the service
31			option group (SO_GROUP_NUM); otherwise, the mobile
32			station shall omit this field.
33			When the service option bitmap is included, if there are more
34			than $(2^{(1+SO\_BITMAP\_IND)})$ service options defined for the
35			service option group, the mobile station shall include the
36			bitmap containing the least significant bits $(2^{(1+SO\_BITMAP\_IND)})$
37			of the service option group.
38			The mobile station shall set a bit in this bitmap to '1', if the
39			mobile station is capable of supporting the service option for
40			which the bit represents; otherwise, the mobile station shall
41			set a bit in this bitmap to '0'.
42	ALT_BAND_CLASS_SUP	-	Alternate band class support indicator.

1			If P_REV_IN_USE <sub>S</sub> is less than eight, then the mobile station
2			shall omit this field; otherwise, the mobile station shall
3			include this field and set it as follows:
4			If BAND_CLASS_INFO_REQ <sub>S</sub> is equal to '1' and the mobile
5			station supports the CDMA band class specified by
6			ALT_BAND_CLASS <sub>S</sub> , then the mobile station shall set this
7			field to '1'; otherwise, the mobile station shall set this field to
8			'0'.
9	MSG_INT_INFO_INCL	-	Signaling message integrity information included indicator.
10			If P_REV_IN_USE <sub>S</sub> is less than nine, the mobile station shall
11			omit this field; otherwise, the mobile station shall include
12			this field and set it as follows.
13			If MSG_INTEGRITY_SUP <sub>S</sub> is set to '0', the mobile station shall
14			set this field to '0'; otherwise, the mobile station shall set this
15			field to '1'.
16	SIG_INTEGRITY_SUP_INCL	-	Signaling message integrity information included
17			indicator.
18			If MSG_INT_INFO_INCL is included and is set to '1', the
19			mobile station shall include this field and set it as follows;
20			otherwise, the mobile station shall omit this field.
21			If the mobile station supports other integrity algorithm(s) in
22			addition to the default integrity algorithm, the mobile station
23			shall set this field to '1'; otherwise, the mobile station shall
24			set this field to '0'.
25	SIG_INTEGRITY_SUP	-	Signaling integrity algorithm supported by the mobile station.
26			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
27			mobile station shall set this field as follows; otherwise, the
28			mobile station shall omit this field.
29			The mobile station shall set this field to indicate the
30			supported message integrity algorithms in addition to the
31			default integrity algorithm.

1			This field consists of the subfields shown in Table
2			2.7.1.3.2.1-6.
3			The mobile station shall set each subfield to '1' if the
4			corresponding message integrity algorithm is supported by
5			the mobile station; otherwise, the mobile station shall set the
6			subfield to '0'.
7			The mobile station shall set the RESERVED subfield to
8			'00000000'.
9	SIG_INTEGRITY_REQ	-	Signaling message integrity algorithm requested by the
10			mobile station.
11			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
12			mobile station shall set this field as follows; otherwise, the
13			mobile station shall omit this field.
14			The mobile station shall include this field and set it to the
15			value corresponding to the message integrity algorithm
16			requested as shown in Table 2.7.1.3.2.1-7.
17	NEW_KEY_ID	-	New key identifier.
18			If MSG_INT_INFO_INCL is included and is set to '1', the
19			mobile station shall include this field and set it as follows;
20			otherwise, the mobile station shall omit this field.
21			The mobile station shall set this field as follows:
22		-	If LAST_2G_KEY_ID equals '00', the mobile station shall
23			set this field to '01'.
24		-	If LAST_2G_KEY_ID equals '01', the mobile station shall
25			set this field to '00'.
26	NEW_SSEQ_H_INCL	-	The include indicator of the 24 MSB of the security sequence
27			number.
28			If MSG_INT_INFO_INCL is included and is set to '1', the
29			mobile station shall include this field and set it as follows;
30			otherwise, the mobile station shall omit this field.
31			The mobile station shall set this field to '0' if any of the
32			following is true:
33		-	If SIG_ENCRYPT_SUP is included and the ECMEA or REA
34			subfield in SIG_ENCRYPT_SUP is set to '1'
35		-	RESTORE_KEYS is equal to '1'.
36			In all other cases, the mobile station shall set this field to '1'.
37	NEW_SSEQ_H	-	The 24-bit value used to initialize the 24 MSB of the crypto-
38			sync.
39			If NEW_SSEQ_H_INCL is included and is set to '1', the mobile
40			station shall include this field and set this field as follows;
41			otherwise, the mobile station shall omit this field.
42			The mobile station shall set this field to a 24-bit value that
43			will be used as the initial value of the 24 MSB of the crypto-
44			sync for both forward and reverse link message integrity.

1	NEW_SSEQ_H_SIG	-	The signature of NEW_SSEQ_H
2			If NEW_SSEQ_H_INCL is included and is set to '1', the mobile
3			station shall include this field and set this field as follows;
4			otherwise, the mobile station shall omit this field.
5			The mobile station shall set this field to the digital signature
6			of the NEW_SSEQ_H computed as described in 2.3.12.4.5.
7	FOR_PDCH_SUPPORTED	-	Forward Packet Data Channel supported indicator.
8			If P_REV_IN_USE <sub>s</sub> is less than nine, the mobile station shall
9			omit this field; otherwise, the mobile station shall include
10			this field and set it as follows.
11			If the mobile station supports the Forward Packet Data
12			Channel, then the mobile station shall set this field to '1';
13			otherwise, the mobile station shall set this field to '0'.
14	FOR_PDCH Capability		
15	Type-specific fields	-	Forward Packet Data Channel capability information.
16			If the FOR_PDCH_SUPPORTED field is included and is set to
17			'1', the mobile station shall include this field and set it as
18			defined in 2.7.4.27.5; otherwise, the mobile station shall omit
19			this field.
20	EXT_CH_IND	-	Extended Channel Indicator.
21			If the CH_IND field is not included or is included but is not
22			set to '00', the mobile station shall omit this field; otherwise,
23			the mobile station shall include this field and set it as
24			follows.
25			The mobile station shall set this field as shown in Table
26			2.7.1.3.2.4-11 to request a physical resource.
27	SIGN_SLOT_CYCLE_INDEX	-	Sign of the slot cycle index.
28			If P_REV_IN_USE <sub>s</sub> is less than 11, or if the
29			SLOT_CYCLE_INDEX field is set to '000', the mobile station
30			shall omit this field; otherwise, the mobile station shall
31			include this field and set it as follows:
32			The mobile station shall set this field as specified in Table
33			2.7.1.3.2.1-8 to the sign of the preferred slot cycle index,
34			SLOT_CYCLE_INDEX <sub>p</sub> (see 2.6.2.1.1). The absolute value of
35			the preferred slot cycle index, SLOT_CYCLE_INDEX <sub>p</sub> , is
36			specified in the SLOT_CYCLE_INDEX field of this message.
37	BCMC_INCL	-	BCMC information included indicator
38			If the P_REV_IN_USE <sub>s</sub> is less than 11, the mobile station
39			shall omit this field; otherwise, the mobile station shall
40			include this field and set it as follows:



1		The mobile station shall set this field to '1' if one or more
2		BCMC_PROGRAM_IDs are included in the message;
3		otherwise, the mobile station shall set this field to '0'.
4	BCMC_PREF_INCL	- BCMC preference included indicator
5		If the BCMC_INCL field is not included or is included and is
6		set to '0', the mobile station shall omit this field; otherwise,
7		the mobile station shall include this field and set it as
8		follows:
9		The mobile station shall set this field to '1' if BCMC
10		preference information is included in this message;
11		otherwise, the mobile station shall set this field to '0'.
12	FUNDICATED_BCMC_SUPPORTED	- Fundicated BCMC capability type-specific
13		supported indicator.
14		If the BCMC_INCL field is not included or is included and is
15		set to '0', the mobile station shall omit this field; otherwise,
16		the mobile station shall include this field and set it as
17		follows.
18		If the mobile station supports Fundicated BCMC channel
19		configurations, the mobile station shall set this field to '1';
20		otherwise, the mobile station shall set this field to '0'.
21	FUNDICATED_BCMC Capability	
22	Type-specific fields	- FUNDICATED_BCMC capability information.
23		If the FUNDICATED_BCMC_SUPPORTED field is included
24		and is set to '1', the mobile station shall include this field and
25		set it as defined in 2.7.4.27.7; otherwise, the mobile station
26		shall omit this field.
27	AUTH_SIGNATURE_INCL	- Authorization signature included indication.
28		If the BCMC_INCL field is not included or is included and is
29		set to '0', the mobile station shall omit this field; otherwise,
30		the mobile station shall include this field and set it as
31		follows.
32		The mobile station shall set this field to '1' to indicate that
33		the authorization signature is included in this message for
34		each of the BCMC flows included in this message; otherwise,
35		the mobile station shall set this field to '0'.
36	TIME_STAMP_SHORT_LENGTH	- Length of time stamp included in this message.
37		If the AUTH_SIGNATURE_INCL field is not included or is
38		included and is set to '0', the mobile station shall omit this
39		field; otherwise, the mobile station shall include this field and
40		set it as follows:
41		The mobile station shall set this field to the length of the time
42		stamp, in units of bits, included in this message.
43	TIME_STAMP_SHORT	- Time stamp short.

1		If the AUTH_SIGNATURE_INCL field is not included or is
2		included and is set to '0', the mobile station shall omit this
3		field; otherwise, the mobile station shall include this field and
4		set it as follows:
5		The mobile station shall set this field to the
6		TIME_STAMP_SHORT_LENGTH least significant bits of the
7		time stamp parameter used to generate the Authorization
8		signature included in this message.
9	NUM_BCMC_PROGRAMS	- Number of BCMC Programs
10		If the BCMC_INCL field is not included or is included and is
11		set to '0', the mobile station shall omit this field; otherwise,
12		the mobile station shall include this field and set it as
13		follows:
14		The mobile station shall set this field to the number of BCMC
15		programs included in this message minus 1.
16	The mobile station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following	
17	variable length record:	
18	BCMC_PROGRAM_ID_LEN	- Length of BCMC_PROGRAM_ID field
19		The mobile station shall set this field to one less than the
20		length, in bits, of the BCMC_PROGRAM_ID of this program.
21	BCMC_PROGRAM_ID	- BCMC program Identifier
22		The length of this field shall be one more than the value of
23		BCMC_PROGRAM_ID_LEN bits.
24		The mobile station shall set this field to the identifier of the
25		BCMC program corresponding to one or more flows that the
26		mobile station is requesting.
27	BCMC_FLOW_DISCRIMINATOR_LEN	- Length of BCMC_FLOW_DISCRIMINATOR field
28		The mobile station shall set this field to the length, in bits, of
29		the BCMC_FLOW_DISCRIMINATOR of this program. To
30		request all flows associated with this BCMC_PROGRAM_ID,
31		the mobile station may set this field to '000'.
32	NUM_FLOW_DISCRIMINATOR	- Number of BCMC flow discriminators
33		The length of this field shall be determined by the value of the
34		BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
35		BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
36		is omitted; otherwise, the length of this field shall be
37		BCMC_FLOW_DISCRIMINATOR_LEN bits.
38		The mobile station shall set this field to the number of flow
39		discriminators included for this program minus one.

1 If NUM\_FLOW\_DISCRIMINATOR field is included, the mobile station shall include  
 2 NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;  
 3 otherwise, the mobile station shall include 1 occurrence of the following variable length  
 4 record:

5 BCMC\_FLOW\_DISCRIMINATOR - BCMC Flow discriminator.

6 The length of this field shall be determined by the value of the  
 7 BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
 8 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
 9 is omitted; otherwise, the length of this field shall be  
 10 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

11 The mobile station shall set this field to the BCMC flow  
 12 discriminator requested.

13 BCMC\_PREF - BCMC preference indicator

14 If the BCMC\_PREF\_INCL field is not included or is included  
 15 and is set to '0', the mobile station shall omit this field;  
 16 otherwise, the mobile station shall include this field and set it  
 17 as follows:

18 The mobile station shall set this field to '1' to indicate that  
 19 the mobile station has higher preference for this BCMC flow  
 20 than the incoming call for which this message is sent;  
 21 otherwise, the mobile station shall set this field to '0'.

22 AUTH\_SIGNATURE\_IND - Authorization signature indicator.

23 If the AUTH\_SIGNATURE\_INCL field is not included or is  
 24 included and is set to '0', the mobile station shall omit this  
 25 field; otherwise, the mobile station shall include this field and  
 26 set it as follows:

27 The mobile station shall set this field to '1' to indicate that  
 28 the authorization signature is included in this message for  
 29 this BCMC flow; otherwise, the mobile station shall set this  
 30 field to '0'.

31 AUTH\_SIGNATURE\_SAME\_IND - Authorization signature same as previous BCMC  
 32 flow indicator.

33 If the AUTH\_SIGNATURE\_IND field is not included or is  
 34 included and is set to '0', the mobile station shall omit this  
 35 field; otherwise, the mobile station shall include this field and  
 36 set it as follows:

37 The mobile station shall set this field to '1' to indicate that  
 38 the authorization signature generated for this BCMC flow is  
 39 the same as the one generated for the BCMC flow listed prior  
 40 to this BCMC flow in this message; otherwise, the mobile  
 41 station shall set this field to '0'.

42 For the first BCMC flow listed in this message, the mobile  
 43 station shall set this field to '0'.

1	BAK_ID	- BAK identifier.
2		If the AUTH_SIGNATURE_SAME_IND field is not included or
3		is included and is set to '1', the mobile station shall omit this
4		field; otherwise, the mobile station shall include this field and
5		set it as follows:
6		The mobile station shall set this field to BAK identifier used
7		to generate the Authorization signature included in this
8		message.
9	AUTH_SIGNATURE	- Authorization signature.
10		If the AUTH_SIGNATURE_SAME_IND field is not included or
11		is included and is set to '1', the mobile station shall omit this
12		field; otherwise, the mobile station shall include this field and
13		set it as follows:
14		The mobile station shall set this field to the Authorization
15		signature computed for this BCMC flow as specified in
16		2.6.13.9.
17	REV_PDCH_SUPPORTED	- Reverse Packet Data Channel supported indicator.
18		If P_REV_IN_USE <sub>S</sub> is less than 11 or
19		FOR_PDCH_SUPPORTED is not included or is included and
20		is set to '0', the mobile station shall omit this field; otherwise,
21		the mobile station shall include this field and set it as
22		follows.
23		If the mobile station supports the Reverse Packet Data
24		Channel (R-PDCH), the mobile station shall set this field to
25		'1'; otherwise, the mobile station shall set this field to '0'.
26	REV_PDCH Capability Type-specific fields	- Reverse Packet Data Channel capability
27		information.
28		If the REV_PDCH_SUPPORTED field is included and is set to
29		'1', the mobile station shall include this field and set it as
30		defined in 2.7.4.27.6; otherwise, the mobile station shall omit
31		this field.
32	BAND_SUB_REP_INCL	- Band class – band subclass report included
33		If P_REV_IN_USE <sub>S</sub> is less than eleven, the mobile station
34		shall omit this field; otherwise, the mobile station shall
35		include this field and set it as follows:
36		If CAND_BAND_INFO_REQ <sub>S</sub> is equal to '1' and the mobile
37		station supports at least 1 band class and band subclass ( if
38		applicable) combination queried by the base station, the
39		mobile station shall set this field to '1'; otherwise, the mobile
40		station shall set this field to '0'.
41		

- 1    NUM\_BAND\_SUBCLASS – Number of band class - band subclass capabilities reported  
2  
3                    If BAND\_SUB\_REP\_INCL is set to '0' or is not included, this  
4                    field shall be omitted; otherwise, the mobile station shall  
5                    include this field and set it as follows:  
6  
7                    If the mobile station supports all candidate band class and  
8                    band subclass (if applicable) combinations queried by the  
9                    base station, the mobile station shall set this field to '0000';  
10                   otherwise, the mobile station shall set this field to the  
11                   number of band class-band subclass capabilities reported.
- 10   If the NUM\_BAND\_SUBCLASS field is included in this message, the mobile station shall  
11   include NUM\_BAND\_SUBCLASS occurrences of the BAND\_SUBCLASS\_SUP field:
- 12   BAND\_SUBCLASS\_SUP – Band class-band subclass supported indicator  
13  
14                    The mobile station shall set this field as specified in section  
15                    2.6.14.1.

1 2.7.1.3.2.6 Authentication Challenge Response Message

2 MSG\_TAG: AUCRM

3

Field	Length (bits)
AUTHU	18

4 AUTHU – Authentication challenge response.

5 The mobile station shall set this field as specified in  
6 2.3.12.1.4.

7

## 1 2.7.1.3.2.7 Status Response Message

2 MSG\_TAG: STRPM

3

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields	$8 \times \text{QUAL\_INFO\_LEN}$

One or more occurrences of the following record:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	$8 \times \text{RECORD\_LEN}$

}

4 QUAL\_INFO\_TYPE - Qualification information type.  
 5 The mobile station shall set this field to the  
 6 QUAL\_INFO\_TYPE field in the corresponding *Status Request*  
 7 *Message*.

8 QUAL\_INFO\_LEN - Qualification information length.  
 9 The mobile station shall set this field to the QUAL\_INFO\_LEN  
 10 field in the corresponding *Status Request Message*.

11 Type-specific fields - Type-specific fields.  
 12 The mobile station shall set these fields to the qualification  
 13 information in the corresponding *Status Request Message*.

14 The mobile station shall include all the records requested in the corresponding *Status*  
 15 *Request Message*. The mobile station shall include one occurrence of the following fields  
 16 for each information record to be included:

17 RECORD\_TYPE - Information record type.  
 18 The mobile station shall set this field to the record type value  
 19 shown in Table 2.7.4-1 corresponding to the type of this  
 20 information record.

21 RECORD\_LEN - Information record length.  
 22 The mobile station shall set this field to the number of octets  
 23 included in the type-specific fields of this information record.

24 Type-specific fields - Type-specific fields.  
 25 The mobile station shall set these fields to the information as  
 26 specified in 2.7.4 for the specific type of records. The mobile  
 27 station shall only specify the information corresponding to  
 28 the included qualification information.  
 29

- 1 2.7.1.3.2.8 TMSI Assignment Completion Message
- 2 MSG\_TAG: TACM
- 3 There are no Layer 3 fields associated with this message.
- 4



- 1 2.7.1.3.2.9 PACA Cancel Message
- 2 MSG\_TAG: PACNM
- 3 There are no Layer 3 fields associated with this message.
- 4

## 1 2.7.1.3.2.10 Extended Status Response Message

2 MSG\_TAG: ESTRPM

3

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields	$8 \times \text{QUAL\_INFO\_LEN}$
NUM_INFO_RECORDS	4

NUM\_INFO\_RECORDS occurrences of the following record:

{ (NUM\_INFO\_RECORDS)

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	$8 \times \text{RECORD\_LEN}$

} (NUM\_INFO\_RECORDS)

4

5 QUAL\_INFO\_TYPE – Qualification information type.

6 The mobile station shall set this field to the  
7 QUAL\_INFO\_TYPE field in the corresponding *Status Request*  
8 *Message*.

9 QUAL\_INFO\_LEN – Qualification information length.

10 The mobile station shall set this field to the QUAL\_INFO\_LEN  
11 field in the corresponding *Status Request Message*.

12 Type-specific fields – Type-specific fields.

13 The mobile station shall set these fields to the qualification  
14 information in the corresponding *Status Request Message*.

15 NUM\_INFO\_RECORDS – Number of information records included.

16 The mobile station shall set this field to the number of  
17 information records which are included. The mobile station  
18 shall include all the records requested in the corresponding  
19 *Status Request Message*.

20 The mobile station shall include one occurrence of the following fields for each information  
21 record which is included:

22 RECORD\_TYPE – Information record type.

23 The mobile station shall set this field to the record type value  
24 shown in Table 2.7.4-1 corresponding to the type of this  
25 information record.

26 RECORD\_LEN – Information record length.

1		The mobile station shall set this field to the number of octets
2		included in the type-specific fields of this information record.
3	Type-specific fields	– Type-specific fields.
4		The mobile station shall set these fields to the information as
5		specified in 2.7.4 for the specific type of records. The mobile
6		station shall only specify the information corresponding to
7		the included qualification information.
8		

## 1 2.7.1.3.2.11 Device Information Message

2 MSG\_TAG: DIM

3

Field	Length (bits)
WLL_DEVICE_TYPE	3
NUM_INFO_RECORDS	5

NUM\_INFO\_RECORDS occurrences of the following record:

{ (NUM\_INFO\_RECORDS)

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

} (NUM\_INFO\_RECORDS)

4

5 WLL\_DEVICE\_TYPE – WLL device type indicator.

6 The mobile station shall set this field to the  
 7 WLL\_DEVICE\_TYPE value shown in Table 2.7.1.3.2.1-3  
 8 corresponding to the mobile station device type.

9 NUM\_INFO\_RECORDS – Number of information records included.

10 The mobile station shall set this field to the number of  
 11 information records which are included.

12 The mobile station shall include one occurrence of the following fields for each information  
 13 record which is included:

14 RECORD\_TYPE – Information record type.

15 The mobile station shall set this field to the record type code  
 16 shown in Table 2.7.4-1 corresponding to the type of this  
 17 information record.

18 RECORD\_LEN – Information record length.

19 The mobile station shall set this field to the number of octets  
 20 in the type-specific fields of this record.

21 Type-specific fields – Type-specific fields.

22 The mobile station shall set these fields as specified in 2.7.4  
 23 for this type of information record.

24

## 1 2.7.1.3.2.12 Security Mode Request Message

2 MSG\_TAG: SMRM

3

Field	Length (bits)
UI_ENC_INCL	1
UI_ENCRYPT_SUP	0 or 8
SIG_ENC_INCL	1
SIG_ENCRYPT_SUP	0 or 8
C_SIG_ENCRYPT_REQ	0 or 1
NEW_SSEQ_H_INCL	1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8
MSG_INT_INFO_INCL	1
SIG_INTEGRITY_SUP_INCL	0 or 1
SIG_INTEGRITY_SUP	0 or 8
SIG_INTEGRITY_REQ	0 or 3

4

5 UI\_ENC\_INCL – User information encryption fields included.

6 The mobile station shall set this field to '1' if the user  
 7 information encryption related fields are included in this  
 8 message; otherwise, the mobile station shall set this field to  
 9 '0'.

10 UI\_ENCRYPT\_SUP – User information encryption supported indicator.

11 If UI\_ENC\_INCL is equal to '1', the mobile station shall  
 12 include this field; otherwise, the mobile station shall omit  
 13 this field. If this field is included, the mobile station shall set  
 14 this field to indicate the supported user information  
 15 encryption algorithms.

16 This field consists of the subfields shown in Table  
 17 2.7.1.3.2.4-9.

18 The mobile station shall set each subfield to '1' if the  
 19 corresponding user information encryption algorithm is  
 20 supported by the mobile station; otherwise, the mobile  
 21 station shall set the subfield to '0'.

22 The mobile station shall set the RESERVED subfield to  
 23 '000000'.

24 SIG\_ENC\_INCL – Signaling encryption fields included.

1			The mobile station shall set this field to '1' if the following two
2			fields related to signaling encryption fields are included in
3			this message; otherwise, the mobile station shall set this field
4			to '0'.
5	SIG_ENCRYPT_SUP	-	Signaling encryption supported indicator.
6			If SIG_ENC_INCL is equal to '1', the mobile station shall
7			include this field; otherwise, the mobile station shall omit
8			this field. If this field is included, the mobile shall set this
9			field to indicate the supported signaling encryption
10			algorithms supported by the mobile station.
11			This field consists of the subfields shown in Table
12			2.7.1.3.2.1-5.
13			If this field is included, the mobile station shall set the
14			subfields as follows:
15			The mobile station shall set the CMEA subfield to '1'.
16			The mobile station shall set each other subfield to '1' if the
17			corresponding signaling encryption algorithm is supported by
18			the mobile station; otherwise, the mobile station shall set the
19			subfield to '0'.
20			The mobile station shall set the RESERVED subfield to
21			'00000'.
22	C_SIG_ENCRYPT_REQ	-	Common channel signaling encryption request indicator.
23			If SIG_ENC_INCL is equal to '1', the mobile station shall
24			include this field; otherwise, the mobile station shall omit
25			this field. If this field is included, the mobile station shall set
26			this field to '1' to request signaling encryption to be turned on
27			for signaling messages sent on f-csch and r-csch, and to '0' to
28			request signaling encryption to be turned off for signaling
29			messages sent on f-csch and r-csch.
30	NEW_SSEQ_H_INCL	-	The NEW_SSEQ included indicator.
31			The mobile station shall set this field to '1' if NEW_SSEQ_H is
32			included in this message; otherwise, the mobile station shall
33			set this field to '0'.
34			If MSG_INTEGRITY_SUP <sub>S</sub> is equal to '0', the mobile station
35			shall set this field to '1' if the mobile station is to include the
36			NEW_SSEQ_H and NEW_SSEQ_H_SIG fields.
37			If MSG_INTEGRITY_SUP <sub>S</sub> is equal to '1', the mobile station
38			shall set this field to '0'.
39	NEW_SSEQ_H	-	The 24-bit value used to initialize the 24 MSB of crypto-sync.
40			If NEW_SSEQ_H_INCL is set to '1', the mobile station shall
41			include this field; otherwise, the mobile station shall omit
42			this field. If this field is included, the mobile station shall set
43			this field to a 24-bit value that will be used as the initial
44			value of the 24 MSB of the crypto-sync for both forward and
45			reverse link message encryption and integrity.

1	NEW_SSEQ_H_SIG	-	The signature of NEW_SSEQ_H
2			If NEW_SSEQ_H is included, the mobile station shall include
3			this field; otherwise, the mobile station shall omit this field. If
4			this field is included, the mobile station shall set this field to
5			the digital signature of the NEW_SSEQ_H computed as
6			described in 2.3.12.4.5.
7	MSG_INT_INFO_INCL	-	Signaling message integrity information included indicator.
8			If MSG_INTEGRITY_SUP <sub>S</sub> is equal to '0', the mobile station
9			shall set this field to '0'; otherwise, the mobile station shall
10			set this field to '1'.
11	SIG_INTEGRITY_SUP_INCL	-	Signaling message integrity information included
12			indicator.
13			If MSG_INT_INFO_INCL is set to '0', the mobile station shall
14			omit this field; otherwise, the mobile station shall include
15			this field and set it as follows:
16			If the mobile station supports other integrity algorithm(s) in
17			addition to the default integrity algorithm, the mobile station
18			shall set this field to '1'; otherwise, the mobile station shall
19			set this field to '0'.
20	SIG_INTEGRITY_SUP	-	Signaling integrity algorithm supported by the mobile station.
21			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
22			mobile station shall set this field as follows; otherwise, the
23			mobile station shall omit this field.
24			The mobile station shall set this field to indicate the
25			supported message integrity algorithm in addition to the
26			default integrity algorithm.
27			This field consists of the subfields shown in Table
28			2.7.1.3.2.1-6.
29			The mobile station shall set each subfield to '1' if the
30			corresponding message integrity algorithm is supported by
31			the mobile station; otherwise, the mobile station shall set the
32			subfield to '0'.
33			The mobile station shall set the RESERVED subfield to
34			'00000000'.
35	SIG_INTEGRITY_REQ	-	Signaling message integrity algorithm requested by the
36			mobile station.
37			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
38			mobile station shall set this field as follows; otherwise, the
39			mobile station shall omit this field.
40			The mobile station shall include this field and set it to the
41			value corresponding to the message integrity algorithm
42			requested as shown in Table 2.7.1.3.2.1-7.
43			

## 2.7.1.3.2.13 Authentication Response Message

MSG\_TAG: AURSPM

Field	Length (bits)
RES	128
SIG_INTEGRITY_SUP_INCL	1
SIG_INTEGRITY_SUP	0 or 8
SIG_INTEGRITY_REQ	0 or 3
NEW_KEY_ID	2
NEW_SSEQ_H	24

RES – The output, RES, of the User Authentication Function.

The mobile station shall set this field to the output, RES, of the function as specified in Figure 2.3.12.5.2-2. If the UIM returns a RES value with length smaller than 128, the mobile station shall store the RES value in the most significant bits of the RES field and pad the least significant bits with '0's.

SIG\_INTEGRITY\_SUP\_INCL – Signaling message integrity information included indicator.

If the mobile station supports other integrity algorithm(s) in addition to the default integrity algorithm, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.



1			
2	SIG_INTEGRITY_SUP	-	Signaling integrity algorithm supported indicator.
3			If SIG_INTEGRITY_SUP_INCL is set to '1', the mobile station
4			shall set this field as follows; otherwise, the mobile station
5			shall omit this field.
6			The mobile station shall set this field to indicate the
7			supported message integrity algorithms in addition to the
8			default integrity algorithm.
9			This field consists of the subfields shown in Table
10			2.7.1.3.2.1-6.
11			The mobile station shall set each subfield to '1' if the
12			corresponding message integrity algorithm is supported by
13			the mobile station; otherwise, the mobile station shall set the
14			subfield to '0'.
15			The mobile station shall set the RESERVED subfield to
16			'00000000'.
17	SIG_INTEGRITY_REQ	-	Signaling message integrity algorithm requested by the
18			mobile station.
19			If SIG_INTEGRITY_SUP_INCL is set to '1', the mobile station
20			shall set this field as follows; otherwise, the mobile station
21			shall omit this field.
22			The mobile station shall include this field and set it to the
23			value corresponding to the message integrity algorithm
24			requested as shown in Table 2.7.1.3.2.1-7.
25	NEW_KEY_ID	-	New key identifier.
26			The mobile station shall set this field as follows:
27		-	If LAST_3G_KEY_ID equals '10', the mobile station shall
28			set this field to '11'.
29		-	If LAST_3G_KEY_ID equals '11', the mobile station shall
30			set this field to '10'.
31	NEW_SSEQ_H	-	The 24-bit value used to initialize the 24 MSB of the crypto-
32			sync.
33			The mobile station shall set this field to a 24-bit value that
34			will be used as the initial value of the 24 MSB of the crypto-
35			sync for both forward and reverse link message integrity.
36			

## 2.7.1.3.2.14 Authentication Resynchronization Message

MSG\_TAG: AURSYNM

Field	Length (bits)
CON_MS_SQN	48
MAC_S	64

CON\_MS\_SQN – The concealed sequence number of the authentication vector.  
The mobile station shall set this field to the output, CON\_MS\_SQN, of the function as specified in Figure 2.3.12.5.2-3.

MAC\_S – Message authentication code for resynchronization.  
The mobile station shall set this field to the output, MAC\_S, of the function as specified in Figure 2.3.12.5.2-3.

## 1 2.7.1.3.2.15 Reconnect Message

2 MSG\_TAG: RCNM

3

Field	Length (bits)
ORIG_IND	1
SYNC_ID_INCL	1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
SERVICE_OPTION	0 or 16
SR_ID	0 or 3
ADD_SERV_INSTANCE_INCL	0 or 1
NUM_ADD_SERV_INSTANCE	0 or 3

NUM\_ADD\_SERV\_INSTANCE occurrences of the following record:

{ (NUM\_ADD\_SERV\_INSTANCE)

ADD_SR_ID	3
-----------	---

} (NUM\_ADD\_SERV\_INSTANCE)

SDB_INCL	0 or 1
NUM_FIELDS	0 or 8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	8
-------------------	---

} (NUM\_FIELDS)

4 ORIG\_IND – Origination indicator

5 If this message is being sent in place of an *Origination*  
6 *Message*, the mobile station shall set this field to '1'; if this  
7 message is being sent in place of a *Page Response Message*,  
8 the mobile station shall set this field to '0'.

9 SYNC\_ID\_INCL – Service Configuration synchronization identifier included  
10 indicator.

11 The mobile station shall set this field to '1' if the SYNC\_ID  
12 field is included in this message; otherwise, the mobile  
13 station shall set this field to '0'.

14 If SYNC\_ID\_SUPPORTED<sub>s</sub> is equal to '0', the mobile station  
15 shall set this field to '0'.

1	SYNC_ID_LEN	-	Service Configuration synchronization identifier length indicator.
2			
3			If the SYNC_ID_INCL field is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
4			
5			
6			The mobile station shall set this field to the length of the SYNC_ID field included in this message.
7			
8	SYNC_ID	-	Service Configuration synchronization identifier.
9			If the SYNC_ID_INCL field is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
10			
11			
12			The mobile station shall set this field to the Service Configuration synchronization identifier corresponding to the stored service configuration.
13			
14			
15	SERVICE_OPTION	-	Service option number.
16			If the SYNC_ID_INCL field is set to '1', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
17			
18			
19			If the ORIG_IND field is set to '1', the mobile station shall set this field to the service option number corresponding to the service being reconnected.
20			
21			
22			If the ORIG_IND field is set to '0', the mobile station shall set this field as follows:
23			
24			
25			• If the mobile station accepts the service option specified by the mobile-station-addressed page, the mobile station shall set this field to the service option number specified in the SERVICE OPTION field of the page record to which the mobile station is responding.
26			
27			
28			
29			
30			▪ If the mobile station does not accept the service option specified by the mobile-station-addressed page to which the mobile station is responding and the mobile station has an alternative service option to request, the mobile station shall set this field to the service option code specified in [30] corresponding to the alternative service option.
31			
32			
33			
34			
35			
36			
37			▪ If the mobile station does not accept the service option specified by the mobile-station-addressed page to which the mobile station is responding and the mobile station does not have an alternative service option to request, the mobile station shall set this field to '0000000000000000' to reject the service option specified by the page record of
38			
39			
40			
41			
42			

1 the *General Page Message* or *Universal Page Message* to  
 2 which the mobile station is responding.

3 SR\_ID – Service reference identifier.

4 If the ORIG\_IND field is set to '0', the mobile station shall  
 5 omit this field; otherwise, the mobile station shall include  
 6 this field and set it as follows.

7 If the SYNC\_ID\_INCL field is set to '0', the mobile station shall  
 8 set this field as follows:

9 o If the service instance provides a service reference  
 10 identifier, the mobile station shall set this field to the  
 11 service reference identifier specified by the service  
 12 instance. If the service instance does not provide a service  
 13 reference identifier, the mobile station shall set this field  
 14 to the smallest unused service reference identifier value  
 15 between 1 and 6 (inclusive).

16 Otherwise, the mobile station shall set this field as follows:

17 o If the mobile station requests the restoration of a single  
 18 service option connection from the stored service  
 19 configuration, the mobile station shall set this field to the  
 20 corresponding service reference identifier

21 o If the mobile station requests the restoration of more than  
 22 one but not all service option connections from the stored  
 23 service configuration, the mobile station shall set this  
 24 field to the service reference identifier corresponding to  
 25 one of the service option connections to be restored.

26 o Otherwise (that is, the mobile station requests the  
 27 restoration of all the service option connections from the  
 28 stored service configuration), the mobile station shall set  
 29 this field to '111'.

30 ADD\_SERV\_INSTANCE\_INCL- Additional service instances included indicator.

31 If the ORIG\_IND field is set to '0' or P\_REV\_IN\_USE<sub>s</sub> is less  
 32 than 11 or if SYNC\_ID\_INCL is set to '0' or if SR\_ID is  
 33 included and set to '111', the mobile station shall omit this  
 34 field; otherwise, the mobile station shall include this field and  
 35 set it as follows:

1 If at least one occurrence of the ADD\_SR\_ID field is included  
2 in this message, the mobile station shall set this field to '1';  
3 otherwise, the mobile station shall set this field to '0'.

4 NUM\_ADD\_SERV\_INSTANCE - Number of additional service instances included.  
5 If ADD\_SERV\_INSTANCE\_INCL is not included or is included  
6 and set to '0', the mobile station shall omit this field;  
7 otherwise, the mobile station shall include this field and set it  
8 to the number of additional service instances included in this  
9 message.

10 If ADD\_SERV\_INSTANCE\_INCL is included and set to '1', the mobile station shall include  
11 NUM\_ADD\_SERV\_INSTANCE occurrences of the following record:

12 ADD\_SR\_ID - Additional service reference identifier.  
13 The mobile station shall set this field to the service reference  
14 identifier corresponding to the service option connection that  
15 the mobile station requests to be restored from the stored  
16 service configuration.

17 SDB\_INCL - Short Data Burst included indicator.  
18 If P\_REV\_IN\_USE<sub>s</sub> is less than eleven, the mobile station  
19 shall omit this field; otherwise, the mobile station shall  
20 include this field and set it as follows:  
21 If a Short Data Burst (i.e., data burst message with burst type  
22 equal to '000110', see [30]) is being included in this message,  
23 the mobile station shall set this field to '1'; otherwise, the  
24 mobile station shall set this field to '0'.  
25 The mobile station shall set this field to '0' if  
26 SDB\_IN\_RCNM\_IND<sub>s</sub> or SDB\_SUPPORTED<sub>s</sub> is equal to '0'.

27 NUM\_FIELDS - Number of characters in this message.  
28 If SDB\_INCL is set to '0', the mobile station shall omit this  
29 field; otherwise, the mobile station shall include this field and  
30 set it as follows:  
31 The mobile station shall set this field to the number of CHAR<sub>i</sub>  
32 fields included in this message.

33 If SDB\_INCL is included and set to '1', the mobile station shall include NUM\_FIELDS  
34 occurrences of the following record:

35 CHAR<sub>i</sub> - Character.  
36 The mobile station shall set these fields to the corresponding  
37 octet of the data burst stream.  
38  
39

## 1 2.7.1.3.2.16 Radio Environment Message

2 MSG\_TAG: REM

Field	Length (bits)
MODE_DISABLED	1
TKZ_MODE_IND	1

3 MODE\_DISABLED - Mode disabled indicator.

4 The mobile station shall set this field to '1' if any of the  
5 following conditions is true:

- 6 • RER\_COUNT is equal to (RER\_MAX\_NUM\_MSG<sub>S</sub> - 1) and  
7 the TKZ\_MODE\_IND field in this message is set to '0', or  
8 • TKZ\_COUNT is equal to (TKZ\_MAX\_NUM\_MSG<sub>S</sub> - 1) and  
9 the TKZ\_MODE\_IND field in this message is set to '1'.

10 Otherwise, the mobile station shall set this field to '0'.

11 TKZ\_MODE\_IND - Tracking zone mode indicator.

12 The mobile station shall set this field to '1' if the *Radio*  
13 *Environment Message* is sent for tracking zone mode;  
14 otherwise, the mobile station shall set this field to '0'.

15

- 1 2.7.1.3.2.17 Call Recovery Request Message
- 2 MSG\_TAG: CRRM
- 3 There are no Layer 3 fields associated with this message.
- 4



## 1 2.7.1.3.2.18 General Extension Message

2 MSG\_TAG: GEM

Field	Length (bits)
NUM_GE_REC	8

NUM\_GE\_REC occurrences of the following record:

{ (NUM\_GE\_REC)

GE_REC_TYPE	8
GE_REC_LEN	8
GE_REC	8 x GE_REC_LEN

} (NUM\_GE\_REC)

MESSAGE_TYPE	8
MESSAGE_REC	variable

3 NUM\_GE\_REC - Number of General Extension Records included in this message.

4 The mobile station shall set this field to the number of general  
 5 extension records included in this message. Mobile station shall  
 6 set this field to a value greater than 0.

7 GE\_REC\_TYPE - Type of General Extension Record.

8 The mobile station shall set this field based on the type of record  
 9 as specified in Table 2.7.1.3.2.17-1.

10 **Table 2.7.1.3.2.17-1. General Extension Record Type**  
 11 **values**

GE_REC_TYPE (binary)	Description
00000000	Supported Band Class - Subclass
00000001-11111111	Reserved

12 GE\_REC\_LEN - Length of the General Extension Record.

13 The mobile station shall set this field to the length in octets of  
 14 the general extension record following the GE\_REC\_LEN field.

15 GE\_REC - General Extension Record.

16 The mobile station shall set this field according to the previous  
 17 occurrence of the GE\_REC\_TYPE in this message. If the  
 18 GE\_REC\_TYPE is set to '00000000' then the mobile station shall  
 19 set the GE\_REC to the following:

20

NUM_BAND_SUBCLASS	0 or 4
-------------------	--------

NUM\_BAND\_SUBCLASS occurrences of the following field:

{ (NUM\_BAND\_SUBCLASS)

BAND_SUBCLASS_SUP	1
-------------------	---

} (NUM\_BAND\_SUBCLASS)

Reserved	0-7
----------	-----

- 1 NUM\_BAND\_SUBCLASS – Number of band class - band subclass capabilities reported
- 2 If the mobile station supports all candidate band class and
- 3 band subclass (if applicable) combinations queried by the
- 4 base station, the mobile station shall set this field to '0000';
- 5 otherwise, the mobile station shall set this field to the
- 6 number of band class-band subclass capabilities reported.
- 7 If the NUM\_BAND\_SUBCLASS field is included in this message, the mobile station shall
- 8 include NUM\_BAND\_SUBCLASS occurrences of the BAND\_SUBCLASS\_SUP field:
- 9 BAND\_SUBCLASS\_SUP – Band class - Band subclass supported indicator
- 10 The mobile station shall set this field as specified in section
- 11 2.6.14.1.
- 12 RESERVED – Reserved bits.
- 13 This field shall contain the number of bits required to make
- 14 the entire GE\_REC field an integer number of octets in
- 15 length. All bits of this field shall be set to zeros.
- 16 MESSAGE\_TYPE – Message type of the message included in the *General*
- 17 *Extension Message*.
- 18 This field shall contain the message type value for the
- 19 message following this field. When transmitting the general
- 20 extension message over r-csch, then mobile station shall set
- 21 the first 2 MSB of this field to '00'. The mobile station shall
- 22 set this field according to [4].
- 23 MESSAGE\_REC – Message extended through the General Extension message.
- 24 The mobile station shall set this field to the message that is
- 25 being extended using the *General Extension Message*.
- 26
- 27

1 2.7.2 r-dsch

2 During Traffic Channel operation, the mobile station sends signaling messages to the base  
3 station using the r-dsch.

4 2.7.2.1 Reserved

5 2.7.2.2 Reserved

6 2.7.2.3 PDU Formats for Messages on r-dsch

7 The messages sent on the r-dsch are summarized in Table 2.7.2.3-1.

8 **Table 2.7.2.3-1. Messages on r-dsch (Part 1 of 2)**

Message Name	MSG_TAG	Section Number	P_REV_IN_USE <sup>4</sup>
<i>Order Message</i>	ORDM	2.7.2.3.2.1	All
<i>Authentication Challenge Response Message</i>	AUCRM	2.7.2.3.2.2	All
<i>Flash With Information Message</i>	FWIM	2.7.2.3.2.3	All
<i>Data Burst Message</i>	DBM	2.7.2.3.2.4	All
<i>Pilot Strength Measurement Message</i>	PSMM	2.7.2.3.2.5	< 7
<i>Power Measurement Report Message</i>	PMRM	2.7.2.3.2.6	All
<i>Send Burst DTMF Message</i>	BDTMFM	2.7.2.3.2.7	All
<i>Status Message (Band Class 0 only)</i>	STM	2.7.2.3.2.8	< 8
<i>Origination Continuation Message</i>	ORCM	2.7.2.3.2.9	All
<i>Handoff Completion Message</i>	HOCM	2.7.2.3.2.10	< 7
<i>Parameters Response Message</i>	PRSM	2.7.2.3.2.11	All
<i>Service Request Message</i>	SRQM	2.7.2.3.2.12	1, ≥ 3
<i>Service Response Message</i>	SRPM	2.7.2.3.2.13	1, ≥ 3
<i>Service Connect Completion Message</i>	SCCM	2.7.2.3.2.14	1, ≥ 3
<i>Service Option Control Message</i>	SOCM	2.7.2.3.2.15	1, ≥ 3
<i>Status Response Message</i>	STRPM	2.7.2.3.2.16	1, ≥ 3
<i>TMSI Assignment Completion Message</i>	TACM	2.7.2.3.2.17	1, ≥ 4
<i>Supplemental Channel Request Message</i>	SCRM	2.7.2.3.2.18	≥ 4

9

10

---

<sup>4</sup> P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.

1

**Table 2.7.2.3-1. Messages on r-dsch (Part 2 of 2)**

<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>P_REV_IN_USE</b>
<i>Candidate Frequency Search Response Message</i>	CFSRSM	2.7.2.3.2.19	≥ 4
<i>Candidate Frequency Search Report Message</i>	CFSRPM	2.7.2.3.2.20	≥ 4
<i>Periodic Pilot Strength Measurement Message</i>	PPSMM	2.7.2.3.2.21	≥ 4
<i>Outer Loop Report Message</i>	OLRM	2.7.2.3.2.22	≥ 6
<i>Resource Request Message</i>	RRM	2.7.2.3.2.23	≥ 6
<i>Resource Request Mini Message</i>	RRMM	2.7.2.3.2.24	≥ 6
<i>Extended Release Response Message</i>	ERRM	2.7.2.3.2.25	≥ 6
<i>Extended Release Response Mini Message</i>	ERRMM	2.7.2.3.2.26	≥ 6
<i>Pilot Strength Measurement Mini Message</i>	PSMMM	2.7.2.3.2.27	≥ 6
<i>Supplemental Channel Request Mini Message</i>	SCRMM	2.7.2.3.2.28	≥ 6
<i>Resource Release Request Message</i>	RRRM	2.7.2.3.2.29	≥ 6
<i>Resource Release Request Mini Message</i>	RRRMM	2.7.2.3.2.30	≥ 6
<i>User Zone Update Request Message</i>	UZURM	2.7.2.3.2.31	≥ 6
<i>Enhanced Origination Message</i>	EOM	2.7.2.3.2.32	≥ 7
<i>Extended Flash With Information Message</i>	EFWIM	2.7.2.3.2.33	≥ 7
<i>Extended Pilot Strength Measurement Message</i>	EPSMM	2.7.2.3.2.34	≥ 7
<i>Extended Handoff Completion Message</i>	EHOCM	2.7.2.3.2.35	≥ 7
<i>Security Mode Request Message</i>	SMRM	2.7.2.3.2.36	≥ 7
<i>Call Cancel Message</i>	CLCM	2.7.2.3.2.37	≥ 7
<i>Device Information Message</i>	DIM	2.7.2.3.2.38	≥ 7
<i>Base Station Status Request Message</i>	BSSREQM	2.7.2.3.2.39	≥ 7
<i>CDMA Off Time Report Message</i>	COTRM	2.7.2.3.2.40	≥ 8
<i>Authentication Response Message</i>	AURSPM	2.7.2.3.2.41	≥ 10
<i>Authentication Resynchronization Message</i>	AURSYNM	2.7.2.3.2.42	≥ 10
<i>ITBSPM Request Message</i>	ITBSPMRM	2.7.2.3.2.43	≥ 11
<i>Handoff Supplementary Information Notification Message</i>	HOSINM	2.7.2.3.2.44	≥ 12
<i>General Extension Message</i>	GEM	2.7.1.3.2.45	≥ 12

2

3

- 1 2.7.2.3.1 Reserved
- 2 2.7.2.3.2 Message Body Contents
- 3

## 1 2.7.2.3.2.1 Order Message

2 MSG\_TAG: ORDM

3

Field	Length (bits)
ORDER	6
ADD_RECORD_LEN	3
Order-specific fields (if used)	$8 \times \text{ADD\_RECORD\_LEN}$
CON_REF_INCL	0 or 1
CON_REF	0 or 8

4

5 ORDER – Order code.

6 The mobile station shall set this field to the ORDER code.  
7 See 2.7.3.

8 ADD\_RECORD\_LEN – Additional record length.

9 The mobile station shall set this field to the number of octets  
10 in the order-specific fields included in this message.

11 Order-specific fields – Order-specific fields.

12 The mobile station shall include order-specific fields as  
13 specified in 2.7.3.

14 CON\_REF\_INCL – Connection reference included indicator.

15 If the order carried by this message is not a Call Control order  
16 (2.6.10), the mobile station shall omit this field; otherwise,  
17 the mobile station shall include this field and set it as  
18 follows:19 The mobile station shall set this field to '1' if the connection  
20 reference field is included in this message; otherwise, it shall  
21 set this field to '0'.

22 CON\_REF – Connection reference.

23 If the CON\_REF\_INCL field is not included, or is included but  
24 is set to '0', the mobile station shall omit this field; otherwise,  
25 the mobile station shall include this field and shall set it to  
26 the value of the connection reference assigned to the service  
27 option connection of the call, to which this message  
28 corresponds.  
29

1    2.7.2.3.2.2 Authentication Challenge Response Message

2    MSG\_TAG: AUCRM

3

Field	Length (bits)
AUTHU	18

4

5            AUTHU    –    Authentication challenge response.

6                            The mobile station shall set this field as specified in

7                            2.3.12.1.4.

8

## 1 2.7.2.3.2.3 Flash With Information Message

2 MSG\_TAG: FWIM

3

Field	Length (bits)
-------	---------------

Zero or more occurrences of the following record:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	$8 \times \text{RECORD\_LEN}$

}

4

5 The mobile station shall include one occurrence of the following record for each  
6 information record to be included:

7 RECORD\_TYPE – Information record type.

8 The mobile station shall set this field to the record type code  
9 shown in Table 2.7.4-1 corresponding to the type of this  
10 information record.

11 RECORD\_LEN – Information record length.

12 The mobile station shall set this field to the number of octets  
13 in the type-specific fields of this record.

14 Type-specific fields – Type-specific fields.

15 The mobile station shall set these fields as specified in 2.7.4  
16 for this type of information record.

17



## 1 2.7.2.3.2.4 Data Burst Message

2 MSG\_TAG: DBM

3

Field	Length (bits)
MSG_NUMBER	8
BURST_TYPE	6
NUM_MSGS	8
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	8
-------------------	---

} (NUM\_FIELDS)

4

5 MSG\_NUMBER – Message number within the data burst stream.

6 The mobile station shall set this field to the number of this  
7 message within the data burst stream.

8 BURST\_TYPE – Data burst type.

9 The mobile station shall set the value of this field for the type  
10 of this data burst as defined in [30]. If the mobile station sets  
11 this field equal to '111110', it shall set the first two CHAR<sub>i</sub>  
12 fields of this message equal to  
13 EXTENDED\_BURST\_TYPE\_INTERNATIONAL as described in  
14 the definition of CHAR<sub>i</sub> below. If the mobile station sets this  
15 field equal to '111111', it shall set the first two CHAR<sub>i</sub> fields of  
16 this message equal to the EXTENDED BURST TYPE as  
17 described in the definition of CHAR<sub>i</sub> below.

18 NUM\_MSGS – Number of messages in the data burst stream.

19 The mobile station shall set this field to the number of  
20 messages within this data burst stream.

21 NUM\_FIELDS – Number of characters in this message.

22 The mobile station shall set this field to the number of CHAR<sub>i</sub>  
23 fields included in this message.

24 CHAR<sub>i</sub> – Character.

25 The mobile station shall include NUM\_FIELDS occurrences of  
26 this field. The mobile station shall set these fields to the  
27 corresponding octet of the data burst stream.

If the BURST\_TYPE field of this message is equal to '111110', the first two CHARi octets shall represent a 16 bit EXTENDED\_BURST\_TYPE\_INTERNATIONAL field, which is encoded as shown below. The first ten bits of this field contain a binary mapping of the Mobile Country Code (MCC) associated with the national standards organization administering the use of the remaining octets of the message. Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the EXTENDED\_BURST\_TYPE\_INTERNATIONAL field shall specify the COUNTRY\_BURST\_TYPE. The mobile station shall set the value of the COUNTRY\_BURST\_TYPE according to the type of this data burst as defined in standards governed by the country where this data burst type is to be used.

Field	Length (bits)
Mobile Country Code	10
COUNTRY_BURST_TYPE	6
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$

If the BURST TYPE field of this message is equal to '111111', the first two CHARi octets shall represent a single, 16 bit, EXTENDED BURST TYPE field, as shown below. The mobile station shall set the value of the EXTENDED BURST TYPE according to the type of this data burst as defined in [30].

Field	Length (bits)
EXTENDED_BURST_TYPE (first two CHARi fields)	16
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$

## 2.7.2.3.2.5 Pilot Strength Measurement Message

MSG\_TAG: PSMM

Field	Length (bits)
REF_PN	9
PILOT_STRENGTH	6
KEEP	1

Zero or more occurrences of the following record:

{

PILOT_PN_PHASE	15
PILOT_STRENGTH	6
KEEP	1

}

REF\_PN – Time reference PN sequence offset.

The mobile station shall set this field to the PN sequence offset of the pilot used by the mobile station to derive its time reference, relative to the zero offset pilot PN sequence in units of 64 PN chips.

PILOT\_STRENGTH – Pilot strength in dB.

The mobile station shall set this field to

$$\lfloor -2 \times 10 \log_{10} PS \rfloor,$$

where PS is the strength of the pilot used by the mobile station to derive its time reference (see [2]), measured as specified in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less than 0, the mobile station shall set this field to '000000'. If this value is greater than '111111', the mobile station shall set this field to '111111'.

KEEP – Keep pilot indicator.

If the handoff drop timer (see 2.6.6.2.3) corresponding to the pilot used by the mobile station to derive its time reference (see [2]) has expired, the mobile station shall set this field to '0'; otherwise, the mobile station shall set this field to '1'.

If P\_REV\_IN\_USE<sub>s</sub> is less than or equal to three, the mobile station shall include one occurrence of the three-field record given below for each pilot in the Active Set and for each Candidate Set pilot reported (the number of Candidate Set pilots reported shall not exceed 5), other than the pilot identified by the REF\_PN field. If P\_REV\_IN\_USE<sub>s</sub> is greater than

three and  $\text{SOFT\_SLOPE}_s$  is equal to '000000', the mobile station shall include one occurrence of the three-field record given below for each pilot in the Active Set and for each pilot in the Candidate Set, other than the pilot identified by the REF\_PN field. If  $\text{P\_REV\_IN\_USE}_s$  is greater than three and  $\text{SOFT\_SLOPE}_s$  is not equal to '000000', the mobile station shall include one occurrence of the three-field record given below for each pilot in the Active Set, for each pilot in the Candidate Set whose strength exceeds  $\text{T\_ADD}$ , and shall also include one occurrence of the three-field record given below for each pilot in the Candidate Set whose strength satisfies the following inequality:

$$10 \times \log_{10} \text{PS} > \frac{\text{SOFT\_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} \text{PS}_i + \frac{\text{ADD\_INTERCEPT}_s}{2}$$

where the summation is performed over all pilots currently in the Active Set. The mobile station shall not include these fields for the pilot identified by the REF\_PN field.

The mobile station shall order any occurrences of the three-field record given below which correspond to pilots in the Active Set such that they occur before any occurrences of the three-field record given below which correspond to pilots in the Candidate Set.

**PILOT\_PN\_PHASE** – Pilot measured phase.

The mobile station shall set this field to the phase of the pilot PN sequence relative to the zero offset pilot PN sequence of this pilot, in units of one PN chip, as specified in 2.6.6.2.4.

**PILOT\_STRENGTH** – Pilot strength in dB.

The mobile station shall set this field to

$$\lfloor -2 \times 10 \log_{10} \text{PS} \rfloor,$$

where PS is the strength of this pilot, measured as specified in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} \text{PS} \rfloor$ ) is less than 0, the mobile station shall set this field to '000000'. If this value is greater than '111111', the mobile station shall set this field to '111111'.

**KEEP** – Keep pilot indicator.

If the handoff drop timer (see 2.6.6.2.3) corresponding to this pilot has expired, the mobile station shall set this field to '0'; otherwise, the mobile station shall set this field to '1'.

## 1 2.7.2.3.2.6 Power Measurement Report Message

2 MSG\_TAG: PMRM

3

Field	Length (bits)
ERRORS_DETECTED	5
PWR_MEAS_FRAMES	10
LAST_HDM_SEQ	2
NUM_PILOTS	4

NUM\_PILOTS occurrences of the following field:

{ (NUM\_PILOTS)

PILOT_STRENGTH	6
----------------	---

} (NUM\_PILOTS)

DCCH_PWR_MEAS_INCL	1
DCCH_PWR_MEAS_FRAMES	0 or 10
DCCH_ERRORS_DETECTED	0 or 5
SCH_PWR_MEAS_INCL	1
SCH_ID	0 or 1
SCH_PWR_MEAS_FRAMES	0 or 16
SCH_ERRORS_DETECTED	0 or 10

4

5 ERRORS\_DETECTED – Number of detected bad frames.

6 When the Forward Fundamental Channel is assigned, the  
 7 mobile station shall set this field to the number of bad frames  
 8 detected (BAD\_FRAMES<sub>S</sub>, see 2.6.4.1.1] on the Forward  
 9 Fundamental Channel.

10 If P\_REV\_IN\_USE<sub>S</sub> is greater than or equal to six and only the  
 11 Forward Dedicated Control Channel is assigned, the mobile  
 12 station shall set this field to the number of bad frames  
 13 detected on the Forward Dedicated Control Channel  
 14 (DCCH\_BAD\_FRAMES<sub>S</sub>, see 2.6.4.1.1].

15 If the number of bad frames received on this channel within  
 16 the measurement period is less than or equal to 31, the  
 17 mobile station shall set this field to that number. If that  
 18 number exceeds 31, the mobile station shall set this field to  
 19 '11111'.

1	PWR_MEAS_FRAMES	-	Number of power measurement frames.
2			When the Forward Fundamental Channel is assigned, the
3			mobile station shall set this field to the number of frames
4			received on the Forward Fundamental Channel within the
5			measurement period (TOT_FRAMES <sub>S</sub> , see 2.6.4.1.1).
6			If P_REV_IN_USE <sub>S</sub> is greater than or equal to six and only the
7			Dedicated Control Channel is assigned, the mobile station
8			shall set this field to the number of frames received on the
9			Dedicated Control Channel (DCCH_TOT_FRAMES <sub>S</sub> , see
10			2.6.4.1.1).
11	LAST_HDM_SEQ	-	<i>Extended Handoff Direction Message</i> or a <i>General Handoff</i>
12			<i>Direction Message</i> , or <i>Universal Handoff Direction Message</i>
13			sequence number.
14			If an <i>Extended Handoff Direction Message</i> , a <i>General Handoff</i>
15			<i>Direction Message</i> , or <i>Universal Handoff Direction Message</i>
16			has been received during this call, the mobile station shall
17			set this field to the value of the HDM_SEQ field from the
18			<i>Extended Handoff Direction Message</i> , the <i>General Handoff</i>
19			<i>Direction Message</i> or the <i>Universal Handoff Direction Message</i>
20			that determined the current Active Set. If no <i>Extended</i>
21			<i>Handoff Direction Message</i> , <i>General Handoff Direction</i>
22			<i>Message</i> , or <i>Universal Handoff Direction Message</i> has been
23			received during this call, the mobile station shall set this field
24			to '11'.
25	NUM_PILOTS	-	Number of pilots reported.
26			The mobile station shall set this field to the number of pilots
27			in the current Active Set.
28	PILOT_STRENGTH	-	Pilot strength in dB.
29			The mobile station shall include one occurrence of this field
30			for each pilot in the Active Set. If the Active Set contains
31			more than one pilot, the mobile station shall include the pilot
32			strengths in the same order as in the <i>Extended Channel</i>
33			<i>Assignment Message</i> , <i>Extended Handoff Direction Message</i> ,
34			<i>General Handoff Direction Message</i> or the <i>Universal Handoff</i>
35			<i>Direction Message</i> that determined the current Active Set.
36			The mobile station shall set each occurrence of this field to
37			$\lfloor -2 \times 10 \log_{10} PS \rfloor$ ,
38			where PS is the strength of the pilot, measured as specified in
39			2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less than 0, the
40			mobile station shall set this field to '000000'. If this value is
41			greater than '111111', the mobile station shall set this field to
42			'111111'.
43	DCCH_PWR_MEAS_INCL	-	Forward Dedicated Control Channel power measurement
44			included.

1		If both Forward Fundamental Channel and Forward
2		Dedicated Control Channel are assigned, the mobile station
3		shall set this field equal to '1'; otherwise, the mobile shall set
4		this field to '0'.
5	DCCH_PWR_MEAS_FRAMES	- Number of received Dedicated Control Channel
6		frames.
7		If DCCH_PWR_MEAS_INCL is set to '0', the mobile station
8		shall omit this field; otherwise, the mobile station shall set
9		this field to the number of frames received on the Dedicated
10		Control Channel within the measurement period
11		(DCCH_TOT_FRAMES <sub>s</sub> , see 2.6.4.1.1).
12	DCCH_ERRORS_DETECTED	- Number of detected bad Dedicated Control Channel
13		frames.
14		If DCCH_PWR_MEAS_INCL is set to '0', the mobile station
15		shall omit this field; otherwise, the mobile station shall set
16		this field to the number of bad frames
17		(DCCH_BAD_FRAMES <sub>s</sub> ) detected on the Forward Dedicated
18		Control Channel.
19		If DCCH_BAD_FRAMES <sub>s</sub> exceeds 31, the mobile station shall
20		set this field to '11111'; otherwise, the mobile station shall set
21		this field to DCCH_BAD_FRAMES <sub>s</sub> [see 2.6.4.1.1).
22	SCH_PWR_MEAS_INCL	- Supplemental Channel power measurement included
23		indicator.
24		If FOR_SCH_FER_REP <sub>s</sub> is set to '1' and this message is to
25		report the frame counts at the end of the burst on an
26		assigned Supplemental Channel, the mobile station shall set
27		this field to '1'; otherwise, the mobile station shall set this
28		field to
29	SCH_ID	- Forward Supplemental Channel identifier.
30		If the SCH_PWR_MEAS_INCL is set to '0', the mobile station
31		shall omit this field; otherwise, the mobile shall set this field
32		to the Identifier of the Forward Supplemental Channel of
33		which the frame counts are being reported in this message.
34	SCH_PWR_MEAS_FRAMES	- Number of received Supplemental Channel frames.
35		If SCH_PWR_MEAS_INCL is set to '0', the mobile station shall
36		omit this field; otherwise, the mobile station shall set this
37		field to the total number of frames (SCH_TOT_FRAMES <sub>s</sub> )
38		received during the burst duration on the Supplemental
39		Channel specified by SCH_ID. If this measurement is greater
40		than or equal to 2 <sup>16</sup> - 1, the mobile station shall set this field
41		to '1111111111111111'.
42	SCH_ERRORS_DETECTED	- Number of detected bad Supplemental Channel frames.

1 If SCH\_PWR\_MEAS\_INCL is set to '0', the mobile station shall  
2 omit this field; otherwise, the mobile station shall set this  
3 field to the number of bad frame detected on the Forward  
4 Supplemental Channel of the SCH\_ID for the duration of the  
5 forward burst on this channel.  
6  
7 If the number of bad frames (SCH\_BAD\_FRAMES<sub>S</sub>) detected  
8 on the SCH\_ID Supplemental Channel during the burst is  
9 greater than 1023, the mobile station shall set this field to  
10 '111111111'.



## 1 2.7.2.3.2.7 Send Burst DTMF Message

2 MSG\_TAG: BDTMFM

3

Field	Length (bits)
NUM_DIGITS	8
DTMF_ON_LENGTH	3
DTMF_OFF_LENGTH	3

NUM\_DIGITS occurrences of the following field:

{ (NUM\_DIGITS)

DIGIT <sub>i</sub>	4
--------------------	---

} (NUM\_DIGITS)

CON_REF_INCL	1
CON_REF	0 or 8

4

5 NUM\_DIGITS – Number of DTMF digits.

6 The mobile station shall set this field to the number of DTMF  
7 digits included in this message.

8 DTMF\_ON\_LENGTH – DTMF pulse width code.

9 The mobile station shall set this field to the  
10 DTMF\_ON\_LENGTH value shown in Table 2.7.2.3.2.7-1  
11 corresponding to the requested width of DTMF pulses to be  
12 generated by the base station.

13 **Table 2.7.2.3.2.7-1. Recommended DTMF Pulse Width**

DTMF_ON_LENGTH Field (binary)	Recommended Pulse Width
000	95 ms
001	150 ms
010	200 ms
011	250 ms
100	300 ms
101	350 ms
All other DTMF_ON_LENGTH codes are reserved.	

14

DTMF\_OFF\_LENGTH – DTMF inter-digit interval code.  
 The mobile station shall set this field to the DTMF\_OFF\_LENGTH value shown in Table 2.7.2.3.2.7-2 corresponding to the requested minimum interval between DTMF pulses to be generated by the base station.

**Table 2.7.2.3.2.7-2. Recommended Minimum Inter-digit Interval**

DTMF_OFF_LENGTH Field (binary)	Recommended Minimum Inter-digit Interval
000	60 ms
001	100 ms
010	150 ms
011	200 ms
All other DTMF_OFF_LENGTH codes are reserved.	

DIGIT<sub>i</sub> – DTMF digit.  
 The mobile station shall include one occurrence of this field for each DTMF digit to be generated by the base station. The mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit.

CON\_REF\_INCL – Connection reference included indicator.  
 The mobile station shall set this field to '1' if the connection reference field is included in this message; otherwise, it shall set this field to '0'.

CON\_REF – Connection reference.  
 If the CON\_REF\_INCL field is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it to the value of the connection reference assigned to the service option connection of the call, to which this message corresponds.

1    2.7.2.3.2.8 Status Message

2    MSG\_TAG: STM

3

Field	Length (bits)
RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

4

5            RECORD\_TYPE    –    Information record type.  
6                                    The mobile station shall set this field to the record type value  
7                                    shown in Table 2.7.4-1 corresponding to the type of this  
8                                    information record.

9            RECORD\_LEN    –    Information record length.  
10                                   The mobile station shall set this field to the number of octets  
11                                   included in the type-specific fields of this information record.

12          Type-specific fields    –    Type-specific fields.  
13                                   The mobile station shall set these fields as specified in 2.7.4  
14                                   for this type of record.  
15

## 2.7.2.3.2.9 Origination Continuation Message

MSG\_TAG: ORCM

Field	Length (bits)
DIGIT_MODE	1
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	4 or 8
-------------------	--------

} (NUM\_FIELDS)

Zero or more occurrences of the following record:

{

RECORD TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

}

DIGIT\_MODE – Digit mode indicator.

The mobile station shall set this field to the DIGIT\_MODE value from the *Origination Message* for which this message is a continuation.

NUM\_FIELDS – Number of dialed digits in this message.

The mobile station shall set this field to the number of dialed digits included in this message.

CHAR<sub>i</sub> – A dialed digit or character.

The mobile station shall include NUM\_FIELDS occurrences of this field. The mobile station shall include occurrences of this field for all dialed digits after those sent in the *Origination Message* of which this message is a continuation. If the DIGIT\_MODE field is set to '0', the mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the DIGIT\_MODE field is set to '1', the mobile station shall set each occurrence of this field to the ASCII representation corresponding to the dialed digit, as specified in [9], with the most significant bit set to '0'.

If the MORE\_RECORDS field in the last *Origination Message*, of which this message is a continuation, is set to '1', the mobile station shall include one or more occurrences of the following three-field record; otherwise, the mobile station shall not include the following record.

1	RECORD_TYPE	-	Information record type.
2			The mobile station shall set this field to the record type value
3			shown in Table 2.7.4-1.
4			The mobile station shall not include the record type for QoS
5			Parameters information record if MOB_QOS <sub>S</sub> is equal to '0'.
6	RECORD_LEN	-	Information record length.
7			The mobile station shall set this field to the number of octets
8			in the type-specific fields included in this record.
9	Type-specific fields	-	Type-specific fields.
10			The mobile station shall include type-specific fields as
11			specified in 2.7.4.
12			

2.7.2.3.2.10 Handoff Completion Message

MSG\_TAG: HOCM

Field	Length (bits)
LAST_HDM_SEQ	2

One or more occurrences of the following field:

{

PILOT_PN	9
----------	---

}

LAST\_HDM\_SEQ – *Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message* sequence number.

The mobile station shall set this field to the value of the HDM\_SEQ field from the *Extended Handoff Direction Message, General Handoff Direction Message, or the Universal Handoff Direction Message* that determined the current Active Set.

PILOT\_PN – Pilot PN sequence offset.

The mobile station shall include one occurrence of this field for each pilot in the current Active Set. The mobile station shall set this field to the pilot PN sequence offset, relative to the zero offset pilot PN sequence in units of 64 PN chips, for this pilot. If the Active Set contains more than one pilot, the mobile station shall include the pilot offsets in the same order as in the *Extended Handoff Direction Message, the General Handoff Direction Message, or the Universal Handoff Direction Message* that determined the current Active Set.

## 1 2.7.2.3.2.11 Parameters Response Message

2 MSG\_TAG: PRSM

3

Field	Length (bits)
-------	---------------

One or more occurrences of the following record:

{

PARAMETER_ID	16
PARAMETER_LEN	10
PARAMETER	0 or PARAMETER_LEN + 1

}

4

5 The mobile station shall include one occurrence of the following three-field record for each  
6 occurrence of the PARAMETER\_ID field in the Forward Traffic Channel *Retrieve Parameters*  
7 *Message* to which this message is a response. See Annex E.

8       PARAMETER\_ID    – Parameter identification.

9                        The mobile station shall set this field to the value of the  
10       PARAMETER\_ID field for this parameter from the *Retrieve*  
11       *Parameters Message* to which this message is a response.

12       PARAMETER\_LEN   – Parameter length.

13                        The mobile station shall set this field to the length shown in  
14       Table E-1 corresponding to this PARAMETER\_ID.

15                        If the mobile station is unable to return the value of this  
16       parameter, or if the parameter identification is unknown, the  
17       mobile station shall set this field to '11111111'.

18       PARAMETER       – Parameter value.

19                        The mobile station shall set this field equal to the value of the  
20       parameter shown in Table E-1 corresponding to the  
21       PARAMETER\_ID field of the record.

22                        If the mobile station is unable to return the value of this  
23       parameter, or if the parameter identification is unknown, the  
24       mobile station shall omit this field.

25

## 2.7.2.3.2.12 Service Request Message

MSG\_TAG: SRQM

Field	Length (bits)
SERV_REQ_SEQ	3
REQ_PURPOSE	4
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN

SERV\_REQ\_SEQ – Service request sequence number.

The mobile station shall set this field to the service request sequence number pertaining to this request message as specified in 2.6.4.1.2.1.1.

REQ\_PURPOSE – Request purpose.

The mobile station shall set this field to the appropriate REQ\_PURPOSE code from Table 2.7.2.3.2.12-1 to indicate the purpose of the message.

**Table 2.7.2.3.2.12-1. REQ\_PURPOSE Codes**

REQ_PURPOSE (binary)	Meaning
0000	Indicates that the purpose of the message is to accept a proposed service configuration.
0001	Indicates that the purpose of the message is to reject a proposed service configuration.
0010	Indicates that the purpose of the message is to propose a service configuration.
All other REQ_PURPOSE codes are reserved.	



1		
2	RECORD_TYPE	- Information record type.
3		If the REQ_PURPOSE code is set to '0010', the mobile station
4		shall include this field and set it as follows; otherwise, the
5		mobile station shall omit this field.
6		The mobile station shall set this field to the record type value
7		shown in Table 2.7.4-1 corresponding to the Service
8		Configuration information record.
9	RECORD_LEN	- Information record length.
10		If the REQ_PURPOSE code is set to '0010', the mobile station
11		shall include this field and set it as follows; otherwise, the
12		mobile station shall omit this field.
13		The mobile station shall set this field to the number of octets
14		included in the type-specific fields of the Service
15		Configuration information record.
16	Type-specific fields	- Type-specific fields.
17		If the REQ_PURPOSE code is set to '0010', the mobile station
18		shall include this field and set it as follows; otherwise, the
19		mobile station shall omit this field.
20		The mobile station shall set these fields as specified in 3.7.5.7
21		for the Service Configuration information record.
22		

## 2.7.2.3.2.13 Service Response Message

MSG\_TAG: SRPM

Field	Length (bits)
SERV_REQ_SEQ	3
RESP_PURPOSE	4
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN

SERV\_REQ\_SEQ – Service request sequence number.

The mobile station shall set this field to the value of the SERV\_REQ\_SEQ field of the *Service Request Message* to which it is responding.

RESP\_PURPOSE – Response purpose.

The mobile station shall set this field to the appropriate RESP\_PURPOSE code from Table 2.7.2.3.2.13-1 to indicate the purpose of the message.

**Table 2.7.2.3.2.13-1. RESP\_PURPOSE Codes**

RESP_PURPOSE (binary)	Meaning
0000	Indicates that the purpose of the message is to accept a proposed service configuration.
0001	Indicates that the purpose of the message is to reject a proposed service configuration.
0010	Indicates that the purpose of the message is to propose a service configuration.
All other RESP_PURPOSE codes are reserved.	

1			
2	RECORD_TYPE	-	Information record type.
3			If the RSP_PURPOSE code is set to '0010', the mobile station
4			shall include this field and set it as follows; otherwise, the
5			mobile station shall omit this field.
6			The mobile station shall set this field to the record type value
7			shown in Table 2.7.4-1 corresponding to the Service
8			Configuration information record.
9	RECORD_LEN	-	Information record length.
10			If the RSP_PURPOSE code is set to '0010', the mobile station
11			shall include this field and set it as follows; otherwise, the
12			mobile station shall omit this field.
13			The mobile station shall set this field to the number of octets
14			included in the type-specific fields of the Service
15			Configuration information record.
16	Type-specific fields	-	Type-specific fields.
17			If the RSP_PURPOSE code is set to '0010', the mobile station
18			shall include this field and set it as follows; otherwise, the
19			mobile station shall omit this field.
20			The mobile station shall set these fields as specified in 3.7.5.7
21			for the Service Configuration information record.
22			

## 1 2.7.2.3.2.14 Service Connect Completion Message

2 MSG\_TAG: SCCM

3

Field	Length (bits)
RESERVED	1
SERV_CON_SEQ	3

4

5 RESERVED Reserved bit.

6 The mobile station shall set this field to '0'.

7 SERV\_CON\_SEQ – Service connect sequence number.

8 The mobile station shall set this field to the value of the  
9 SERV\_CON\_SEQ field of the *Service Connect Message* to  
10 which it is responding.

11

1 2.7.2.3.2.15 Service Option Control Message

2 MSG\_TAG: SOCM

3

Field	Length (bits)
CON_REF	8
SERVICE_OPTION	16
RESERVED	7
CTL_REC_LEN	8
Type-specific fields	8 × CTL_REC_LEN

4

5           CON\_REF    –   Service option connection reference.  
6                            The mobile station shall set this field to the reference for the  
7                            target service option (see 2.6.4.1.2).

8           SERVICE\_OPTION   –   Service option.  
9                            The mobile station shall set this field to the service option in  
10                           use with the service option connection.

11           RESERVED   –   Reserved bits.  
12                            The mobile station shall set this field to '00000000'.

13           CTL\_REC\_LEN   –   Control record length.  
14                            The mobile station shall set this field to the number of octets  
15                           included in the type-specific fields of this service option  
16                           control record.

17           Type-specific fields   –   Type-specific fields.  
18                            The mobile station shall set these fields as specified by the  
19                           requirements for the service option.  
20

## 2.7.2.3.2.16 Status Response Message

MSG\_TAG: STRPM

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields.	$8 \times \text{QUAL\_INFO\_LEN}$

One or more occurrences of the following record:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	$8 \times \text{RECORD\_LEN}$

}

QUAL\_INFO\_TYPE – Qualification information type.

The mobile station shall set this field to the QUAL\_INFO\_TYPE field in the corresponding *Status Request Message*.

QUAL\_INFO\_LEN – Qualification information length.

The mobile station shall set this field to the QUAL\_INFO\_LEN field in the corresponding *Status Request Message*.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields to the qualification information in the corresponding *Status Request Message*.

The mobile station shall include all the records requested in the corresponding *Status Request Message*. The mobile station shall include one occurrence of the following fields for each information record that is included:

RECORD\_TYPE – Information record type.

The mobile station shall set this field to the record type value shown in Table 2.7.4-1 corresponding to the type of this information record.

RECORD\_LEN – Information record length.

The mobile station shall set this field to the number of octets included in the type-specific fields of this information record.

- 1       Type-specific fields    –   Type-specific fields.  
2  
3       The mobile station shall set these fields as specified in 2.7.4  
4       for this type of record, according to the mobile station's  
5       capabilities under the qualification information included in  
6       this message.

- 1 2.7.2.3.2.17 TMSI Assignment Completion Message
- 2 MSG\_TAG: TACM
- 3 There are no Layer 3 fields associated with this message.
- 4



## 1 2.7.2.3.2.18 Supplemental Channel Request Message

2 MSG\_TAG: SCRM

3

Field	Length (bits)
SIZE_OF_REQ_BLOB	4
REQ_BLOB	$8 \times \text{SIZE\_OF\_REQ\_BLOB}$
USE_SCRM_SEQ_NUM	1
SCRM_SEQ_NUM	0 or 4
REF_PN	0 or 9
PILOT_STRENGTH	0 or 6
NUM_ACT_PN	0 or 3

NUM\_ACT\_PN occurrences of the following record:

{ (NUM\_ACT\_PN)

ACT_PN_PHASE	15
ACT_PILOT_STRENGTH	6

} (NUM\_ACT\_PN)

NUM_NGHBR_PN	0 or 3
--------------	--------

NUM\_NGHBR\_PN occurrences of the following record:

{ (NUM\_NGHBR\_PN)

NGHBR_PN_PHASE	15
NGHBR_PILOT_STRENGTH	6

} (NUM\_NGHBR\_PN)

REF_PILOT_REC_INCL	0 or 1
REF_PILOT_REC_TYPE	0 or 3

(continues on next page)

4

**1**

Field	Length (bits)
REF_RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$

NUM\_ACT\_PN occurrences of the following record:

$\{ (NUM\_ACT\_PN)$

PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$

} (NUM\_ACT\_PN)

NUM\_NGHR\_PN occurrences of the following record:

$\{ (NUM\_NGHBR\_PN)$

PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$

} (NUM\_NGHR\_PN)

2

3     **SIZE\_OF\_REQ\_BLOB**     –     Size of the request information block of bytes (REQ\_BLOB).  
4  
5     The mobile station shall set this field to the number of bytes  
6     in the Reverse Supplemental Code Channel or the Reverse  
   Supplemental Channel request block of bytes (REQ\_BLOB).

7	REQ_BLOB	–	Reverse Supplemental Code Channel	or	Reverse
8	Supplemental Channel request block of bytes.				

9                   The mobile station shall include information in this field  
10                  containing the parameters that specify the characteristics of  
11                  the Reverse Supplemental Code Channels or the Reverse  
12                  Supplemental Channel request. The mobile station shall set  
13                  this field in accordance with the connected Service Option.

14 USE\_SCRM\_SEQ\_NUM - Use *Supplemental Channel Request Message* sequence  
15 number indicator.

16 The mobile station shall set this field to '1' if the  
17 *Supplemental Channel Request Message* sequence number is  
18 included in this message; otherwise, the mobile station shall  
19 set this field to '0'.

20      SCRM\_SEQ\_NUM      –      *Supplemental Channel Request Message* sequence number.

1			If USE_SCRM_SEQ_NUM is set to '1', the mobile station shall
2			set this field to the <i>Supplemental Channel Request Message</i>
3			sequence number that the base station is to include in a
4			<i>Supplemental Channel Assignment Message</i> or <i>Extended</i>
5			<i>Supplemental Channel Assignment Message</i> which is in
6			response to this message; otherwise, the mobile station shall
7			omit this field.
8	REF_PN	-	Time reference PN sequence offset.
9			If SIZE_OF_REQ_BLOB is set to '0000' and
10			USE_SCRM_SEQ_NUM is set to '0', the mobile station shall
11			omit this field; otherwise, the mobile station shall set this
12			field to the PN sequence offset of the pilot used by the mobile
13			station to derive its time reference, relative to the zero offset
14			pilot PN sequence in units of 64 PN chips.
15	PILOT_STRENGTH	-	Reference pilot strength in dB.
16			If SIZE_OF_REQ_BLOB is set to '0000' and
17			USE_SCRM_SEQ_NUM is set to '0', the mobile station shall
18			omit this field; otherwise, the mobile station shall set this
19			field to
20			$\lfloor -2 \times 10 \times \log_{10} PS \rfloor,$
21			where PS is the strength of the pilot used by the mobile
22			station to derive its time reference (see [2]), measured as
23			specified in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less
24			than 0, the mobile station shall set this field to '000000'. If
25			this value is greater than '111111', the mobile station shall
26			set this field to '111111'.
27	NUM_ACT_PN	-	Number of reported pilots in the Active Set.
28			If SIZE_OF_REQ_BLOB is set to '0000' and
29			USE_SCRM_SEQ_NUM is set to '0', the mobile station shall
30			omit this field; otherwise, the mobile station shall set this
31			field to the number of reported pilots in the Active Set other
32			than the pilot identified by the REF_PN field.
33	If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile		
34	station shall not include any occurrence of the following record; otherwise, the mobile		
35	station shall include one occurrence of the following two-field record for each pilot in the		
36	Active Set other than the pilot identified by the REF_PN field:		
37	ACT_PN_PHASE	-	Active pilot measured phase.
38			The mobile station shall set this field to the phase of this pilot
39			PN sequence relative to the zero offset pilot PN sequence, in
40			units of one PN chip, as specified in 2.6.6.2.4.
41	ACT_PILOT_STRENGTH	-	Active pilot strength in dB.
42			The mobile station shall set this field to
43			$\lfloor -2 \times 10 \times \log_{10} PS \rfloor,$

1		where PS is the strength of this pilot, measured as specified
2		in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less than 0,
3		the mobile station shall set this field to '000000'. If this value
4		is greater than 63, the mobile station shall set this field to
5		'111111'.
6	NUM_NGHBR_PN	- Number of reported neighbor pilots in the Candidate Set and
7		the Neighbor Set.
8		If SIZE_OF_REQ_BLOB is set to '0000', the mobile station
9		shall omit this field; otherwise, the mobile station shall set
10		this field as follows:
11		The mobile station shall set this field to the number of
12		reported pilots which are not in the Active Set and have
13		measurable strength that exceeds ( $T_{ADD_S} - T_{MULCHAN_S}$ ).
14		(NUM_ACT_PN + NUM_NGHBR_PN) shall not exceed 8. If
15		there are more than (8 - NUM_ACT_PN) pilots not in the
16		Active Set with strength exceeding ( $T_{ADD_S} - T_{MULCHAN_S}$ ),
17		the mobile station shall set NUM_NGHBR_PN to
18		(8 - NUM_ACT_PN) and report the NUM_NGHBR_PN strongest
19		pilots not in the Active Set.
20		If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile
21		station shall not include any occurrence of the following record; otherwise, the mobile
22		station shall include one occurrence of the following two-field record for each of the
23		NUM_NGHBR_PN reported pilots.
24	NGHBR_PN_PHASE	- Neighbor pilot measured phase.
25		The mobile station shall set this field to the phase of this pilot
26		PN sequence relative to the zero offset pilot PN sequence, in
27		units of one PN chip, as specified in 2.6.6.2.4.
28	NGHBR_PILOT_STRENGTH	- Neighbor pilot strength.
29		The mobile station shall set this field to
30		$\lfloor -2 \times 10 \times \log_{10} PS \rfloor$ ,
31		where PS is the strength of this pilot, measured as specified
32		in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less than 0,
33		the mobile station shall set this field to '000000'. If this value
34		is greater than 63, the mobile station shall set this field to
35		'111111'.
36	REF_PILOT_REC_INCL	- Additional pilot information included indicator.
37		If SIZE_OF_REQ_BLOB is set to '0000', the mobile station
38		shall omit this field; otherwise, the mobile station shall
39		include this field and set it as follows:
40		The mobile station shall set this field to '1' if additional
41		reference pilot information listed in the
42		REF_PILOT_REC_TYPE and REF_RECORD_LEN fields are
43		included. The mobile station shall set this field to '0' if the
44		corresponding pilot is the common pilot and there is no
45		additional pilot information included.
46	REF_PILOT_REC_TYPE	- Reference pilot record type.

1 If REF\_PILOT\_REC\_INCL is included and set to '0', the mobile  
 2 station shall omit this field. If REF\_PILOT\_REC\_INCL is  
 3 included and set to '1', the mobile station shall set this field  
 4 to the REF\_PILOT\_REC\_TYPE value shown in Table  
 5 2.7.2.3.2.34-1 corresponding to the type of Pilot Record  
 6 specified by this record.

7 REF\_RECORD\_LEN – Pilot record length for the reference pilot.

8 If REF\_PILOT\_REC\_INCL is included and set to '0', the mobile  
 9 station shall omit this field. If REF\_PILOT\_REC\_INCL is  
 10 included and set to '1', the mobile station shall set this field  
 11 to the number of octets in the type-specific fields of this pilot  
 12 record.

13 Type-specific fields – Pilot record type-specific fields for the reference pilot.

14 If REF\_PILOT\_REC\_INCL is included and set to '0', the mobile  
 15 station shall omit this field. If REF\_PILOT\_REC\_INCL is  
 16 included and set to '1', the mobile station shall include type-  
 17 specific fields based on the REF\_PILOT\_REC\_TYPE of this  
 18 pilot record.

19

20 If REF\_PILOT\_REC\_TYPE is equal to '000', the mobile station shall include the following  
 21 fields:

22

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
PILOT_WALSH	(WALSH_LENGTH + 6)
RESERVED	0 to 7 (as needed)

23

24 QOF – Quasi-orthogonal function index.

25 The mobile station shall set this field to the index of the  
 26 Quasi-orthogonal function of the corresponding Auxiliary  
 27 Pilot.

28 WALSH\_LENGTH – Length of the Walsh code for the reference pilot.

29 The mobile station shall set this field to the WALSH\_LENGTH  
 30 value shown in Table 2.7.2.3.2.34-2 corresponding to the  
 31 length of the Walsh code for the pilot that is used as the  
 32 Auxiliary Pilot.

33 PILOT\_WALSH – Walsh code for the Auxiliary Pilot used by the mobile station  
 34 to derive its time reference.

35 The mobile station shall set this field to the Walsh code  
 36 corresponding to the Auxiliary Pilot.

1	RESERVED	-	Reserved bits.
2			The mobile station shall set all the bits of this field to '0' to
3			make the entire record octet-aligned.
4	If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile		
5	station shall not include any occurrence of the following record; otherwise, the mobile		
6	station shall include one occurrence of the following record for each pilot in the Active Set		
7	other than the pilot identified by the REF_PN field:		
8	PILOT_REC_INCL	-	Additional pilot information included indicator.
9			The mobile station shall set this field to '1' if additional pilot
10			information listed in the PILOT_REC_TYPE and
11			RECORD_LEN fields are included. The mobile station shall
12			set this field to '0' if the corresponding pilot is the common
13			pilot and there is no additional pilot information included.
14	PILOT_REC_TYPE	-	Reference pilot record type.
15			If PILOT_REC_INCL is set to '0', the mobile station shall omit
16			this field; otherwise, the mobile station shall set this field to
17			the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1
18			corresponding to the type of Pilot Record specified by this
19			record.
20	RECORD_LEN	-	Pilot record length.
21			If PILOT_REC_INCL is set to '0', the mobile station shall omit
22			this field; otherwise, the mobile station shall set this field to
23			the number of octets in the type-specific fields of this pilot
24			record.
25	Type-specific fields	-	Pilot record type-specific fields.
26			If PILOT_REC_INCL is set to '0', the mobile station shall omit
27			this field; otherwise, the mobile station shall include type-
28			specific fields based on the PILOT_REC_TYPE of this pilot
29			record as described in 3.7.6.1.
30			
31	If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile		
32	station shall not include any occurrence of the following record; otherwise, the mobile		
33	station shall include one occurrence of the following record for each of the		
34	NUM_NGHR_PN reported pilots.		
35	PILOT_REC_INCL	-	Additional pilot information included indicator.
36			The mobile station shall set this field to '1' if additional pilot
37			information listed in the PILOT_REC_TYPE and
38			RECORD_LEN fields are included. The mobile station shall
39			set this field to '0' if the corresponding pilot is the common
40			pilot and there is no additional pilot information included.
41	PILOT_REC_TYPE	-	Reference pilot record type.

1			If PILOT_REC_INCL is set to '0', the mobile station shall omit
2			this field; otherwise, the mobile station shall set this field to
3			the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1
4			corresponding to the type of Pilot Record specified by this
5			record.
6	RECORD_LEN	-	Pilot record length.
7			If PILOT_REC_INCL is set to '0', the mobile station shall omit
8			this field; otherwise, the mobile station shall set this field to
9			the number of octets in the type-specific fields of this pilot
10			record.
11	Type-specific fields	-	Pilot record type-specific fields.
12			If PILOT_REC_INCL is set to '0', the mobile station shall omit
13			this field; otherwise, the mobile station shall include type-
14			specific fields based on the PILOT_REC_TYPE of this pilot
15			record as described in 3.7.6.1.
16			
17			

## 1 2.7.2.3.2.19 Candidate Frequency Search Response Message

2 MSG\_TAG: CFSRSM

3

Field	Length (bits)
LAST_CFSRM_SEQ	2
TOTAL_OFF_TIME_FWD	6
MAX_OFF_TIME_FWD	6
TOTAL_OFF_TIME_REV	6
MAX_OFF_TIME_REV	6
PCG_OFF_TIMES	1
ALIGN_TIMING_USED	1
MAX_NUM_VISITS	0 or 5
INTER_VISIT_TIME	0 or 6

4

5 LAST\_CFSRM\_SEQ - *Candidate Frequency Search Request Message* sequence  
6 number.

7 The mobile station shall set this field to the value of the  
8 CFSRM\_SEQ field from the *Candidate Frequency Search*  
9 *Request Message* to which this message is a response.

10 TOTAL\_OFF\_TIME\_FWD - Total time that the mobile station is off the Forward Traffic  
11 Channel.

12 The mobile station shall set this field to the mobile station's  
13 estimate of the total number of frames or power control  
14 groups for which the mobile station will need to suspend its  
15 current Forward Traffic Channel processing in order to tune  
16 to the Candidate Frequency, to perform the requested search,  
17 and to re-tune to the Serving Frequency. If the mobile station  
18 requires multiple visits to the Candidate Frequency to  
19 complete the requested search, the mobile station shall set  
20 this field to the total number of frames (if PCG\_OFF\_TIME is  
21 set to '0') or power control groups (if PCG\_OFF\_TIME is set to  
22 '1') for all visits to the Candidate Frequency in a search  
23 period.

24 MAX\_OFF\_TIME\_FWD - Maximum time the mobile station is away from the Forward  
25 Traffic Channel.



1			The mobile station shall set this field to the mobile station's
2			estimate of the maximum number of frames (if
3			PCG_OFF_TIME is set to '0') or power control groups (if
4			PCG_OFF_TIME is set to '1') for which the mobile station will
5			need to suspend its current Forward Traffic Channel
6			processing during a visit to the Candidate Frequency, to
7			perform a part of the requested search, and to re-tune to the
8			Serving Frequency.
9	TOTAL_OFF_TIME_REV	-	Total time that the mobile station is away from the Reverse
10			Traffic Channel.
11			The mobile station shall set this field to the mobile station's
12			estimate of the total number of frames or power control
13			groups for which the mobile station will need to suspend its
14			current Reverse Traffic Channel processing in order to tune to
15			the Candidate Frequency, to perform the requested search,
16			and to re-tune to the Serving Frequency. If the mobile station
17			requires multiple visits to the Candidate Frequency to
18			complete the requested search, the mobile station shall set
19			this field to the total number of frames or power control
20			groups for all visits to the Candidate Frequency in a search
21			period.
22	MAX_OFF_TIME_REV	-	Maximum time the mobile station is away from the Reverse
23			Traffic Channel.
24			The mobile station shall set this field to the mobile station's
25			estimate of the maximum number of frames or power control
26			groups for which the mobile station will need to suspend its
27			current Forward Traffic Channel processing during a visit to
28			the Candidate Frequency, to perform a part of the requested
29			search, and to re-tune to the Serving Frequency.
30	PCG_OFF_TIMES	-	Indicator if off times are expressed in units of power control
31			groups.
32			If P_REV_IN_USE <sub>s</sub> is less than six, the mobile station shall
33			set this field to '0'; otherwise, the mobile station shall set this
34			field as follows:
35			The mobile station shall set this field to '1' if it expresses
36			TOTAL_OFF_TIME_FWD, MAX_OFF_TIME_FWD,
37			TOTAL_OFF_TIME_REV, and MAX_OFF_TIME_REV in units
38			of power control groups; otherwise, the mobile station shall
39			set this field to '0' so that TOTAL_OFF_TIME_FWD,
40			MAX_OFF_TIME_FWD, TOTAL_OFF_TIME_REV, and
41			MAX_OFF_TIME_REV are expressed in units of frames.
42	ALIGN_TIMING_USED	-	Alignment timing used indicator.
43			The mobile station shall set this field to '1' if it will align the
44			times of its visits away from the Serving Frequency, as
45			requested by the base station; otherwise, the mobile station
46			shall set this field to '0'.
47	MAX_NUM_VISITS	-	Maximum number of visits per search period.

1 If the ALIGN\_TIMING\_USED field is set to '0', the mobile  
2 station shall omit this field; otherwise, the mobile station  
3 shall include this field and set it to the maximum number of  
4 visits per search period minus one.

5 INTER\_VISIT\_TIME – Inter-visit time.

6 If the mobile station includes the MAX\_NUM\_VISITS field and  
7 sets it to a value other than 0, the mobile station shall  
8 include this field and set it as described below; otherwise, the  
9 mobile station shall omit this field.

10 The mobile station shall set INTER\_VISIT\_TIME to

11  $\min ( 63, \lceil inter\_visit\_time / search\_time\_resolution \rceil )$

12 where

13 *search\_time\_resolution* is equal to 0.02 if the mobile  
14 station sets PCG\_OFF\_TIMES to '0'; otherwise,  
15 *search\_time\_resolution* is equal to 0.00125,

16 and

17 *inter\_visit\_time* is the mobile station's estimate of the  
18 time, in seconds, between the beginning of consecutive  
19 visits away from the Serving Frequency.  
20

## 1 2.7.2.3.2.20 Candidate Frequency Search Report Message

2 MSG\_TAG: CFSRPM

3

Field	Length (bits)
LAST_SRCH_MSG	1
LAST_SRCH_MSG_SEQ	2
SEARCH_MODE	4
MODE_SPECIFIC_LEN	8
Mode-specific fields	8 × MODE_SPECIFIC_LEN

4

5 LAST\_SRCH\_MSG – Indicator for the type of message that started the search  
6 being reported.

7 If this message is being sent to report the results of a single  
8 search or a periodic search started by a *Candidate Frequency*  
9 *Search Control Message* or by a *Candidate Frequency Search*  
10 *Request Message*, the mobile station shall set this field to '0';  
11 otherwise, the mobile station shall set this field to '1'.

12 LAST\_SRCH\_MSG\_SEQ – Sequence number received in the message that started the  
13 search being reported.

14 If this message is being sent in response to a *Candidate*  
15 *Frequency Search Control Message*, the mobile station shall  
16 set this field to the value of the CFSCM\_SEQ field from the  
17 *Candidate Frequency Search Control Message*.

18 If this message is being sent in response to a *Candidate*  
19 *Frequency Search Request Message*, the mobile station shall  
20 set this field to the value of the CFSRM\_SEQ field from the  
21 *Candidate Frequency Search Request Message*.

22 If this message is being sent in response to a *General Handoff*  
23 *Direction Message* or a *Universal Handoff Direction Message*,  
24 the mobile station shall set this field to the value of the  
25 HDM\_SEQ field from the *General Handoff Direction Message*  
26 or the *Universal Handoff Direction Message*.

27 SEARCH\_MODE – Search mode.  
28 The mobile station shall set this field to the SEARCH\_MODE  
29 value shown in Table 3.7.3.3.2.27-2 corresponding to the  
30 type of search specified by the *Candidate Frequency Search*  
31 *Request Message* that specified the search parameters.

32 MODE\_SPECIFIC\_LEN – Length of mode-specific fields included in this message.

33 Mode-specific fields – Search mode-specific fields.

The mobile station shall include mode-specific fields based on the SEARCH\_MODE of this message.

If SEARCH\_MODE is equal to '0000', the mobile station shall include the following fields:

Field	Length (bits)
BAND_CLASS	5
CDMA_FREQ	11
SF_TOTAL_RX_PWR	5
CF_TOTAL_RX_PWR	5
NUM_PILOTS	6

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

PILOT_PN_PHASE	15
PILOT_STRENGTH	6
RESERVED_1	3

} (NUM\_PILOTS)

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$

} (NUM\_PILOTS)

**BAND\_CLASS** - Band class.

If this message is being sent to report an unsuccessful hard handoff attempt, the mobile station shall set this field to the CDMA band class corresponding to the CDMA Frequency Assignment for the Target Frequency, as specified in [30]. If this message is being sent to report measurements on a Candidate Frequency, the mobile station shall set this field to the CDMA band class corresponding to the CDMA Frequency Assignment for the Candidate Frequency, as specified in [30].

**CDMA\_FREQ** - Frequency assignment.

1			If this message is being sent to report an unsuccessful hard
2			handoff attempt, the mobile station shall set this field to the
3			CDMA Channel number, in the specified CDMA band class,
4			corresponding to the CDMA Frequency Assignment for the
5			Target Frequency, as specified in [2]. If this message is being
6			sent to report measurements on a Candidate Frequency, the
7			mobile station shall set this field to the CDMA Channel
8			number, in the specified CDMA band class, corresponding to
9			the CDMA Frequency Assignment for the Candidate
10			Frequency, as specified in [2].
11	SF_TOTAL_RX_PWR	-	Total received power on the Serving Frequency.
12			The mobile station shall set this field to
13			$\min(31, \lceil (10 \times \log_{10}(\text{total\_received\_power}) + 110) / 2 \rceil)$
14			where <i>total_received_power</i> is the mean input power received
15			by the mobile station on the Serving Frequency, in mW/1.23
16			MHz.
17	CF_TOTAL_RX_PWR	-	Indicates the total received power on the Target Frequency or
18			the Candidate Frequency.
19			If this message is being sent to report an unsuccessful hard
20			handoff attempt, the mobile station shall include the total
21			received power on the Target Frequency; if this message is
22			being sent to report measurements on a Candidate
23			Frequency, the mobile station shall include the total received
24			power on the Candidate Frequency.
25			The mobile station shall set this field to
26			$\min(31, \lceil (10 \times \log_{10}(\text{total\_received\_power}) + 110) / 2 \rceil)$
27			where <i>total_received_power</i> is the mean input power received
28			by the mobile station on the Target Frequency or the
29			Candidate Frequency, in mW/1.23 MHz.
30	NUM_PILOTS	-	Number of pilots.
31			The mobile station shall set this field to the number of pilots
32			included in this message. The mobile station shall set this
33			field to a value from 0 to $N_{8m}$ , inclusive.
34	The mobile station shall include NUM_PILOTS occurrences of the following three-field		
35	record:		
36	PILOT_PN_PHASE	-	Pilot measured phase.
37			The mobile station shall set this field to the phase of the pilot
38			PN sequence relative to the zero offset pilot PN sequence of
39			this pilot, in units of one PN chip, as specified in 2.6.6.2.4.
40	PILOT_STRENGTH	-	Pilot strength in dB.
41			The mobile station shall set this field to
42			$\lfloor -2 \times 10 \times \log_{10} \text{PS} \rfloor$ ,

1 where PS is the strength of this pilot, measured as specified  
2 in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less than 0,  
3 the mobile station shall set this field to '000000'. If this value  
4 is greater than 63, the mobile station shall set this field to  
5 '111111'.

6 RESERVED\_1 – Reserved bits.  
7 The mobile station shall set this field to '000'.

8 The mobile station shall include NUM\_PILOTS occurrences of the following record in the  
9 same order as the pilots listed above.

10 PILOT\_REC\_INCL – Additional pilot information included indicator.  
11 The mobile station shall set this field to '1' if additional pilot  
12 information listed in the PILOT\_REC\_TYPE and  
13 RECORD\_LEN fields are included. The mobile station shall  
14 set this field to '0' if the corresponding pilot is the common  
15 pilot and there is no additional pilot information included.

16 PILOT\_REC\_TYPE – Reference Pilot record type  
17 If PILOT\_REC\_INCL is set to '0', the mobile station shall omit  
18 this field; otherwise, the mobile station shall set this field to  
19 the PILOT\_REC\_TYPE value shown in Table 2.7.2.3.2.34-1  
20 corresponding to the type of Pilot Record specified by this  
21 record.

22 RECORD\_LEN – Pilot record length.  
23 If PILOT\_REC\_INCL is set to '0', the mobile station shall omit  
24 this field; otherwise, the mobile station shall set this field to  
25 the number of octets in the type-specific fields of this pilot  
26 record.

27 Type-specific fields – Pilot record type-specific fields.  
28 If PILOT\_REC\_INCL is set to '0', the mobile station shall omit  
29 this field; otherwise, the mobile station shall include type-  
30 specific fields based on the PILOT\_REC\_TYPE of this pilot  
31 record as described in 3.7.6.1.  
32

## 1 2.7.2.3.2.21 Periodic Pilot Strength Measurement Message

2 MSG\_TAG: PPSMM

Field	Length (bits)
REF_PN	9
PILOT_STRENGTH	6
KEEP	1
SF_RX_PWR	5
NUM_PILOT	4

NUM\_PILOT occurrences of the following record:

{ (NUM\_PILOT)

PILOT_PN_PHASE	15
PILOT_STRENGTH	6
KEEP	1

} (NUM\_PILOT)

NUM\_PILOT occurrences of the following record:

{ (NUM\_PILOT)

PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$

} (NUM\_PILOT)

SETPT_INCL	1
FCH_INCL	0 or 1
FPC_FCH_CURR_SETPT	0 or 8
DCCH_INCL	0 or 1
FPC_DCCH_CURR_SETPT	0 or 8
NUM_SUP	0 or 2

NUM\_SUP occurrences of the following fields:

{ (NUM\_SUP)

SCH_ID	1
FPC_SCH_CURR_SETPT	8

} (NUM\_SUP)

3

4 REF\_PN - Time reference PN sequence offset.

1			The mobile station shall set this field to the PN sequence
2			offset of the pilot used by the mobile station to derive its time
3			reference, relative to the zero offset pilot PN sequence in units
4			of 64 PN chips.
5	PILOT_STRENGTH	-	Pilot strength in dB.
6			The mobile station shall set this field to
7			$\lfloor -2 \times 10 \times \log_{10} PS \rfloor$ ,
8			where PS is the strength of the pilot used by the mobile
9			station to derive its time reference (see [2]), measured as
10			specified in 2.6.6.2.2. If this value is less than 0, the mobile
11			station shall set this field to '000000'. If this value is greater
12			than '111111', the mobile station shall set this field to
13			'111111'.
14	KEEP	-	Keep pilot indicator.
15			If the handoff drop timer (see 2.6.6.2.3) corresponding to the
16			pilot used by the mobile station to derive its time reference
17			(see [2]) has expired, the mobile station shall set this field to
18			'0'; otherwise, the mobile station shall set this field to '1'.
19	SF_RX_PWR	-	The received power spectral density of the Serving Frequency.
20			The mobile station shall set this field to
21			$\min(31, \lceil (10 \times \log_{10}(\text{spec\_density}) + 120) / 2 \rceil)$
22			where <i>spec_density</i> is the mobile station received power
23			spectral density of the Serving Frequency, in mW/1.23MHz.
24			If this value is less than 0, the mobile station shall set this
25			field to '00000'.
26	NUM_PILOT	-	Number of Pilots.
27			The mobile station shall set this field to the number of other
28			reported pilots of the Active Set and the Candidate Set.
29	The mobile station shall include NUM_PILOT occurrences of the following three-field		
30	record, one for each pilot in the Active Set and one for each pilot in the Candidate Set,		
31	other than the pilot identified by the REF_PN field.		
32	PILOT_PN_PHASE	-	Pilot measured phase.
33			The mobile station shall set this field to the phase of the pilot
34			PN sequence relative to the zero offset pilot PN sequence of
35			this pilot, in units of one PN chip, as specified in 2.6.6.2.4.
36	PILOT_STRENGTH	-	Pilot strength in dB.
37			The mobile station shall set this field to
38			$\lfloor -2 \times 10 \times \log_{10} PS \rfloor$ ,
39			where PS is the strength of this pilot, measured as specified
40			in 2.6.6.2.2. If this value is less than 0, the mobile station
41			shall set this field to '000000'. If this value is greater than
42			'111111', the mobile station shall set this field to '111111'.



1	KEEP	-	Keep pilot indicator.
2			If the handoff drop timer (see 2.6.6.2.3) corresponding to this
3			pilot has expired, the mobile station shall set this field to '0';
4			otherwise, the mobile station shall set this field to '1'.
5	The mobile station shall include NUM_PILOTS occurrences of the following record in the		
6	same order as the pilots listed above.		
7	PILOT_REC_INCL	-	Additional pilot information included indicator.
8			The mobile station shall set this field to '1' if additional pilot
9			information listed in the PILOT_REC_TYPE and
10			RECORD_LEN fields are included. The mobile station shall
11			set this field to '0' if the corresponding pilot is the common
12			pilot and there is no additional pilot information included.
13	PILOT_REC_TYPE	-	Reference Pilot record type
14			If PILOT_REC_INCL is set to '0', the mobile station shall omit
15			this field; otherwise, the mobile station shall set this field to
16			the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1
17			corresponding to the type of Pilot Record specified by this
18			record.
19	RECORD_LEN	-	Pilot record length.
20			If PILOT_REC_INCL is set to '0', the mobile station shall omit
21			this field; otherwise, the mobile station shall set this field to
22			the number of octets in the type-specific fields of this pilot
23			record.
24	Type-specific fields	-	Pilot record type-specific fields.
25			If PILOT_REC_INCL is set to '0', the mobile station shall omit
26			this field; otherwise, the mobile station shall include type-
27			specific fields based on the PILOT_REC_TYPE of this pilot
28			record as described in 2.7.2.3.2.34.
29	SETPT_INCL	-	Setpoint information included indicator.
30			The mobile station shall set this field to '1' if setpoint
31			information is included in this message; otherwise, the
32			mobile station shall set this field to '0'.
33	FCH_INCL	-	Fundamental Channel included indicator.
34			If SETPT_INCL is equal to '1', the mobile station shall include
35			this field and set it as follows; otherwise, the mobile station
36			shall omit this field.
37			If P_REV_IN_USE <sub>s</sub> is less than nine, the mobile station shall
38			do the following:
39			The mobile station shall set this field to '1' if
40			FPC_PRI_CHAN <sub>s</sub> is equal to '0'; otherwise, the mobile
41			station shall set this field to '0'.
42			If P_REV_IN_USE <sub>s</sub> is greater than or equal to nine, the mobile
43			station shall do the following:

1		The mobile station shall set this field to '1' if a
2		Fundamental Channel is assigned; otherwise, the
3		mobile station shall set this field to '0'.
4	FPC_FCH_CURR_SETPT	- The outer loop $E_b/N_t$ setpoint of the Fundamental Channel.
5		If SETPT_INCL is equal to '1' and if FCH_INCL is set to '1', the
6		mobile station shall set this field to the value of the $E_b/N_t$
7		setpoint, in units of 0.125 dB, currently in use in the
8		Fundamental Channel power control outer loop estimation;
9		otherwise, the mobile station shall omit this field.
10	DCCH_INCL	- Dedicated Control Channel included indicator.
11		If SETPT_INCL is equal to '1', the mobile station shall include
12		this field and set it as follows; otherwise, the mobile station
13		shall omit this field.
14		If P_REV_IN_USE <sub>s</sub> is less than nine, the mobile station shall
15		do the following:
16		The mobile station shall set this field to '1' if
17		FPC_PRI_CHAN <sub>s</sub> is equal to '1'; otherwise, the mobile
18		station shall set this field to '0'.
19		If P_REV_IN_USE <sub>s</sub> is greater than or equal to nine, the mobile
20		station shall do the following:
21		The mobile station shall set this field to '1' if a
22		Dedicated Control Channel is assigned; otherwise, the
23		mobile station shall set this field to '0'.
24	FPC_DCCH_CURR_SETPT	- The outer loop $E_b/N_t$ setpoint of the Forward Dedicated
25		Channel.
26		If SETPT_INCL is equal to '1', and if DCCH_INCL is set to '1',
27		the mobile station shall set this field to the value of the $E_b/N_t$
28		setpoint, in units of 0.125 dB, currently in use in the
29		Dedicated Channel power control outer loop estimation;
30		otherwise, the mobile station shall omit this field.
31	NUM_SUP	- The number of Supplemental Channels.
32		If SETPT_INCL is equal to '1', the mobile station shall include
33		this field and set it as follows; otherwise, the mobile station
34		shall omit this field.
35		The mobile station shall set this field to the total number of
36		the Supplemental Channels reported by this message.
37	The mobile station shall include NUM_SUP occurrences of the following two fields:	
38	SCH_ID	- The Supplemental Channel index.
39		The mobile station shall set this field to the Supplemental
40		Channel index to indicate the Forward Supplemental
41		Channel that is to be reported.

- 1    FPC\_SCH\_CURR\_SETPT -    The supplemental channel outer loop  $E_b/N_t$  setpoint.  
2  
3                                The mobile station shall set this field to the value of the  
4                                power control outer loop  $E_b/N_t$  setpoint, in units of 0.125 dB,  
5                                currently in use in the Channel specified by SCH\_ID.  
6

## 2.7.2.3.2.22 Outer Loop Report Message

MSG\_TAG: OLRM

Field	Length (bits)
FCH_INCL	1
FPC_FCH_CURR_SETPT	0 or 8
DCCH_INCL	1
FPC_DCCH_CURR_SETPT	0 or 8
NUM_SUP	2

NUM\_SUP occurrences of the following fields:

{ (NUM\_SUP)

SCH_ID	1
FPC_SCH_CURR_SETPT	8

} (NUM\_SUP)

FCH\_INCL – Fundamental Channel included indicator.

The mobile station shall set this field to '1' if FPC\_FCH\_CURR\_SETPT is included; otherwise the mobile station shall set this field to '0'.

FPC\_FCH\_CURR\_SETPT – The outer loop  $E_b/N_t$  setpoint of the Fundamental Channel.

If FCH\_INCL is set to '1', the mobile station shall set this field to the value of the  $E_b/N_t$  setpoint, in units of 0.125 dB, currently in use in the Fundamental Channel power control outer loop estimation; otherwise, the mobile station shall omit this field.

DCCH\_INCL – Dedicated Control Channel included indicator.

The mobile station shall set this field to '1' if the FPC\_DCCH\_CURR\_SETPT field is included; otherwise the mobile station shall set this field to '0'.

FPC\_DCCH\_CURR\_SETPT – The outer loop  $E_b/N_t$  setpoint of the Forward Dedicated Channel.

If DCCH\_INCL is set to '1', the mobile station shall set this field to the value of the  $E_b/N_t$  setpoint, in units of 0.125 dB, currently in use in the Dedicated Channel power control outer loop estimation; otherwise, the mobile station shall omit this field.

- 1                    NUM\_SUP    -    The number of Supplemental Channels.  
2                                    The mobile station shall set this field to the total number of  
3                                    the Supplemental Channels reported by this message.  
4    The mobile station shall in NUM\_SUP occurrences of the following two fields:  
5                    SCH\_ID    -    The Supplemental Channel index.  
6                                    The mobile station shall set this field to the Supplemental  
7                                    Channel index to indicate the Forward Supplemental  
8                                    Channel that to be reported  
9    FPC\_SCH\_CURR\_SETPT -    The supplemental outer loop  $E_b/N_t$  setpoint.  
10                                   The mobile station shall set this field to the value of the  
11                                   power control outer loop  $E_b/N_t$  setpoint, in units of 0.125 dB,  
12                                   currently in use in the Channel specified by SCH\_ID.  
13  
14

## 1 2.7.2.3.2.23 Resource Request Message

2 MSG\_TAG: RRM

3

Field	Length (bits)
CH_IND_INCL	1
CH_IND	0 or 2
EXT_CH_IND	0 or 5

4 CH\_IND\_INCL – Channel indicator inclusion bit.

5 The mobile station shall set this field to '1' if the mobile  
6 station is requesting a channel configuration; otherwise, the  
7 mobile station shall set this field to '0'.

8 CH\_IND – Channel indicator.

9 If CH\_IND\_INCL is set to '0', the mobile station shall omit this  
10 field; otherwise, the mobile station shall include this field and  
11 set it as shown in Table 2.7.1.3.2.4-6 to request a new  
12 physical channel configuration.

13 EXT\_CH\_IND - Extended Channel Indicator.

14 If the CH\_IND field is not included, or is included and not set  
15 to '00', the mobile station shall omit this field; otherwise, the  
16 mobile station shall include this field and set it as shown in  
17 Table 2.7.1.3.2.4-11 to request a new physical channel  
18 configuration.

19

20

1 2.7.2.3.2.24 Resource Request Mini Message

2 MSG\_TAG: RRMM

3

Field	Length (bits)
CH_IND_INCL	1
CH_IND	0 or 2
EXT_CH_IND	0 or 5

4 CH\_IND\_INCL – Channel indicator inclusion bit.  
5 The mobile station shall set this field to ‘1’ if the mobile  
6 station is requesting a channel configuration; otherwise, the  
7 mobile station shall set this field to ‘0’.

8 CH\_IND – Channel indicator.  
9 If CH\_IND\_INCL is set to ‘0’, the mobile station shall omit this  
10 field; otherwise, the mobile station shall include this field and  
11 set it as shown in Table 2.7.1.3.2.4-6 to request a new  
12 physical channel configuration.

13 EXT\_CH\_IND - Extended Channel Indicator.  
14 If the CH\_IND field is not included, or is included and not set  
15 to ‘00’, the mobile station shall omit this field; otherwise, the  
16 mobile station shall include this field and set it as shown in  
17 Table 2.7.1.3.2.4-11 to request a new physical channel  
18 configuration.

19

20

## 1 2.7.2.3.2.25 Extended Release Response Message

2 MSG\_TAG: ERRM

Field	Length (bits)
RSC_MODE_IND	1
RSCI	0 or 4
RSC_END_TIME_UNIT	0 or 2
RSC_END_TIME_VALUE	0 or 4

3

4 RSC\_MODE\_IND – Reduced slot cycle mode indicator.

5 The mobile station shall set this field to '1' to indicate that it  
6 will operate in the reduced slot cycle mode following release  
7 of the traffic channel; otherwise, the mobile station shall set  
8 this field to '0'.

9 RSCI – Reduced slot cycle index.

10 If RSC\_MODE\_IND is equal to '1', the mobile station shall  
11 include this field and set it to the value of the reduced slot  
12 cycle index, as specified in Table 2.7.1.3.2.1-8; otherwise, the  
13 mobile station shall omit this field.

14 The mobile station shall set this field to a value less than the  
15 registered slot cycle index, SLOT\_CYCLE\_INDEX\_REG.

16 RSC\_END\_TIME\_UNIT – Reduced slot cycle mode end time unit.

17 If RSC\_MODE\_IND is equal to '0', the mobile station shall  
18 omit this field; otherwise, the mobile station shall set this  
19 field according to Table 2.7.3.5-1 to indicate the units of the  
20 RSC\_END\_TIME\_VALUE field.

21 RSC\_END\_TIME\_VALUE – Reduced slot cycle mode end time value.

22 If RSC\_MODE\_IND is equal to '0', the mobile station shall  
23 omit this field; otherwise, the mobile station shall include  
24 this field and set it as follows:

25 The mobile station shall set this field to the system time, in  
26 units of time specified by RSC\_END\_TIME\_UNIT(modulo 16),  
27 at which the mobile station is to exit the reduced slot cycle  
28 mode.

29

30

31



- 1 2.7.2.3.2.26 Extended Release Response Mini Message
- 2 MSG\_TAG: ERRMM
- 3 There are no Layer 3 fields associated with this message.
- 4

## 2.7.2.3.2.27 Pilot Strength Measurement Mini Message

MSG\_TAG: PSM MM

Field	Length (bits)
PSMM_POS	3
PILOT_STRENGTH	6
RANK	3

PSMM\_POS – *Pilot Strength Measurement Message* position.

The mobile station shall set this field to an index corresponding to the position, within the last sent *Pilot Strength Measurement Message* (see 2.7.2.3.2.5) or *Extended Pilot Strength Measurement Message* (see 2.7.2.3.2.34), of the Active-Set pilot whose strength is being reported. The mobile station shall use a value of 0 to report the pilot represented by the REF\_PN field in the last sent *Pilot Strength Measurement Message* or *Extended Pilot Strength Measurement Message*. The mobile station shall use a value of n, where n is an integer greater than 0, to report the pilot represented by the n<sup>th</sup> occurrence of the PILOT\_PN\_PHASE field in the last sent *Pilot Strength Measurement Message* or *Extended Pilot Strength Measurement Message*.

PILOT\_STRENGTH – Pilot strength in dB.

The mobile station shall set this field to

$$\lfloor -2 \times 10 \times \log_{10} PS \rfloor,$$

where PS is the strength of this Active-Set pilot, measured as specified in [2]. If this value is less than 0, the mobile station shall set this field to '000000'. If this value is greater than '111111', the mobile station shall set this field to '111111'.

RANK – Rank order.

The mobile station shall set this field to the rank order of the pilot whose strength is being reported, relative to all other pilots in the current Active Set. The mobile station shall use a value of 0 to report the strongest pilot in the current Active Set.

1 2.7.2.3.2.28 Supplemental Channel Request Mini Message

2 MSG\_TAG: SCRMM

3

Field	Length (bits)
REQ_BLOB	16

4

5 REQ\_BLOB – Reverse Supplemental Channel request block of bytes.

6 The mobile station shall include information in this field  
7 containing the parameters that specify the characteristics of  
8 the Reverse Supplemental Channels request. The mobile  
9 station shall set this field in accordance with the connected  
10 Service Options.

11

## 1 2.7.2.3.2.29 Resource Release Request Message

2 MSG\_TAG: RRRM

3

Field	Length (bits)
GATING_DISCONNECT_IND	1
CON_REF	0 or 8
PURGE_SERVICE	0 or 1
ADD_CON_REF_INCL	0 or 1
NUM_ADD_CON_REF	0 or 3

*{ (NUM\_ADD\_CON\_REF + 1)*

ADD_CON_REF	8
ADD_PURGE_SERVICE	1

*} (NUM\_ADD\_CON\_REF + 1)*

BCMC_INFO_INCL	1
NUM_BCMC_PROGRAMS	0 or 6

0 or NUM\_BCMC\_PROGRAMS occurrences of the following variable length record:

*{ (0 or NUM\_BCMC\_PROGRAMS)*

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	Variable (Value of BCMC_PROGRAM_ID_LEN + 1)
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
-------------------------	-----------------------------

*} (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

*} (0 or NUM\_BCMC\_PROGRAMS)*

4

1	GATING_DISCONNECT_IND	-	Reverse pilot gating or service disconnect indicator.
2			If the mobile station requests that reverse pilot gating
3			operation to be performed, the mobile station shall set this
4			field to '1'; otherwise (if the mobile station requests that the
5			service option connection specified by CON_REF to be
6			released), the mobile station shall set this field to '0'.
7	CON_REF	-	Connection reference.
8			If the GATING_DISCONNECT_IND field is set to '1', the mobile
9			station shall omit this field; otherwise, the mobile station
10			shall include this field and set it as follows:
11			To request the release of a service option connection, the
12			mobile station shall set this field to the connection reference
13			corresponding to one of the service option connections
14			requested to be released; otherwise the mobile station shall
15			set this field to '00000000'.
16	PURGE_SERVICE	-	Purge service instance indicator.
17			If the GATING_DISCONNECT_IND field is set to '1', the mobile
18			station shall omit this field; otherwise, the mobile station
19			shall include this field and set it as follows:
20			If the CON_REF is not set to '00000000' and if the packet
21			data service instance identified by CON_REF has been
22			inactivated, the mobile station shall set this field to '1';
23			otherwise, the mobile station shall set this field to '0'. When
24			CON_REF is set to '00000000', this field does not have any
25			significance.
26	ADD_CON_REF_INCL	-	Additional connection reference included indicator.
27			If the GATING_DISCONNECT_IND field is set to '1', the mobile
28			station shall omit this field; otherwise, the mobile station
29			shall include this field and set it as follows:
30			If at least one occurrence of the ADD_CON_REF field is
31			included in this message, then the mobile station shall set
32			this field to '1'; otherwise, the mobile station shall set this
33			field to '0'.
34	NUM_ADD_CON_REF	-	Number of additional connection references.
35			If the ADD_CON_REF_INCL field is included and set to '1', the
36			mobile station shall include this field and set it to one less
37			than the number of occurrences of the ADD_CON_REF field
38			included in this message; otherwise, the mobile station shall
39			omit this field.

1	ADD_CON_REF	-	Additional connection reference.
2			The mobile station shall set this field to the connection
3			reference corresponding to a service option connection that is
4			requested to be released.
5	ADD_PURGE_SERVICE	-	Additional purge service instance indicator.
6			If the packet data service instance identified by the
7			ADD_CON_REF field has been inactivated, the mobile station
8			shall set this field to '1'; otherwise, the mobile station shall
9			set this field to '0'.
10	BCMC_INFO_INCL	-	BCMC information includes indicator.
11			If the mobile station includes BCMC related fields in this
12			message, the mobile station shall set this field to '1';
13			otherwise, the mobile station shall set this field to '0'.
14	NUM_BCMC_PROGRAMS	-	Number of BCMC Programs
15			If the BCMC_INFO_INCL field is set to '0', the mobile station
16			shall omit this field; otherwise, the mobile station shall
17			include this field and set it as follows:
18			If the mobile station is requesting the release of all the BCMC
19			programs being monitored, the mobile station shall set this
20			field to '000000'; otherwise, the mobile station shall set this
21			field to the number of BCMC programs included in this
22			message.
23	The mobile station shall include NUM_BCMC_PROGRAMS occurrences of the following		
24	variable length record:		
25	BCMC_PROGRAM_ID_LEN	-	Length of BCMC_PROGRAM_ID field
26			The mobile station shall set this field to one less than the
27			length, in bits, of the BCMC_PROGRAM_ID of this program.
28	BCMC_PROGRAM_ID	-	BCMC program Identifier
29			The length of this field shall be one more than the value of
30			BCMC_PROGRAM_ID_LEN bits.
31			The mobile station shall set this field to the identifier of the
32			BCMC program corresponding to one or more flows that the
33			mobile station is requesting to release.
34	BCMC_FLOW_DISCRIMINATOR_LEN	-	Length of BCMC_FLOW_DISCRIMINATOR field
35			The mobile station shall set this field to the length, in bits, of
36			the BCMC_FLOW_DISCRIMINATOR of this program. To
37			request release of all flows associated with this
38			BCMC_PROGRAM_ID, the mobile station may set this field to
39			'000'.

1    NUM\_FLOW\_DISCRIMINATOR - Number of BCMC flow discriminators

2                                    The length of this field shall be determined by the value of the  
3                                    BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
4                                    BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
5                                    is omitted; otherwise, the length of this field shall be  
6                                    BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

7                                    The mobile station shall set this field to the number of flow  
8                                    discriminators included for this program minus one.

9    If NUM\_FLOW\_DISCRIMINATOR field is included, the mobile station shall include  
10    NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;  
11    otherwise, the mobile station shall include 1 occurrence of the following variable length  
12    record:

13    BCMC\_FLOW\_DISCRIMINATOR - BCMC Flow discriminator.

14                                   The length of this field shall be determined by the value of the  
15                                   BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
16                                   BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
17                                   is omitted; otherwise, the length of this field shall be  
18                                   BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

19                                   The mobile station shall set this field to the BCMC flow  
20                                   discriminator that is requested to be released.

21

## 2.7.2.3.2.30 Resource Release Request Mini Message

MSG\_TAG: RRRMM

Field	Length (bits)
GATING_DISCONNECT_IND	1
CON_REF	0 or 8
PURGE_SERVICE	0 or 1

**GATING\_DISCONNECT\_IND** - Reverse pilot gating or service disconnect indicator.

If the mobile station requests that reverse pilot gating operation to be performed, the mobile station shall set this field to '1'; otherwise (if the mobile station requests that the service option connection specified by CON\_REF to be released), the mobile station shall set this field to '0'.

**CON\_REF** - Connection reference.

If the GATING\_DISCONNECT\_IND field is set to '1', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the connection reference corresponding to the service option connection that is requested to be released.

**PURGE\_SERVICE** - Purge service instance indicator.

If the GATING\_DISCONNECT\_IND field is set to '1', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the packet data service instance identified by CON\_REF has been inactivated, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.



1     2.7.2.3.2.31 User Zone Update Request Message

2     MSG\_TAG: UZURM

3

Field	Length (bits)
UZID	16

4

5             UZID     -     User Zone identifiers.

6                             The mobile station shall set this field to the UZID<sub>S</sub>.

7

8

## 1 2.7.2.3.2.32 Enhanced Origination Message

## 2 MSG\_TAG: EOM

Field	Length (bits)
TAG	4
CH_IND	3
EXT_CH_IND	0 or 5
SR_ID	3
GLOBAL_EMERGENCY_CALL	1
MS_INIT_POS_LOC_IND	0 or 1
NEW_SINFO_INCL	1
UI_ENCRYPT_REQ	0 or 1
UI_ENCRYPT_SUP	0 or 8
SERVICE_OPTION	16
MORE_SO_INFO_INCL	1
NUM_ALT_SO	0 or 3

NUM\_ALT\_SO occurrences of the following field:

{ (NUM\_ALT\_SO)

ALT_SO	16
--------	----

} (NUM\_ALT\_SO)

SO_BITMAP_IND	0 or 2
SO_GROUP_NUM	0 or 5
SO_BITMAP	0 or $2^{(1+ \text{SO\_BITMAP\_IND})}$
DRS	1
PREV_SID_INCL	1
PREV_SID	0 or 15
PREV_NID_INCL	1
PREV_NID	0 or 16

(continues on next page)

<b>Field</b>	<b>Length (bits)</b>
PREV_PZID_INCL	1
PREV_PZID	0 or 8
DIALED_DIGS_INCL	1
DIGIT_MODE	0 or 1
NUMBER_TYPE	0 or 3
NUMBER_PLAN	0 or 4
NUM_FIELDS	0 or 8

NUM\_FIELDS occurrences of the following field:

*{ (NUM\_FIELDS)*

CHAR <sub>i</sub>	4 or 8
-------------------	--------

*} (NUM\_FIELDS)*

NUM_RECS	5
----------	---

NUM\_RECS occurrences of the following three-field records:

*{ (NUM\_RECS)*

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	$8 \times \text{RECORD\_LEN}$

*} (NUM\_RECS)*

SYNC_ID_INCL	1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or $(8 \times \text{SYNC\_ID\_LEN})$

Field	Length (bits)
ADD_SERV_INSTANCE_INCL	0 or 1
NUM_ADD_SERV_INSTANCE	0 or 3

NUM\_ADD\_SERV\_INSTANCE occurrences of the following record:

{ (NUM\_ADD\_SERV\_INSTANCE)

ADD_SR_ID	3
ADD_DRS	1
ADD_TAG	4
ADD_SERVICE_OPTION_INCL	0 or 1
ADD_SERVICE_OPTION	0 or 16
ADD_NUM_RECS	5

ADD\_NUM\_RECS occurrences of the following three-field records:

{ (ADD\_NUM\_RECS)

ADD_RECORD_TYPE	8
ADD_RECORD_LEN	8
Type-specific fields	$8 \times \text{ADD\_RECORD\_LEN}$

} (ADD\_NUM\_RECS)

} (NUM\_ADD\_SERV\_INSTANCE)

BCMC_INCL	1
BCMC_ORIG_ONLY_IND	0 or 1
AUTH_SIGNATURE_INCL	0 or 1
TIME_STAMP_SHORT_LENGTH	0 or 8
TIME_STAMP_SHORT	Variable
NUM_BCMC_PROGRAMS	0 or 3

NUM\_BCMC\_PROGRAMS+1 occurrences of the following variable length record:

{ (NUM\_BCMC\_PROGRAMS+1)

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	Variable (Value of BCMC_PROGRAM_ID_LEN + 1)
BCMC_FLOW_DISCRIMINATOR_LEN	3

Field	Length (bits)
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
AUTH_SIGNATURE_IND	0 or 1
AUTH_SIGNATURE_SAME_IND	0 or 1
BAK_ID	0 or 4
AUTH_SIGNATURE	0 or 32

*} (NUM\_FLOW\_DISCRIMINATOR +1) or 1*

*} (NUM\_BCMC\_PROGRAMS+1)*

- 1 TAG – Call initiation transaction identifier.
- 2 The mobile station shall set this field to the identifier for the
- 3 transaction corresponding to SR\_ID.
- 4 CH\_IND – Channel indicator.
- 5 The mobile station shall set this field as shown in Table
- 6 2.7.2.3.2.32-1, to request physical resources.

1

**Table 2.7.2.3.2.32-1. Channel Indicator**

<b>CH_IND (binary)</b>	<b>Channel(s) Requested</b>
000	No additional channels requested.
001	Fundamental Channel.
010	Dedicated Control Channel.
011	Reserved.
100	Continuous Reverse Pilot Channel.
101	Fundamental Channel and Continuous Reverse Pilot Channel.
110	Reserved.
111	Refer to EXT_CH_IND.

2

3

EXT\_CH\_IND - Extended Channel Indicator.

4

If CH\_IND is set to '111, then the mobile station shall set this field as shown in Table 2.7.1.3.2.4-11; otherwise, the mobile station shall omit this field.

5

6

- 1                   SR\_ID    –   Service reference identifier.
- 2                               If the SYNC\_ID\_INCL field is set to '0', the mobile station shall
- 3                               set this field as follows:
- 4                               o   If the service instance provides a service reference
- 5                                    identifier, the mobile station shall set this field to the
- 6                                    service reference identifier specified by the service
- 7                                    instance. If the service instance does not provide a
- 8                                    service reference identifier, the mobile station shall set
- 9                                    this field to the smallest unused service reference
- 10                                  identifier value between 1 and 6 (inclusive).
- 11                               Otherwise, the mobile station shall set this field as follows:
- 12                               o   If the mobile station requests the restoration of a single
- 13                                    service option connection from the stored service
- 14                                    configuration, the mobile station shall set this field to the
- 15                                    corresponding service reference identifier.
- 16                               o   If the mobile station requests the restoration of more than
- 17                                    one but not all service option connections from the stored
- 18                                    service configuration, the mobile station shall set this
- 19                                    field to the service reference identifier corresponding to
- 20                                    one of the service option connections to be restored.
- 21                               o   Otherwise (that is, the mobile station requests the
- 22                                    restoration of all remaining service option connections
- 23                                    from the stored service configuration), the mobile station
- 24                                    shall set this field to '111'.
- 25   GLOBAL\_EMERGENCY\_CALL   –   Global emergency call indicator.
- 26                               The mobile station shall set this field to '1', if the mobile
- 27                               station recognizes that this is an emergency call; otherwise,
- 28                               the mobile station shall set this field to '0'.
- 29   MS\_INIT\_POS\_LOC\_IND   –   Mobile Initiated Position Location Session indicator.
- 30                               If the GLOBAL\_EMERGENCY\_CALL field is set to '0', the
- 31                               mobile station shall omit this field; otherwise, the mobile
- 32                               station shall include this field and shall set it as follows:
- 33                               The mobile station shall set this field to '1' if
- 34                               MS\_INIT\_POS\_LOC\_SUP\_IND<sub>s</sub> is equal to '1' and if the mobile
- 35                               station is to initiate a position location session associated
- 36                               with this emergency call; otherwise, the mobile station shall
- 37                               set this field to '0'.

1	NEW_SINFO_INCL	-	Encryption fields included.
2			The mobile station shall set this field to '1' if the encryption
3			related fields are included; otherwise the mobile station shall
4			set this field to '0'. The mobile station shall set this field to '0'
5			if the base station does not support encryption or the mobile
6			station does not support any of the encryption modes
7			supported by the base station.
8	UI_ENCRYPT_REQ	-	Request for user information encryption on the traffic
9			channel indicator.
10			If NEW_SINFO_INCL is set to '1', the mobile station shall
11			include this field; otherwise, the mobile station shall omit
12			this field. If this field is included, the mobile station shall set
13			this field to '1' to request user information encryption, and to
14			'0' to request no user information encryption.
15	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
16			If NEW_SINFO_INCL is set to '1', the mobile station shall
17			include this field; otherwise, the mobile station shall omit
18			this field. If this field is included, the mobile station shall set
19			this field to indicate the supported user information
20			encryption algorithms.
21			This field consists of the subfields shown in Table
22			2.7.1.3.2.4-9.
23			The mobile station shall set each subfield to '1' if the
24			corresponding user information encryption algorithm is
25			supported by the mobile station; otherwise, the mobile
26			station shall set the subfield to '0'.
27			The mobile station shall set the RESERVED subfield to
28			'000000'.
29	SERVICE_OPTION	-	Requested service option for this origination.
30			The mobile station shall set this field to the value specified in
31			[30], corresponding to the requested service option.
32	MORE_SO_INFO_INCL	-	More service option information included.
33			If MAX_NUM_ALT_SO <sub>S</sub> is equal to '000', the mobile station
34			shall set this field to '0'; otherwise, the mobile station shall set
35			this field as follows:
36			If any alternate service option number or/and service option
37			bitmap is to be included in this message, the mobile station
38			shall set this field to '1', otherwise, the mobile station shall
39			set this field to '0'. In other words, MORE_SO_INFO_INCL is
40			set to '1', if NUM_ALT_SO is included and not set to '000'
41			or/and SO_BITMAP_IND is included and not set to '00'.
42	NUM_ALT_SO	-	Number of alternative service options.



1 If MORE\_SO\_INFO\_INCL is set to '0', the mobile station shall  
 2 omit this field; otherwise, the mobile station shall set this  
 3 field to the number of supported alternative service options  
 4 which either have no service option group number assigned  
 5 or do not belong to the same service option group whose  
 6 bitmap is include in the message.

7 The mobile station shall include NUM\_ALT\_SO occurrences of the following field:

8 ALT\_SO – Alternative service option.

9 The mobile station shall set this field to the value specified in  
 10 [30], corresponding to the alternative service option  
 11 supported by the mobile station. These alternate service  
 12 options are either have not service option group number  
 13 assigned or do not belong to the same service option group  
 14 whose bitmap is included in this message.

15 SO\_BITMAP\_IND – SO bitmap indicator.

16 If MORE\_SO\_INFO\_INCL is set to '0', the mobile station shall  
 17 omit this field; otherwise, the mobile station shall include  
 18 this field and set it as defined in Table 2.7.1.3.2.4-10.

19 SO\_GROUP\_NUM – Service option group number.

20 If the field SO\_BITMAP\_IND is included and not set to '00',  
 21 the mobile station shall include this field and set this field to  
 22 the service option group number of which the bitmap is to be  
 23 included; otherwise, the mobile station shall omit this field.

24 SO\_BITMAP – Service option bitmap.

25 If the field SO\_BITMAP\_IND is included and not set to '00',  
 26 the mobile station shall include the bitmap of size  $2^{(1+SO\_BITMAP\_IND)}$  bits of the service option group number  
 27 (SO\_GROUP\_NUM); otherwise, the mobile station shall omit  
 28 this field;  
 29

30 When the service option bitmap is included, if there are more  
 31 than  $(2^{(1+SO\_BITMAP\_IND)})$  service options defined for the  
 32 service option group, the mobile station shall include the  
 33 bitmap containing the least significant bits  $(2^{(1+SO\_BITMAP\_IND)})$  of the service option group.  
 34

35 The mobile station shall set a bit in this bitmap to '1', if the  
 36 mobile station supports the service option for which this bit  
 37 represents; otherwise, the mobile station shall set a bit in this  
 38 bitmap to '0'.

39 DRS – Data ready to send indicator.

40 If the service instance corresponding to SR\_ID has data to  
 41 send, the mobile station shall set this field to '1'; otherwise,  
 42 the mobile station shall set this field to '0'.

1	PREV_SID_INCL	-	Previous System Identification (SID) included indicator.
2			The mobile station shall set this field to '1' if:
3		-	The mobile station determines that the SID has been
4			changed after a packet data dormant handoff, and
5		-	This message includes the main service instance (see
6			[42]).
7			Otherwise, the mobile station shall set this field to '0'.
8	PREV_SID	-	Previous System Identification.
9			If PREV_SID_INCL is set to '0', the mobile station shall omit
10			this field; otherwise, the mobile station shall include this field
11			and set it as follows:
12			The mobile station shall set this field to the previous SID.
13	PREV_NID_INCL	-	Previous Network Identification (NID) included indicator.
14			The mobile station shall set this field to '1' if:
15		-	The mobile station determines that NID has been changed
16			after a packet data dormant handoff, and
17		-	This message includes the main service instance (see
18			[42]).
19			Otherwise, the mobile station shall set this field to '0'.
20	PREV_NID	-	Previous Network Identification.
21			If PREV_NID_INCL is set to '0', the mobile station shall omit
22			this field; otherwise, the mobile station shall include this field
23			and set it as follows:
24			The mobile station shall set this field to the previous NID.
25	PREV_PZID_INCL	-	Previous Packet Zone ID (PZID) included indicator.
26			The mobile station shall set this field to '1' if:
27		-	The mobile station determines that the Packet Zone ID
28			has been changed after a packet data dormant handoff,
29			and
30		-	This message includes the main service instance (see
31			[42]).
32			Otherwise, the mobile station shall omit this field.
33	PREV_PZID	-	Previous Packet Zone ID.
34			If PREV_PZID_INCL is set to '0', the mobile station shall omit
35			this field; otherwise, the mobile station shall include this field
36			and set it as follows:
37			The mobile station shall set this field to the previous PZID.
38	DIALED_DIGS_INCL	-	Dialed digits included indicator.

1			The mobile station shall set this field to '1' if the dialed digits
2			related fields are included in this message; otherwise, the
3			mobile station shall set this field to '0'.
4	DIGIT_MODE	-	Digit mode indicator.
5			If the DIALED_DIGS_INCL field is set to '0', the mobile station
6			shall omit this field; otherwise, the mobile station shall
7			include this field and shall set it as follows:
8			This field indicates whether the dialed digits are 4-bit DTMF
9			codes or 8-bit ASCII codes using a specified numbering plan.
10			To originate the call using the binary representation of DTMF
11			digits (i.e., CHARi fields are represented in Table 2.7.1.3.2.4-
12			4), the mobile station shall set this field to '0'. To originate
13			the call using ASCII characters, the mobile station shall set
14			this field to '1'.
15	NUMBER_TYPE	-	Type of number.
16			If the DIALED_DIGS_INCL field is set to '0', or if
17			P_REV_IN_USE <sub>s</sub> < 11 and DIGIT_MODE is set to '0', the
18			mobile station shall omit this field; otherwise, the mobile
19			station shall include this field and shall set it as follows:
20			The mobile station shall set this field to the NUMBER_TYPE
21			value shown in Table 2.7.1.3.2.4-2 corresponding to the type
22			of the number as defined in [7], Section 4.5.9.
23			If this field is included and the mobile station determines that
24			the user has entered an international number (for example,
25			with a leading "+" as specified in [39] for Plus Code Dialing or
26			an international access code), the mobile station should set
27			this field to '001'.
28	NUMBER_PLAN	-	Numbering plan.
29			If the DIALED_DIGS_INCL field is set to '0' or if the
30			DIGIT_MODE field is set to '0', the mobile station shall omit
31			this field; otherwise, the mobile station shall include this field
32			and shall set it as follows:
33			The mobile station shall set this field to the NUMBER_PLAN
34			value shown in Table 2.7.1.3.2.4-3 corresponding to the
35			requested numbering plan as defined in [7], Section 4.5.9.
36	NUM_FIELDS	-	Number of dialed digits in this message.

- 1 If the DIALED\_DIGS\_INCL field is set to '0', the mobile station  
 2 shall omit this field; otherwise, the mobile station shall  
 3 include this field and shall set it as follows:
- 4 The mobile station shall set this field to the number of dialed  
 5 digits included in this message.
- 6 The mobile station shall include NUM\_FIELDS occurrences of the following field:
- 7           CHARi    – A dialed digit or character.
- 8 If the DIGIT\_MODE field is set to '0', the mobile station shall  
 9 set each occurrence of this field to the code value shown in  
 10 Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the  
 11 DIGIT\_MODE field is set to '1', the mobile station shall set  
 12 each occurrence of this field to the ASCII representation  
 13 corresponding to the dialed digit, as specified in [9], with the  
 14 most significant bit set to '0'.
- 15           NUM\_RECS   – Number of records.
- 16 The mobile station shall set this field to the number of  
 17 information records included with this message.
- 18 The mobile station shall include NUM\_RECS occurrences of the following three-field  
 19 record.
- 20           RECORD\_TYPE   – Information record type.
- 21 The mobile station shall set this field to the record type value  
 22 shown in Table 2.7.4-1.
- 23 The mobile station shall not include the record type for QoS  
 24 Parameters information record if MOB\_QOS<sub>s</sub> is equal to '0'.
- 25           RECORD\_LEN   – Information record length.
- 26 The mobile station shall set this field to the number of octets  
 27 in the type-specific fields included in this record.
- 28           Type-specific fields   – Type-specific fields.
- 29 The mobile station shall include type-specific fields as  
 30 specified in 2.7.4.

1	SYNC_ID_INCL	-	Service Configuration synchronization identifier included indicator.
2			
3			The mobile station shall set this field to '1' if the SYNC_ID
4			field is included in this message; otherwise, the mobile
5			station shall set this field to '0'.
6			If SYNC_ID_SUPPORTED <sub>s</sub> is equal to '0', the mobile station
7			shall set this field to '0'.
8	SYNC_ID_LEN	-	Service Configuration synchronization identifier length
9			indicator.
10			If the SYNC_ID_INCL field is set to '0', the mobile station shall
11			omit this field; otherwise the mobile station shall include this
12			field and set it as follows:
13			The mobile station shall set this field to the length of the
14			SYNC_ID field included in this message.
15	SYNC_ID	-	Service Configuration synchronization identifier.
16			If the SYNC_ID_INCL field is set to '0', the mobile station shall
17			omit this field; otherwise, the mobile station shall include
18			this field and set it as follows:
19			The mobile station shall set this field to the Service
20			Configuration synchronization identifier corresponding to the
21			stored service configuration.
22	ADD_SERV_INSTANCE_INCL	-	Additional service instances included indicator.
23			If SR_ID is included and set to '111', the mobile station shall
24			omit this field; otherwise, the mobile station shall include
25			this field and set it as follows:
26			If at least one occurrence of the ADD_SR_ID field is included
27			in this message, the mobile station shall set this field to '1';
28			otherwise, the mobile station shall set this field to '0'.
29			If SYNC_ID_INCL is equal to '0' and
30			MAX_ADD_SERV_INSTANCE <sub>s</sub> is equal to '0', the mobile
31			station shall set this field to '0'.
32	NUM_ADD_SERV_INSTANCE	-	Number of additional service instances included.
33			If ADD_SERV_INSTANCE_INCL is set to '0', the mobile station
34			shall omit this field; otherwise, the mobile station shall
35			include this field and set it to the number of additional
36			service instances included in this message.

1                   If SYNC\_ID\_INCL is equal to '0', the mobile station shall set  
2                   this field to a value less than or equal to  
3                   MAX\_ADD\_SERV\_INSTANCE<sub>s</sub>.

4   If ADD\_SERV\_INSTANCE\_INCL is set to '1', the mobile station shall include  
5   NUM\_ADD\_SERV\_INSTANCE occurrences of the following variable-field record:

6           ADD\_SR\_ID    -   Additional service reference identifier.

7                   If SYNC\_ID\_INCL is set to '0', the mobile station shall set this  
8                   field as follows:

9                   o   If the service instance provides a service reference  
10                    identifier, the mobile station shall set this field to the  
11                    service reference identifier specified by the service  
12                    instance. If the service instance does not provide a service  
13                    reference identifier, the mobile station shall set this field  
14                    to the smallest unused service reference identifier value  
15                    between 1 and 6 (inclusive).

16                   Otherwise, the mobile station shall set this field to the service  
17                   reference identifier corresponding to the service option  
18                   connection that the mobile station requests to be restored  
19                   from the stored service configuration.

20           ADD\_DRS    -   Additional Data Ready to Send indicator.

21                   If the service instance corresponding to the ADD\_SR\_ID field  
22                   of this record has data to send, the mobile station shall set  
23                   this field to '1'; otherwise, the mobile station shall set this  
24                   field to '0'.

25           ADD\_TAG    -   Additional call initiation transaction identifier.

26                   The mobile station shall set this field to the identifier for the  
27                   transaction corresponding to the ADD\_SR\_ID field of this  
28                   record.

29   ADD\_SERVICE\_OPTION\_INCL   -   Additional service option included indicator.

30                   If SYNC\_ID\_INCL is set to '1', the mobile station shall omit  
31                   this field; otherwise, the mobile station shall include this field  
32                   and set it as follows:

33                   The mobile station shall set this field to '0' if the requested  
34                   service option number of the service instance corresponding  
35                   to the ADD\_SR\_ID field of this record is the same as  
36                   SERVICE\_OPTION; otherwise, the mobile station shall set  
37                   this field to '1'.

- 1     **ADD\_SERVICE\_OPTION**    –   Additional service option number.
- 2                                If the **ADD\_SERVICE\_OPTION\_INCL** field of this record is not
- 3                                included or is included and is set to '0', the mobile station
- 4                                shall omit this field; otherwise, the mobile station shall
- 5                                include this field and set it to the value specified in [30],
- 6                                corresponding to the requested service option number of the
- 7                                service instance corresponding to the **ADD\_SR\_ID** field of this
- 8                                record.
- 9     **ADD\_NUM\_RECS**        –   Additional number of records.
- 10                              The mobile station shall set this field to the number of
- 11                              information records included in this record for the service
- 12                              instance corresponding to the **ADD\_SR\_ID** field in this record.
- 13   The mobile station shall include **ADD\_NUM\_RECS** occurrences of the following three-field
- 14   record.
- 15   **ADD\_RECORD\_TYPE**     –   Additional information record type.
- 16                              The mobile station shall set this field to the record type value
- 17                              shown in Table 2.7.4-1.
- 18                              The mobile station shall not include the record type for QoS
- 19                              Parameters information record if **MOB\_QOS<sub>S</sub>** is equal to '0'.
- 20   **ADD\_RECORD\_LEN**     –   Additional information record length.
- 21                              The mobile station shall set this field to the number of octets
- 22                              in the type-specific fields included in this record.
- 23   **Type-specific fields**   –   Type-specific fields.
- 24                              The mobile station shall include type-specific fields as
- 25                              specified in 2.7.4.
- 26
- 27   **BCMC\_INCL**         –   BCMC information included indicator
- 28                              If the **P\_REV\_IN\_USE<sub>S</sub>** is less than 11, the mobile station
- 29                              shall omit this field; otherwise, the mobile station shall
- 30                              include this field and set it as follows:
- 31                              The mobile station shall set this field to '1' if one or more
- 32                              **BCMC\_PROGRAM\_IDs** are included in the message;
- 33                              otherwise, the mobile station shall set this field to '0'.

1	BCMC_ORIG_ONLY_IND - BCMC origination only indicator	
2		If the BCMC_INCL field is not included or is included and is
3		set to '0', the mobile station shall omit this field; otherwise,
4		the mobile station shall include this field and set it as
5		follows:
6		The mobile station shall set this field to '1' to indicate that
7		this origination is only for BCMC and no point to point call is
8		requested in this message; otherwise the mobile station shall
9		set this field to '0'.
10	AUTH_SIGNATURE_INCL	- Authorization signature included indication.
11		If the BCMC_INCL field is not included or is included and is
12		set to '0', the mobile station shall omit this field; otherwise,
13		the mobile station shall include this field and set it as
14		follows:
15		The mobile station shall set this field to '1' to indicate that
16		the authorization signature is included in this message for
17		some of the BCMC flows included in this message; otherwise,
18		the mobile station shall set this field to '0'.
19	TIME_STAMP_SHORT_LENGTH	- Length of time stamp included in this message.
20		If the AUTH_SIGNATURE_INCL field is not included or is
21		included and is set to '0', the mobile station shall omit this
22		field; otherwise, the mobile station shall include this field and
23		set it as follows:
24		The mobile station shall set this field to the length of the time
25		stamp, in units of bits, included in this message.
26	TIME_STAMP_SHORT	- Time stamp short.
27		If the AUTH_SIGNATURE_INCL field is not included or is
28		included and is set to '0', the mobile station shall omit this
29		field; otherwise, the mobile station shall include this field and
30		set it as follows:
31		The mobile station shall set this field to the
32		TIME_STAMP_SHORT_LENGTH least significant bits of the
33		time stamp parameter used to generate the Authorization
34		signature included in this message.
35	NUM_BCMC_PROGRAMS	- Number of BCMC Programs
36		If the BCMC_INCL field is not included or is included and is
37		set to '0', the mobile station shall omit this field; otherwise,
38		the mobile station shall include this field and set it as
39		follows:
40		The mobile station shall set this field to the number of BCMC
41		programs included in this message minus 1.



- 1 The mobile station shall include NUM\_BCMC\_PROGRAMS+1 occurrences of the following  
 2 variable length record:
- 3 BCMC\_PROGRAM\_ID\_LEN - Length of BCMC\_PROGRAM\_ID field
- 4 The mobile station shall set this field to one less than the  
 5 length, in bits, of the BCMC\_PROGRAM\_ID of this program.
- 6 BCMC\_PROGRAM\_ID - BCMC program Identifier
- 7 The length of this field shall be one more than the value of  
 8 BCMC\_PROGRAM\_ID\_LEN bits.
- 9 The mobile station shall set this field to the identifier of the  
 10 BCMC program corresponding to one or more flows that the  
 11 mobile station will continue to monitor or start to monitor  
 12 upon receiving confirmation of delivery of this message or is  
 13 requesting transmission.
- 14 BCMC\_FLOW\_DISCRIMINATOR\_LEN - Length of BCMC\_FLOW\_DISCRIMINATOR field
- 15 The mobile station shall set this field to the length, in bits, of  
 16 the BCMC\_FLOW\_DISCRIMINATOR of this program. To  
 17 request all flows associated with this BCMC\_PROGRAM\_ID,  
 18 the mobile station may set this field to '000'.
- 19 NUM\_FLOW\_DISCRIMINATOR - Number of BCMC flow discriminators
- 20 The length of this field shall be determined by the value of the  
 21 BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
 22 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
 23 is omitted; otherwise, the length of this field shall be  
 24 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.
- 25 The mobile station shall set this field to the number of flow  
 26 discriminators included for this program minus one.
- 27 If NUM\_FLOW\_DISCRIMINATOR field is included, the mobile station shall include  
 28 NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;  
 29 otherwise, the mobile station shall include 1 occurrence of the following variable length  
 30 record:
- 31 BCMC\_FLOW\_DISCRIMINATOR - BCMC Flow discriminator.
- 32 The length of this field shall be determined by the value of the  
 33 BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
 34 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
 35 is omitted; otherwise, the length of this field shall be  
 36 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.
- 37 The mobile station shall set this field to the BCMC flow  
 38 discriminator requested.
- 39 AUTH\_SIGNATURE\_IND - Authorization signature indicator.

1		If the AUTH_SIGNATURE_INCL field is not included or is
2		included and is set to '0', the mobile station shall omit this
3		field; otherwise, the mobile station shall include this field and
4		set it as follows:
5		The mobile station shall set this field to '1' to indicate that
6		the authorization signature is included in this message for
7		this BCMC flow; otherwise, the mobile station shall set this
8		field to '0'.
9	AUTH_SIGNATURE_SAME_IND	- Authorization signature same as previous BCMC
10		flow indicator.
11		If the AUTH_SIGNATURE_IND field is not included or is
12		included and is set to '0', the mobile station shall omit this
13		field; otherwise, the mobile station shall include this field and
14		set it as follows:
15		The mobile station shall set this field to '1' to indicate that
16		the authorization signature generated for this BCMC flow is
17		the same as the one generated for the BCMC flow listed prior
18		to this BCMC flow in this message; otherwise, the mobile
19		station shall set this field to '0'.
20		For the first BCMC flow listed in this message, the mobile
21		station shall set this field to '0'.
22	BAK_ID	- BAK identifier.
23		If the AUTH_SIGNATURE_SAME_IND field is not included or
24		is included and is set to '1', the mobile station shall omit this
25		field; otherwise, the mobile station shall include this field and
26		set it as follows:
27		The mobile station shall set this field to BAK identifier used
28		to generate the Authorization signature included in this
29		message.
30	AUTH_SIGNATURE	- Authorization signature.
31		If the AUTH_SIGNATURE_SAME_IND field is not included or
32		is included and is set to '1', the mobile station shall omit this
33		field; otherwise, the mobile station shall include this field and
34		set it as follows:
35		The mobile station shall set this field to the Authorization
36		signature computed for this BCMC flow as specified in
37		2.6.13.9.
38		

1

## 2 2.7.2.3.2.33 Extended Flash With Information Message

3 MSG\_TAG: EFWIM

4

Field	Length (bits)
CON_REF_INCL	1
CON_REF	0 or 8
NUM_REC	4

NUM\_REC occurrences of the following record:

{ (NUM\_REC)

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

} (NUM\_REC)

5

6 CON\_REF\_INCL – Connection reference included indicator.

7 The mobile station shall set this field to '1' if the connection  
8 reference field is included in this message; otherwise, it shall  
9 set this field to '0'.

10 CON\_REF – Connection reference.

11 If the CON\_REF\_INCL field is set to '0', the mobile station  
12 shall omit this field; otherwise, the mobile station shall  
13 include this field and shall set it to the value of the  
14 connection reference assigned to the service option  
15 connection of the call, to which this message corresponds.

16 NUM\_REC – Number of records.

17 The mobile station shall set this field to the number of  
18 information records included with this message.

19 The mobile station shall include NUM\_REC occurrence of the following three-field record:

1	RECORD_TYPE	–	Information record type.
2			The mobile station shall set this field to the record type code
3			shown in Table 2.7.4-1 corresponding to the type of this
4			information record.
5	RECORD_LEN	–	Information record length.
6			The mobile station shall set this field to the number of octets
7			in the type-specific fields of this record.
8	Type-specific fields	–	Type-specific fields.
9			The mobile station shall set these fields as specified in 2.7.4
10			for this type of information record.
11			

## 1 2.7.2.3.2.34 Extended Pilot Strength Measurement Message

2 MSG\_TAG: EPSMM

Field	Length (bits)
REF_PN	9
PILOT_STRENGTH	6
KEEP	1
REF_PILOT_REC_INCL	1
REF_PILOT_REC_TYPE	0 or 3
REF_RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times$ REF_RECORD_LEN
SF_RX_PWR	5
NUM_PILOTS	4

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

PILOT_PN_PHASE	15
PILOT_STRENGTH	6
KEEP	1
PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times$ RECORD_LEN

} (NUM\_PILOTS)

RESQ_IND_INCL	1
---------------	---

NUM\_PILOTS occurrences of the following record :

{ (0 or NUM\_PILOTS)

RESQ_IND	1
----------	---

} (0 or NUM\_PILOTS)

3

4

REF\_PN – Time reference PN sequence offset.

5

6

7

8

The mobile station shall set this field to the PN sequence offset of the pilot used by the mobile station to derive its time reference, relative to the zero offset pilot PN sequence in units of 64 PN chips.

- 1      **PILOT\_STRENGTH**    -    Pilot strength in dB.  
2      The mobile station shall set this field to  
3       $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ,  
4      where PS is the strength of the pilot used by the mobile  
5      station to derive its time reference (see [2]), measured as  
6      specified in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less  
7      than 0, the mobile station shall set this field to '000000'. If  
8      this value is greater than '111111', the mobile station shall  
9      set this field to '111111'.  
10      **KEEP**    -    Keep pilot indicator.  
11      If the handoff drop timer (see 2.6.6.2.3) corresponding to the  
12      pilot used by the mobile station to derive its time reference  
13      (see [2]) has expired, the mobile station shall set this field to  
14      '0'; otherwise, the mobile station shall set this field to '1'.  
15      **REF\_PILOT\_REC\_INCL**    -    Reference pilot information included indicator.  
16      The mobile station shall set this field to '1' if additional  
17      reference pilot information listed in the  
18      **REF\_PILOT\_REC\_TYPE** and **REF\_RECORD\_LEN** fields are  
19      included. The mobile station shall set this field to '0' if the  
20      corresponding pilot is the common pilot and there is no  
21      additional pilot information included.  
22      **REF\_PILOT\_REC\_TYPE** -    Reference pilot record type.  
23      If **REF\_PILOT\_REC\_INCL** is set to '1', the mobile station shall  
24      set this field to the **REF\_PILOT\_REC\_TYPE** value shown in  
25      Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record  
26      specified by this record.

**Table 2.7.2.3.2.34-1. Pilot Record Types**

<b>Description</b>	<b>REF_PILOT_REC_TYPE PILOT_REC_TYPE (binary)</b>
Auxiliary Pilot	000
All other <b>REF_PILOT_REC_TYPE</b> or <b>PILOT_REC_TYPE</b> values are reserved	

- 29  
30      If **REF\_PILOT\_REC\_INCL** is set to '0', the mobile station shall  
31      omit this field.  
32      **REF\_RECORD\_LEN**    -    Reference pilot record length.  
33      If **REF\_PILOT\_REC\_INCL** is set to '1', the mobile station shall  
34      set this field to the number of octets in the type-specific fields  
35      of this pilot record.

1 If REF\_PILOT\_REC\_INCL is set to '0', the mobile station shall  
2 omit this field.

3 Type-specific fields - Pilot record type-specific fields.

4 If REF\_PILOT\_REC\_INCL is set to '1', the mobile station shall  
5 include type-specific fields based on the  
6 REF\_PILOT\_REC\_TYPE of this pilot record.

7 If REF\_PILOT\_REC\_INCL is set to '0', the mobile station shall  
8 omit this field.

9

10 If REF\_PILOT\_REC\_TYPE is equal to '000', the mobile station shall include the following  
11 fields:

12

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
PILOT_WALSH	(WALSH_LENGTH + 6)
RESERVED	0 to 7 (as needed)

13

14 QOF - Quasi-orthogonal function index.

15 The mobile station shall set this field to the index of the  
16 Quasi-orthogonal function of the corresponding Auxiliary  
17 Pilot.

18 WALSH\_LENGTH - Length of the Walsh code for the reference pilot.

19 The mobile station shall set this field to the WALSH\_LENGTH  
20 value shown in Table 2.7.2.3.2.34-2 corresponding to the  
21 length of the Walsh code for the pilot that is used as the  
22 Auxiliary Pilot.

23

**Table 2.7.2.3.2.34-2. Walsh Code Length**

WALSH_LENGTH (binary)	Length of the Walsh Code
'000'	64
'001'	128
'010'	256
'011'	512
'100' - '111'	Reserved

24

25 PILOT\_WALSH - Walsh code for the Auxiliary Pilot used by the mobile station  
26 to derive its time reference.

1		The mobile station shall set this field to the Walsh code
2		corresponding to the Auxiliary Pilot.
3	RESERVED	- Reserved bits.
4		The mobile station shall set all the bits of this field to '0' to
5		make the entire record octet-aligned.
6		
7	SF_RX_PWR	- The received power spectral density of the Serving Frequency.
8		The mobile station shall set this field to
9		$\lceil (10 \times \log_{10}(\text{spec\_density}) + 120) / 2 \rceil$
10		where <i>spec_density</i> is the mobile station received power
11		spectral density of the Serving Frequency, in mW/1.23MHz,
12		averaged over the last $N_{12m}$ frames (see 2.6.6.2.5.1).
13		If this value is less than 0, the mobile station shall set this
14		field to '00000'.
15	NUM_PILOTS	- Number of pilots reported.
16		The mobile station shall set this field to the number of pilots
17		being reported other than the reference pilot.
18	The mobile station shall include NUM_PILOTS occurrences of the following record: one	
19	occurrence for each pilot in the Active Set, for each pilot in the Candidate Set whose	
20	strength exceeds T_ADD, and for each pilot in the Candidate Set whose strength satisfies	
21	the following inequality:	
22	$10 \times \log_{10} PS > \frac{\text{SOFT\_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD\_INTERCEPT}_s}{2}$	
23	where the summation is performed over all pilots currently in the Active Set. The mobile	
24	station shall not include these fields for the pilot identified by the REF_PN field.	
25	The mobile station shall order any occurrences of the following record which correspond to	
26	pilots in the Active Set such that they occur before any occurrences of the following record	
27	which correspond to pilots in the Candidate Set.	
28	PILOT_PN_PHASE	- Pilot measured phase.
29		The mobile station shall set this field to the phase of the pilot
30		PN sequence relative to the zero offset pilot PN sequence of
31		this pilot, in units of one PN chip, as specified in 2.6.6.2.4.
32	PILOT_STRENGTH	- Pilot strength in dB.
33		The mobile station shall set this field to
34		$\lfloor -2 \times 10 \log_{10} PS \rfloor$ ,
35		where PS is the strength of this pilot, measured as specified
36		in 2.6.6.2.2. If this value ( $\lfloor -2 \times 10 \log_{10} PS \rfloor$ ) is less than 0,
37		the mobile station shall set this field to '000000'. If this value
38		is greater than '111111', the mobile station shall set this field
39		to '111111'.



1	KEEP	-	Keep pilot indicator.
2			If the handoff drop timer (see 2.6.6.2.3) corresponding to this
3			pilot has expired, the mobile station shall set this field to '0';
4			otherwise, the mobile station shall set this field to '1'.
5	PILOT_REC_INCL	-	Additional pilot information included indicator.
6			The mobile station shall set this field to '1' if additional pilot
7			information listed in the PILOT_REC_TYPE and
8			RECORD_LEN fields are included. The mobile station shall
9			set this field to '0' if the corresponding pilot is the common
10			pilot and there is no additional pilot information included.
11	PILOT_REC_TYPE	-	Reference pilot record type.
12			If PILOT_REC_INCL is set to '1', the mobile station shall set
13			this field to the PILOT_REC_TYPE value shown in Table
14			2.7.2.3.2.34-1 corresponding to the type of Pilot Record
15			specified by this record.
16			If PILOT_REC_INCL is set to '0', the mobile station shall omit
17			this field.
18	RECORD_LEN	-	Pilot record length.
19			If PILOT_REC_INCL is set to '1', the mobile station shall set
20			this field to the number of octets in the type-specific fields of
21			this pilot record.
22			If PILOT_REC_INCL is set to '0', the mobile station shall omit
23			this field.
24	Type-specific fields	-	Pilot record type-specific fields.
25			If PILOT_REC_INCL is set to '1', the mobile station shall
26			include type-specific fields based on the PILOT_REC_TYPE of
27			this pilot record as described in 3.7.6.1.
28			If PILOT_REC_INCL is set to '0', the mobile station shall omit
29			this field.
30	RESQ_IND_INCL	-	Call rescue flag included indicator.
31			The mobile station shall set this field to '1' if a pilot in the
32			mobile station's Active Set was autonomously promoted since
33			the last <i>Extended Handoff Direction Message</i> , <i>General</i>
34			<i>Handoff Direction Message</i> , or <i>Universal Handoff Direction</i>
35			<i>Message</i> was received; otherwise, the mobile station shall set
36			this field to '0'.
37	If RESQ_IND_INCL is set to '1', the mobile station shall include NUM_PILOTS occurrences		
38	of the following one-field record in the same order as the pilots listed above.		
39	RESQ_IND	-	Call rescue flag.

1  
2  
3  
4  
5  
6  
7  
8

The mobile station shall set this field to '1' if the corresponding pilot was autonomously promoted to the Active Set since the last *Extended Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff Direction Message* was received; otherwise, the mobile station shall set this field to '0'.

## 1 2.7.2.3.2.35 Extended Handoff Completion Message

2 MSG\_TAG: EHOCM

3

Field	Length (bits)
LAST_HDM_SEQ	2
NUM_PILOTS	4

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

PILOT_PN	9
PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$

} (NUM\_PILOTS)

4

5 LAST\_HDM\_SEQ - *Extended Handoff Direction Message, General Handoff*  
6 *Direction Message, or Universal Handoff Direction Message*  
7 *sequence number.*

8 The mobile station shall set this field to the value of the  
9 HDM\_SEQ field from the *Extended Handoff Direction*  
10 *Message, General Handoff Direction Message, or the Universal*  
11 *Handoff Direction Message* that determined the current Active  
12 Set.

13 NUM\_PILOTS - Number of pilots reported.

14 The mobile station shall set this field to the number of pilots  
15 in the current Active Set.

16 The mobile station shall include NUM\_PILOTS occurrences of the following record: one  
17 occurrence for each pilot in the Active Set. If the Active Set contains more than one pilot,  
18 the mobile station shall include the pilot information in the same order as in the *Extended*  
19 *Handoff Direction Message, the General Handoff Direction Message, or the Universal*  
20 *Handoff Direction Message* that determined the current Active Set.

21 PILOT\_PN - Pilot PN sequence offset.

22 The mobile station shall set this field to the pilot PN sequence  
23 offset, relative to the zero offset pilot PN sequence in units of  
24 64 PN chips, for this pilot.

25 PILOT\_REC\_INCL - Additional pilot information included indicator.

1			The mobile station shall set this field to '1' if additional pilot
2			information listed in the PILOT_REC_TYPE and
3			RECORD_LEN fields are included. The mobile station shall
4			set this field to '0' if the corresponding pilot is the common
5			pilot and there is no additional pilot information included.
6	PILOT_REC_TYPE	-	Reference pilot record type.
7			If PILOT_REC_INCL is set to '0', the mobile station shall omit
8			this field; otherwise, the mobile station shall set this field to
9			the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1
10			corresponding to the type of Pilot Record specified by this
11			record.
12	RECORD_LEN	-	Pilot record length.
13			If PILOT_REC_INCL is set to '0', the mobile station shall omit
14			this field; otherwise, the mobile station shall set this field to
15			the number of octets in the type-specific fields of this pilot
16			record.
17	Type-specific fields	-	Pilot record type-specific fields.
18			If PILOT_REC_INCL is set to '0', the mobile station shall omit
19			this field; otherwise, the mobile station shall include type-
20			specific fields based on the PILOT_REC_TYPE of this pilot
21			record as described in 2.7.2.3.2.34.
22			
23			
24			

## 1 2.7.2.3.2.36 Security Mode Request Message

2 MSG\_TAG: SMRM

3

Field	Length (bits)
UI_ENC_INCL	1
UI_ENCRYPT_SUP	0 or 8
NUM_RECS	0 or 3

NUM\_RECS + 1 occurrences of the following two field record  
 { (NUM\_RECS + 1)

CON_REF	0 or 8
UI_ENCRYPT_REQ	0 or 1

} (NUM\_RECS + 1)

SIG_ENC_INCL	1
SIG_ENCRYPT_SUP	0 or 8
D_SIG_ENCRYPT_REQ	0 or 1
NEW_SSEQ_H_INCL	1
NEW_SSEQ_H	0 or 24
NEW_SSEQ_H_SIG	0 or 8
MSG_INT_INFO_INCL	1
SIG_INTEGRITY_SUP_INCL	0 or 1
SIG_INTEGRITY_SUP	0 or 8
SIG_INTEGRITY_REQ	0 or 3

4

5 UI\_ENC\_INCL – User information encryption fields included.

6 The mobile station shall set this field to '1' if the user  
 7 information encryption related fields are included in this  
 8 message; otherwise, the mobile station shall set this field to  
 9 '0'.

10 UI\_ENCRYPT\_SUP – User information encryption supported indicator.

11 If UI\_ENC\_INCL is equal to '1', the mobile station shall  
 12 include this field; otherwise, the mobile station shall omit  
 13 this field. If this field is included, the mobile station shall set  
 14 this field to indicate the supported user information  
 15 encryption algorithms.

1		This field consists of the subfields shown in Table
2		2.7.1.3.2.4-9.
3		The mobile station shall set each subfield to '1' if the
4		corresponding user information encryption algorithm is
5		supported by the mobile station; otherwise, the mobile
6		station shall set the subfield to '0'.
7		The mobile station shall set the RESERVED subfield to
8		'000000'
9	NUM_REC	- Number of user information encryption records.
10		If UI_ENC_INCL is equal to '1', the mobile station shall
11		include this field; otherwise, the mobile station shall omit
12		this field. If this field is included, the mobile station shall set
13		this field to number of user information encryption records
14		included in this message minus 1.
15	The mobile station shall include NUM_REC + 1 occurrences of the following two field	
16	record	
17	CON_REF	- Connection reference corresponding to the service instance
18		requesting for encryption.
19		If UI_ENC_INCL is equal to '1', the mobile station shall
20		include this field; otherwise, the mobile station shall omit
21		this field. If this field is included, the mobile station shall set
22		this field to the connection reference of the service option
23		connection corresponding to this user information encryption
24		request record.
25	UI_ENCRYPT_REQ	- Request for user information encryption on the traffic
26		channel indicator.
27		The mobile station shall set this field to '1' to request user
28		information encryption for the user information
29		corresponding to the service option connection identified by
30		CON_REF; otherwise, the mobile station shall set this field to
31		'0'.
32	SIG_ENC_INCL	- Signaling encryption fields included.
33		The mobile station shall set this field to '1' if the following two
34		fields related to signaling encryption fields are included in
35		this message. Otherwise, the mobile station shall set this
36		field to '0'.
37	SIG_ENCRYPT_SUP	- Signaling encryption supported indicator.
38		If SIG_ENC_INCL is equal to '1', the mobile station shall
39		include this field; otherwise, the mobile station shall omit
40		this field. If this field is included, the mobile shall set this
41		field to indicate the supported signaling encryption
42		algorithms supported by the mobile station.

1		This field consists of the subfields shown in Table
2		2.7.1.3.2.1-5.
3		If this field is included, the mobile station shall set the
4		subfields as follows:
5		The mobile station shall set the CMEA subfield to '1'.
6		The mobile station shall set each other subfield to '1' if the
7		corresponding signaling encryption algorithm is supported by
8		the mobile station; otherwise, the mobile station shall set the
9		subfield to '0'.
10		The mobile station shall set the RESERVED subfield to
11		'00000'.
12	D_SIG_ENCRYPT_REQ	- Dedicated channel signaling encryption request indicator.
13		If SIG_ENC_INCL is equal to '1', the mobile station shall
14		include this field; otherwise, the mobile station shall omit
15		this field. If included the mobile station shall set this field to
16		'1' to request signaling encryption to be turned on for
17		signaling messages sent on f-dsch and r-dsch, and to '0' to
18		request signaling encryption to be turned off for signaling
19		messages sent on f-dsch and r-dsch.
20	NEW_SSEQ_H_INCL	- The NEW_SSEQ included indicator.
21		The mobile station shall set this field to '1' if NEW_SSEQ_H is
22		included in this message; otherwise, the mobile station shall
23		set this field to '0'.
24		If MSG_INTEGRITY_SUP <sub>S</sub> is equal to '0', the mobile station
25		shall set this field to '1' if the mobile station is to include the
26		NEW_SSEQ_H and NEW_SSEQ_H_SIG fields.
27		If MSG_INTEGRITY_SUP <sub>S</sub> is equal to '1', the mobile station
28		shall set this field to '0'.
29	NEW_SSEQ_H	- The 24-bit value used to initialize the 24 MSB of crypto-sync.
30		If NEW_SSEQ_H_INCL is set to '1', the mobile station shall
31		include this field; otherwise, the mobile station shall omit
32		this field. If this field is included, the mobile station shall set
33		this field to a 24-bit value that will be used as the initial
34		value of the 24 MSB of the crypto-sync for both forward and
35		reverse link message integrity.
36	NEW_SSEQ_H_SIG	- The signature of NEW_SSEQ_H
37		If NEW_SSEQ_H is included, the mobile station shall include
38		this field; otherwise, the mobile station shall omit this field. If
39		this field is included, the mobile station shall set this field to
40		the digital signature of the NEW_SSEQ_H computed as
41		described in 2.3.12.4.5.

1	MSG_INT_INFO_INCL	-	Signaling message integrity information included indicator.
2			If MSG_INTEGRITY_SUP <sub>S</sub> is equal to '0', the mobile station
3			shall set this field to '0'; otherwise, the mobile station shall
4			set this field to '1'.
5	SIG_INTEGRITY_SUP_INCL	-	Signaling message integrity information included
6			indicator.
7			If MSG_INT_INFO_INCL is set to '0', the mobile station shall
8			omit this field; otherwise, the mobile station shall include
9			this field and set it as follows:
10			If the mobile station supports other integrity algorithm(s) in
11			addition to the default integrity algorithm, the mobile station
12			shall set this field to '1'; otherwise, the mobile station shall
13			set this field to '0'.
14	SIG_INTEGRITY_SUP	-	Signaling integrity algorithm supported by the mobile station.
15			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
16			mobile station shall set this field as follows; otherwise, the
17			mobile station shall omit this field.
18			The mobile station shall set this field to indicate the
19			supported message integrity algorithm in addition to the
20			default integrity algorithm.
21			This field consists of the subfields shown in Table
22			2.7.1.3.2.1-6.
23			The mobile station shall set each subfield to '1' if the
24			corresponding message integrity algorithm is supported by
25			the mobile station; otherwise, the mobile station shall set the
26			subfield to '0'.
27			The mobile station shall set the RESERVED subfield to
28			'00000000'.
29	SIG_INTEGRITY_REQ	-	Signaling message integrity algorithm request indicator.
30			If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
31			mobile station shall set this field as follows; otherwise, the
32			mobile station shall omit this field.
33			The mobile station shall include this field and set it to the
34			value corresponding to the message integrity algorithm
35			requested as shown in Table 2.7.1.3.2.1-7.
36			



## 1 2.7.2.3.2.37 Call Cancel Message

2 MSG\_TAG: CLCM

3

Field	Length (bits)
TAG	4
ADD_TAG_INCL	1
NUM_ADD_TAG	0 or 3

NUM\_ADD\_TAG occurrences of the following field:

{ (NUM\_ADD\_TAG)

ADD_TAG	4
---------	---

} (NUM\_ADD\_TAG)

4

5 TAG - Transaction identifier.

6 The mobile station shall set this field to the TAG value in the  
7 list TAG\_OUTSTANDING\_LIST in the *Enhanced Origination*  
8 *Message* sent to originate this call.

9 ADD\_TAG\_INCL - Additional call initiation transaction identifiers included  
10 indicator.

11 If at least one occurrence of the ADD\_TAG field is included in  
12 this message, the mobile station shall set this field to '1';  
13 otherwise, the mobile station shall set this field to '0'.

14 NUM\_ADD\_TAG - Number of additional call initiation transaction identifiers  
15 included.

16 If ADD\_TAG\_INCL is set to '0', the mobile station shall omit  
17 this field; otherwise, the mobile station shall include this field  
18 and set it to the number of occurrences of the ADD\_TAG field  
19 included in this message.

20 If ADD\_TAG\_INCL is set to '1', the mobile station shall include NUM\_ADD\_TAG  
21 occurrences of the following field:

22 ADD\_TAG - Additional call initiation transaction identifier.

23 The mobile station shall set this field to the TAG value in the  
24 *Enhanced Origination Message*.

25

## 1 2.7.2.3.2.38 Device Information Message

2 MSG\_TAG: DIM

3

Field	Length (bits)
WLL_DEVICE_TYPE	3
NUM_INFO_RECORDS	5

NUM\_INFO\_RECORDS occurrences of the following record:

{ (NUM\_INFO\_RECORDS)

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

} (NUM\_INFO\_RECORDS)

4

5 WLL\_DEVICE\_TYPE – WLL device type indicator.

6 The mobile station shall set this field to the  
 7 WLL\_DEVICE\_TYPE value shown in Table 2.7.1.3.2.1-3  
 8 corresponding to the mobile station device type.

9 NUM\_INFO\_RECORDS – Number of information records included.

10 The mobile station shall set this field to the number of  
 11 information records which are included.

12 The mobile station shall include one occurrence of the following fields for each information  
 13 record which is included:

14 RECORD\_TYPE – Information record type.

15 The mobile station shall set this field to the record type code  
 16 shown in Table 2.7.4-1 corresponding to the type of this  
 17 information record.

18 RECORD\_LEN – Information record length.

19 The mobile station shall set this field to the number of octets  
 20 in the type-specific fields of this record.

21 Type-specific fields – Type-specific fields.

22 The mobile station shall set these fields as specified in 2.7.4  
 23 for this type of information record.

24

## 1 2.7.2.3.2.39 Base Station Status Request Message

2 MSG\_TAG: BSSREQM

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields	$8 \times \text{QUAL\_INFO\_LEN}$
NUM_RECORD	4

NUM\_RECORD occurrences of the following record:

{ (NUM\_RECORD)

RECORD_TYPE	8
RECORD_LENGTH	8
Record type specific fields	variable
RESERVED	0-7 (as required)

} (NUM\_RECORD)

3 QUAL\_INFO\_TYPE - Qualification information type.

4 The mobile station shall set this field to the value shown in  
5 Table 3.7.2.3.2.15-1 to show the inclusion of qualification  
6 information in the type-specific fields.

7 QUAL\_INFO\_LEN - Qualification information length.

8 The mobile station shall set this field to the number of octets  
9 included in the type-specific fields of the qualification  
10 information.

11 Type-specific fields - Type-specific fields.

12 The mobile station shall set these fields to the qualification  
13 information according to the QUAL\_INFO\_TYPE field.

14 If QUAL\_INFO\_TYPE is equal to '00000000', the type-specific  
15 fields are omitted.

16 If QUAL\_INFO\_TYPE is equal to '00000001', the mobile  
17 station shall use the following fixed-length format for the  
18 type-specific fields:

Type-specific Field	Length (bits)
BAND_CLASS	5
RESERVED	3

19

20 If QUAL\_INFO\_TYPE is equal to '00000010', the mobile  
21 station shall use the following fixed-length format for the  
22 type-specific fields:

Type-specific Field	Length (bits)
BAND_CLASS	5
OP_MODE	8
RESERVED	3

- 1
- 2       BAND\_CLASS   -   Band class.
- 3                   The mobile station shall set this field to the CDMA band
- 4                   class, as specified in [30].
- 5       OP\_MODE    -   Operating mode.
- 6                   The mobile station shall set this field as shown in
- 7                   Table 3.7.2.3.2.15-3 to specify the operating mode
- 8                   qualification information.
- 9       RESERVED   -   Reserved bits.
- 10                   The mobile station shall set this field to '000'.
- 11       NUM\_RECORD   -   Number of requested record fields in this message.
- 12                   The mobile station shall set this field to the number of
- 13                   occurrences of RECORD\_TYPE field in this message.
- 14   The mobile station shall include NUM\_RECORD occurrences of the following variable-
- 15   length record, one for each information record that is requested:
- 16       RECORD\_TYPE   -   Information record type.
- 17                   The mobile station shall set this field to the record type value
- 18                   shown in Table 2.7.2.3.2.39-1 corresponding to the
- 19                   information record requested.

**Table 2.7.2.3.2.39-1. Base Station Status Request Information Record Types**

Information Record Requested	Record Type
Pilot Information	00000000
Reserved	00000001- 11111111

- 21       RECORD\_LENGTH   -   Information record length.
- 22                   The mobile station shall set this field to the length, in octets,
- 23                   of the record type specific fields included in this record.
- 24   Record type specific
- 25       fields       -   Record type specific fields
- 26                   The mobile station shall set this field to the type specific
- 27                   fields corresponding to this record type.
- 28                   If the RECORD\_TYPE field is set to '00000000', the mobile
- 29                   station shall set the record type specific field as follows:

Field	Length (bits)
NUM_PILOTS	4
SID_NID_REQ	1

NUM\_PILOTS occurrences of the following one field record:

{ NUM\_PILOTS)

PILOT_PN	9
----------	---

}( NUM\_PILOTS)

LAT_LONG_REQ	1
--------------	---

- 1            NUM\_PILOTS - Number of Pilots reported.
- 2            The mobile station shall set this field to the number of pilots
- 3            whose information is requested in this message.
- 4            The mobile station shall set this field to a number equal or
- 5            greater than one.
- 6            SID\_NID\_REQ - SID, NID information requested indicator.
- 7            The mobile station shall set this field to '1' if it also requests
- 8            the SID and NID information for these pilots; otherwise, the
- 9            mobile station shall set this field to '0'.
- 10          The mobile station shall include NUM\_PILOTS occurrences of the following one-
- 11          field record:
- 12          PILOT\_PN - Pilot PN sequence offset index.
- 13          The mobile station shall set this field to the pilot PN sequence
- 14          offset for the base station, in units of 64 PN chips, whose
- 15          Base Station identification number information is being
- 16          requested.
- 17          LAT\_LONG\_REQ - Base station LAT/LONG information requested indicator.
- 18          The mobile station shall set this field to '1' if it also requests
- 19          the LAT/LONG information for these pilots; otherwise, the
- 20          mobile station shall set this field to '0'.
- 21          RESERVED - Reserved bits.
- 22          The mobile station shall add reserved bits as needed in order
- 23          to make the length of the record equal to an integer number
- 24          of octets. The mobile station shall set these bits to '0'.

1  
2

## 1 2.7.2.3.2.40 CDMA Off Time Report Message

2 MSG\_TAG: COTRM

Field	Length (bits)
CDMA_OFF_TIME_ENABLE	1
CDMA_OFF_TIME_START	0 or 6
CDMA_OFF_TIME_UNIT	0 or 2
CDMA_OFF_TIME_MODE	0 or 1
CDMA_OFF_TIME	0 or 4
CDMA_OFF_TIME_PERIOD	0 or 6

3

4 CDMA\_OFF\_TIME\_ENABLE - Off time reporting enable

5 The mobile station shall set this field to '1' if the mobile  
6 station plans to suspend its CDMA Traffic Channel  
7 processing. The mobile station shall set this field to '0' to  
8 cancel a previously reported CDMA Traffic Channel  
9 processing suspension.

10 CDMA\_OFF\_TIME\_START - The start time when the mobile station moves away from  
11 the CDMA Traffic Channel.

12 If CDMA\_OFF\_TIME\_ENABLE is set to '0', the mobile station  
13 shall omit this field; otherwise, the mobile station shall  
14 include this field and set it as follows:

15 The mobile station shall set this field to the System Time, in  
16 units of 80 ms (modulo 64), at which the mobile station plans  
17 to go away from the CDMA Traffic Channel.

18 CDMA\_OFF\_TIME\_UNIT - Time unit used in CDMA\_OFF\_TIME

19 If CDMA\_OFF\_TIME\_ENABLE is set to '0', the mobile station  
20 shall omit this field; otherwise, the mobile station shall  
21 include this field and set it as follows:

22 The mobile station shall set this field to the time unit used in  
23 CDMA\_OFF\_TIME, as specified in Table 2.7.2.3.2.40-1

24

**Table 2.7.2.3.2.40-1. CDMA Off Time Unit**

<b>CDMA_OFF_TIME_UNIT (binary)</b>	<b>Time Unit (decimal)</b>
00	80 ms
01	0.5 sec
10	1 sec
11	RESERVED

**CDMA\_OFF\_TIME\_MODE** – CDMA off time mode

If CDMA\_OFF\_TIME\_ENABLE is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' if CDMA\_OFF\_TIME is periodic; otherwise, the mobile station shall set this field to '0'.

**CDMA\_OFF\_TIME** – The total time that the mobile station plans to be away from the CDMA Traffic Channel.

If CDMA\_OFF\_TIME\_ENABLE is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to one less than the mobile station's estimate of the total time it is off the CDMA Traffic Channel, in units of CDMA\_OFF\_TIME\_UNIT.

**CDMA\_OFF\_TIME\_PERIOD** – The time between CDMA\_OFF\_TIME

If CDMA\_OFF\_TIME\_MODE is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the time minus 10 seconds, in units of 10 seconds, between the beginning of successive CDMA\_OFF\_TIME.



## 1 2.7.2.3.2.41 Authentication Response Message

2 MSG\_TAG: AURSPM

3

Field	Length (bits)
RES	128
SIG_INTEGRITY_SUP_INCL	1
SIG_INTEGRITY_SUP	0 or 8
SIG_INTEGRITY_REQ	0 or 3
NEW_KEY_ID	2
NEW_SSEQ_H	24

4

5 RES – The output, RES, of the User Authentication Function.

6 The mobile station shall set this field to the output, RES, of  
7 the function as specified in Figure 2.3.12.5.2-2. If the UIM  
8 returns a RES value with length smaller than 128, the mobile  
9 station shall store the RES value in the most significant bits  
10 of the RES field and pad the least significant bits with '0's.

11 SIG\_INTEGRITY\_SUP\_INCL – Signaling message integrity information included  
12 indicator.

13 If the mobile station supports other integrity algorithm(s) in  
14 addition to the default integrity algorithm, the mobile station  
15 shall set this field to '1'; otherwise, the mobile station shall  
16 set this field to '0'.

17 SIG\_INTEGRITY\_SUP – Signaling integrity algorithm supported by the mobile station.  
18 If SIG\_INTEGRITY\_SUP\_INCL is set to '1', the mobile station  
19 shall set this field as follows; otherwise, the mobile station  
20 shall omit this field.

21 The mobile station shall set this field to indicate the  
22 supported message integrity algorithms in addition to the  
23 default integrity algorithm.

24 This field consists of the subfields shown in Table  
25 2.7.1.3.2.1-6.

26 The mobile station shall set each subfield to '1' if the  
27 corresponding message integrity algorithm is supported by  
28 the mobile station; otherwise, the mobile station shall set the  
29 subfield to '0'.

30 The mobile station shall set the RESERVED subfield to  
31 '00000000'.

32

1	SIG_INTEGRITY_REQ	-	Signaling message integrity algorithm requested by the
2			mobile station.
3			If SIG_INTEGRITY_SUP_INCL is set to '1', the mobile station
4			shall set this field as follows; otherwise, the mobile station
5			shall omit this field.
6			The mobile station shall include this field and set it to the
7			value corresponding to the message integrity algorithm
8			requested as shown in Table 2.7.1.3.2.1-7.
9	NEW_KEY_ID	-	New key identifier.
10			The mobile station shall set this field as follows:
11		-	If LAST_3G_KEY_ID equals '10', the mobile station shall
12			set this field to '11'.
13		-	If LAST_3G_KEY_ID equals '11', the mobile station shall
14			set this field to '10'.
15	NEW_SSEQ_H	-	The 24-bit value used to initialize the 24 MSB of the crypto-
16			sync.
17			The mobile station shall set this field to a 24-bit value that
18			will be used as the initial value of the 24 MSB of the crypto-
19			sync for both forward and reverse link message integrity.
20			

1 2.7.2.3.2.42 Authentication Resynchronization Message

2 MSG\_TAG: AURSYNM

3

Field	Length (bits)
CON_MS_SQN	48
MAC_S	64

4

5 CON\_MS\_SQN – The concealed sequence number of the authentication vector.  
6 The mobile station shall set this field to the output,  
7 CON\_MS\_SQN, of the function as specified in Figure  
8 2.3.12.5.2-3.

9 MAC\_S – Message authenticaion code for resynchronization.  
10 The mobile station shall set this field to the output, MAC\_S,  
11 of the function as specified in Figure 2.3.12.5.2-3.

12

## 1 2.7.2.3.2.43 ITBSPM Request Message

## 2 MSG\_TAG: ITBSPMRM

Field	Length (bits)
BCMC_REQ_TYPE	4
NUM_BCMC_PROGRAMS	0 or 8

If NUM\_BCMC\_PROGRAMS field is included,  
NUM\_BCMC\_PROGRAMS+1 occurrences of the following  
record

*{ (NUM\_BCMC\_PROGRAMS+1)*

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	Variable (Value of BCMC_PROGRAM_ID_LEN + 1)
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the  
following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
-------------------------	-----------------------------

*} (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

*} (NUM\_BCMC\_PROGRAMS+1)*

3

4 BCMC\_REQ\_TYPE – BCMC Request Type.

5 The mobile station shall set this field as specified in Table  
6 2.7.2.3.2.43-1 to request transmission of ITBSPM over traffic  
7 channel.

1

**Table 2.7.2.3.2.43-1 BCMC Request Type**

<b>Value (binary)</b>	<b>BCMC Request</b>
0000	Request information for all BCMC_FLOW_IDs
0001	Request information for Traffic Channel BCMC_FLOW_IDs
0010	Request information for BCMC_FLOW_IDs (See section 2.6.13.11) specified in this message
0011- 1111	Reserved

2

3    **NUM\_BCMC\_PROGRAMS**    -    Number of BCMC programs included.

4                                If BCMC\_REQ\_TYPE is not set to '0010', the mobile station  
5                                shall omit this field; otherwise, the mobile station shall  
6                                include this field and set it as follows.

7                                The mobile station shall set this field to the number of BCMC  
8                                programs included in this message minus 1.

9    If the NUM\_BCMC\_PROGRAMS field is included, the mobile station shall include  
10    NUM\_BCMC\_PROGRAMS+1 occurrences of the following record:

11    **BCMC\_PROGRAM\_ID\_LEN**    - Length of BCMC\_PROGRAM\_ID field

12                                The mobile station shall set this field to one less than the  
13                                length, in bits, of the BCMC\_PROGRAM\_ID of this program.

14    **BCMC\_PROGRAM\_ID**    -    BCMC program Identifier

15                                The length of this field shall be one more than the value of  
16                                BCMC\_PROGRAM\_ID\_LEN bits.

17                                The mobile station shall set this field to the identifier of the  
18                                BCMC program corresponding to one or more flows that the  
19                                mobile station will continue to monitor or start to monitor  
20                                upon receiving confirmation of delivery of this message or is  
21                                requesting transmission.

22    **BCMC\_FLOW\_DISCRIMINATOR\_LEN**    -    Length of BCMC\_FLOW\_DISCRIMINATOR field

23                                The mobile station shall set this field to the length, in bits, of  
24                                the BCMC\_FLOW\_DISCRIMINATOR of this program. To  
25                                request all flows associated with this BCMC\_PROGRAM\_ID,  
26                                the mobile station may set this field to '000'.

1 NUM\_FLOW\_DISCRIMINATOR - Number of BCMC flow discriminators

2 The length of this field shall be determined by the value of the  
3 BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
4 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
5 is omitted; otherwise, the length of this field shall be  
6 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

7 The mobile station shall set this field to the number of flow  
8 discriminators included for this program minus one.

9 If NUM\_FLOW\_DISCRIMINATOR field is included, the mobile station shall include  
10 NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;  
11 otherwise, the mobile station shall include 1 occurrence of the following variable length  
12 record:

13 BCMC\_FLOW\_DISCRIMINATOR - BCMC Flow Discriminator.

14 The length of this field shall be determined by the value of the  
15 BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
16 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
17 is omitted; otherwise, the length of this field shall be  
18 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

19 The mobile station shall set this field to the discriminator of  
20 the BCMC flow.

21  
22

## 1 2.7.2.3.2.44 Handoff Supplementary Information Notification Message

2 MSG\_TAG: HOSINM

Field	Length (bits)
NUM_HO_SUP_REC	8

NUM\_HO\_SUP\_REC occurrences of the following three-field record:

{

HO_SUP_REC_TYPE	3
HO_SUP_REC_LEN	5
HO_SUP_REC	8 x HO_SUP_REC_LEN

}

3 NUM\_HO\_SUP\_REC - Number of handoff supplementary information record.

4 The mobile station shall set this field based on the number of  
5 handoff supplementary information record included in this  
6 message. If the mobile station does not have any handoff  
7 supplementary handoff information to report, then the mobile  
8 station shall set this field to zero.

9 HO\_SUP\_REC\_TYPE - Handoff supplementary information record type.

10 The mobile station shall set this field based on the type of the  
11 HO\_SUP\_REC field included in this message.

12 HO\_SUP\_REC\_LEN - Handoff supplementary information record length.

13 The mobile station shall set this field to the number of octets  
14 in the fields included in this record following this field.

15 HO\_SUP\_REC - Handoff supplementary record.

16 The handoff supplementary record fields are determined by  
17 the value of HO\_SUP\_REC\_TYPE, as described below.

18 If HO\_SUP\_REC\_TYPE = '000', the HO\_SUP\_REC field shall be:

19

PILOT_PN	9
AP_ID_LEN	4
AP_ID	16 x AP_ID_LEN
IOS_MSC_ID	24
IOS_CELL_ID	16
RESERVED	0-7 (as required)

20

1	If HO_SUP_REC_TYPE field is set to '000', the base station shall include the following sub-		
2	fields in HO_SUP_REC field:		
3	PILOT_PN	-	Pilot PN sequence offset index.
4			The mobile station shall set this field to the pilot PN sequence
5			offset of a base station, in units of 64 PN chips.
6	AP_ID_LEN	-	Access Point identification length.
7			The base station shall set this field to the length of the access
8			point identification in units of 16 bits.
9	AP_ID	-	AP_ID of a base station.
10			The mobile station shall set this field to AP_ID value
11			(see 2.6.2.2.19) corresponding to the PILOT_PN reported in
12			this record.
13	IOS_MSC_ID	-	MSC_ID of a base station.
14			The mobile station shall set this field to MSC_ID value
15			(see 2.6.2.2.19) corresponding to the PILOT_PN reported in
16			this record.
17	IOS_CELL_ID	-	CELL_ID of a base station.
18			The mobile station shall set this field to CELL_ID value (see
19			2.6.2.2.19) corresponding to the PILOT_PN reported in this
20			record.
21	RESERVED	-	Reserved bits.
22			The mobile station shall set all the bits of this field to '0' to
23			make entire record octet aligned.
24			



1    2.7.2.3.2.45 General Extension Message

2    MSG\_TAG: GEM

3    The format of this message is the same as when transmitted on r-csch. Please see section  
4    2.7.1.3.2.18.

5

6

### 2.7.3 Orders

*Order Messages* are sent by the mobile station on the r-csch and on the r-dsch. The general PDU format used on the r-csch is defined in 2.7.1.3.2.2, and the general PDU format used on the r-dsch is defined in 2.7.2.3.2.1. There are many specific types of *Order Messages*, as shown in Table 2.7.3-1.

The mobile station may send on the r-csch any type of order shown in Table 2.7.3-1 with a 'Y' in the first column, but shall not send on the r-csch any type of order with an 'N' in the first column. The mobile station may send on the r-dsch any type of order shown in Table 2.7.3-1 with a 'Y' in the second column, but shall not send on the r-dsch any type of order with an 'N' in the second column. The mobile station shall be capable of sending all types of orders shown in Table 2.7.3-1 with a 'Y' in the sixth column.

An order consists of a 6-bit order code and zero or more order-specific fields. The mobile station shall set the ORDER field in the *Order Message* to the order code shown in Table 2.7.3-1 corresponding to the type of order being sent.

If the order qualification code in the fourth column of Table 2.7.3-1 is '00000000' and there are no other additional fields as shown by an 'N' in the fifth column, the mobile station shall include no order qualification code or other order-specific fields in the *Order Message*. The order qualification code of such a message is implicitly '00000000'.

If the order qualification code is not '00000000' and there are no other additional fields as shown in Table 2.7.3-1 by an 'N' in the fifth column, the mobile station shall include the order qualification code as the only order-specific field in the *Order Message*.

If there are other additional fields as shown in Table 2.7.3-1 by a 'Y' in the fifth column, the mobile station shall include order-specific fields as specified in the corresponding subsection of this section.

1 **Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch**  
 2 **(Part 1 of 6)**

<b>r-csch Order</b>	<b>r-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qualificati on Code, ORDQ (binary)</b>	<b>More Fields other than ORDQ</b>	<b>Support Req'd</b>	<b>P_REV_I N_USE<sup>5</sup></b>	<b>Name/Function</b>
Y	Y	000010	00000000	Y	Y	All	<i>Base Station Challenge Order</i> (see 2.7.3.1)
Y	Y	000011	00000000	N	Y	All	<i>SSD Update Confirmation Order</i>
Y	Y	000011	00000001	N	Y	All	<i>SSD Update Rejection Order</i>
N	Y	000101	0000nnnn	N	Y	All	<i>Parameter Update Confirmation Order</i> (where 'nnnn' is the Request Number)
-	-	001011	00000000	-	-	-	<i>Reserved (Previously: Request Wide Analog Service Order)</i>
		001011	00000001				<i>Reserved (Previously: Request Narrow Analog Service Order)</i>
		001011	00000010				<i>Reserved (Previously: Request Analog Service Order)</i>
Y	Y	010000	00000000	N	Y	All	<i>Mobile Station Acknowledgment Order</i> (see [4])
N	Y	010011	00000000	Y	N	< 7	<i>Service Option Request Order</i> (Band Class 0 only; see 2.7.3.2)
N	Y	010100	00000000	Y	Y	< 7	<i>Service Option Response Order</i> (Band Class 0 only; see 2.7.3.3)
Y	Y	010101	00000000	N	Y	All	<i>Release Order</i> (normal release)

<sup>5</sup> P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.

Y	Y	010101	00000001	N	Y	All	<i>Release Order</i> (with power-down indication)
---	---	--------	----------	---	---	-----	---

1

1 **Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch**  
2 **(Part 2 of 6)**

<b>r-csch Order</b>	<b>r-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qualificati on Code, ORDQ (binary)</b>	<b>More Fields other than ORDQ</b>	<b>Support Req'd</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
N	Y	010101	00000010	N	Y	≥ 6	<i>Release Order</i> (with service inactive indication)
N	Y	010101	00000011	Y	N	≥ 11	<i>Release Order</i> (with reduced slot cycle mode indication; see 2.7.3.5)
N	Y	010111	00000000	N	N	All	<i>Long Code Transition Request Order</i> (request public)
N	Y	010111	00000001	N	N	All	<i>Long Code Transition Request Order</i> (request private)
N	Y	010111	00000010	N	Y	All	<i>Long Code Transition Response Order</i> (use public)
N	Y	010111	00000011	N	N	All	<i>Long Code Transition Response Order</i> (use private)
N	Y	011000	00000000	N	Y	All	<i>Connect Order</i>
N	Y	011001	0000nnn n	N	Y	All	<i>Continuous DTMF Tone Order</i> (where 'nnnn' is the tone per Table 2.7.1.3.2.4-4).
N	Y	011001	11111111	N	Y	All	<i>Continuous DTMF Tone Order</i> (Stop continuous DTMF tone)
N	Y	011101	nnnnnnnn n	N	Y	<7	<i>Service Option Control Order</i> (Band Class 0 only; the specific control is designated by 'nnnnnnnn' as determined by each service option)
Y	Y	011110	nnnnnnnn n	N	N	All	<i>Local Control Response Order</i> (specific response as designated by 'nnnnnnnn' as determined by each system)
Y	Y	011111	00000001	Y	Y	All	<i>Mobile Station Reject Order</i> (unspecified reason; see 2.7.3.4)
Y	Y	011111	00000010	Y	Y	All	<i>Mobile Station Reject Order</i> (message not accepted in this state; see 2.7.3.4)

3

1 **Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch**  
2 **(Part 3 of 6)**

<b>r-csch Order</b>	<b>r-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qualificati on Code, ORDQ (binary)</b>	<b>More Fields other than ORDQ</b>	<b>Support Req'd</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
Y	Y	011111	00000011	Y	Y	All	<i>Mobile Station Reject Order</i> (message structure not acceptable; see 2.7.3.4)
Y	Y	011111	00000100	Y	Y	All	<i>Mobile Station Reject Order</i> (message field not in valid range; see 2.7.3.4)
N	Y	011111	00000101	Y	Y	All	<i>Mobile Station Reject Order</i> (message type or order code not understood; see 2.7.3.4)
Y	Y	011111	00000110	Y	Y	All	<i>Mobile Station Reject Order</i> (message requires a capability that is not supported by the mobile station; see 2.7.3.4)
Y	Y	011111	00000111	Y	Y	All	<i>Mobile Station Reject Order</i> (message cannot be handled by the current mobile station configuration; see 2.7.3.4)
Y	Y	011111	00001000	Y	Y	≥ 4	<i>Mobile Station Reject Order</i> (response message would exceed allowable length; see 2.7.3.4)
Y	Y	011111	00001001	Y	Y	≥ 4	<i>Mobile Station Reject Order</i> (information record is not supported for the specified band class and operating mode; see 2.7.3.4)
N	Y	011111	00001010	Y	Y	≥ 4	<i>Mobile Station Reject Order</i> (search set not specified; see 2.6.6.2.5.1)
N	Y	011111	00001011	Y	Y	≥ 4	<i>Mobile Station Reject Order</i> (invalid search request; see 2.6.6.2.5.1)

3

1 **Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch**  
 2 **(Part 4 of 6)**

<b>r-csch Order</b>	<b>r-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qualificati on Code, ORDQ (binary)</b>	<b>More Fields other than ORDQ</b>	<b>Support Req'd</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
N	Y	011111	00001100	Y	Y	≥ 4	<i>Mobile Station Reject Order</i> (invalid Frequency Assignment; see 2.6.6.2.5.1)
N	Y	011111	00001101	Y	Y	≥ 4	<i>Mobile Station Reject Order</i> (search period too short; see 2.6.6.2.5.1)
Y	N	011111	00001110	Y	Y	≥ 6	<i>Mobile Station Reject Order</i> (RC does not match with the value in the field DEFAULT_CONFIG; see 2.6.3.3 and 2.6.3.5)
N	Y	011111	00010000	Y	Y	≥ 7	<i>Mobile Station Reject Order</i> (call assignment not accepted; see 2.7.3.4)
N	Y	011111	00010001	Y	Y	≥ 7	<i>Mobile Station Reject Order</i> (no call control instance present with the specified identifier; see 2.7.3.4)
N	Y	011111	00010010	Y	Y	≥ 7	<i>Mobile Station Reject Order</i> (a call control instance is already present with the specified identifier; see 2.7.3.4)
N	Y	011111	00010011	Y	Y	≥ 7	<i>Mobile Station Reject Order</i> (TAG received does not match any of the TAG stored; see 2.7.3.4)
Y	Y	011111	00010100	Y	Y	≥ 10	<i>Mobile Station Reject Order</i> (UAK not supported)
N	Y	011111	00010101	Y	Y	≥ 9	<i>Mobile Station Reject Order</i> (stored configuration already restored at channel assignment)

3

4

1 **Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch**  
2 **(Part 5 of 6)**

<b>r-csch Order</b>	<b>r-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qualificati on Code, ORDQ (binary)</b>	<b>More Fields other than ORDQ</b>	<b>Support Req'd</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
Y	Y	011111	00010110	Y	Y	≥ 10	<i>Mobile Station Reject Order</i> (The MAC-I field (see [4]) is missing)
Y	Y	011111	00011000	Y	Y	≥ 10	<i>Mobile Station Reject Order</i> (The MAC-I field (see [4]) is present but invalid)
Y	Y	011111	00011001	Y	Y	≥ 10	<i>Mobile Station Reject Order</i> (The security sequence number is invalid)
Y	Y	011111	00011010	Y	Y	≥ 10	<i>Mobile Station Reject Order</i> (The message can not be decrypted)
Y	Y	011111	00011011	Y	Y	≥ 11	<i>Mobile Station Reject Order</i> (Requested stored service configuration is not available)
Y	Y	011111	00011100	Y	Y	≥ 11	<i>Mobile Station Reject Order</i> (PLCM_TYPE mismatch)
Y	Y	011111	00011101	Y	Y	≥ 12	<i>Mobile Station Reject Order</i>  (General Extension Record contains a record type that is not supported)
Y	Y	011111	00011110	Y	Y	≥ 12	<i>Mobile Station Reject Order</i>  (General Extension Record contains a field value outside its permissible range)



Y	Y	011111	00011111	Y	Y	$\geq 12$	<i>Mobile Station Reject Order</i>  (General Extension Record contains a field value that is not supported)
Y	Y	011111	00100000	Y	Y	$\geq 12$	<i>Mobile Station Reject Order</i>  (General Extension Record not acceptable, unspecified reason)
N	Y	100000	00000000	N	Y	$\geq 8$	<i>Call Rescue Cancel Order</i>

1 **Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch**  
2 **(Part 6 of 6)**

<b>r-csch Order</b>	<b>r-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qualification Code, ORDQ (binary)</b>	<b>More Fields other than ORDQ</b>	<b>Support Req'd</b>	<b>P_REV_IN_USE</b>	<b>Name/Function</b>
Y	Y	100001	00000000	N	Y	$\geq 10$	<i>Security Mode Completion Order</i>
Y	N	100010	00000000	Y	N	$\geq 11$	<i>Fast Call Setup Order</i> (indicates mobile station request to operate in a fast call setup mode, see 2.7.3.6)
Y	N	100010	00000001	Y	N	$\geq 11$	<i>Fast Call Setup Order</i> (indicates mobile station response to operate in a fast call setup mode, see 2.7.3.6)
N	Y	100011	00000000	N	Y	$\geq 11$	<i>Shared Channel Configuration Order</i> (requests R-FCH assignment)
N	Y	100011	00000001	N	Y	$\geq 11$	<i>Shared Channel Configuration Order</i> (requests R-FCH release)
All other codes are reserved.							

3

## 1 2.7.3.1 Base Station Challenge Order

2

Order-Specific Field	Length (bits)
ORDQ	8
RANDBS	32

3

4           ORDQ    –   Order qualification code.

5                           The mobile station shall set this field to '00000000'.

6           RANDBS   –   Random challenge data.

7                           The mobile station shall set this field as specified in  
8                           2.3.12.1.5.

9

1     2.7.3.2 Service Option Request Order

2

Order-Specific Field	Length (bits)
ORDQ	8
SERVICE_OPTION	16

3

- 4                    ORDQ     –    Order qualification code.
- 5                                    The mobile station shall set this field to '00000000'.
- 6           SERVICE\_OPTION   –    Service option.
- 7                                    The mobile station shall set this field to the service option
- 8                                    code specified in [30], corresponding to the requested or
- 9                                    alternative service option.

10

## 2.7.3.3 Service Option Response Order

Order-Specific Field	Length (bits)
ORDQ	8
SERVICE_OPTION	16

ORDQ – Order qualification code.

The mobile station shall set this field to '00000000'.

SERVICE\_OPTION – Service option.

The mobile station shall set this field to the service option code specified in [30], corresponding to the accepted service option, or to '0000000000000000' to reject the proposed service option. See 2.6.4.1.2.2.1.

## 1 2.7.3.4 Mobile Station Reject Order

2

Order-Specific Field	Length (bits)
ORDQ	8
REJECTED_TYPE	8

If the order is sent on the Access Channel or Enhanced Access Channel and

REJECTED\_TYPE is '00000111',  
or if the order is sent on the Reverse Traffic Channel and  
REJECTED\_TYPE is '00000001',  
the order-specific fields also include the following two fields:

RESERVED_1	2
REJECTED_ORDER	6
REJECTED_ORDQ	8

If the order is sent on the Reverse Traffic Channel and  
REJECTED\_TYPE is '00001100',  
the order-specific fields also include the following field:

REJECTED_PARAM_ID	16
-------------------	----

If the order is sent on the Access Channel or Enhanced Access Channel and

REJECTED\_TYPE is '00001100',  
or if the order is sent on the Reverse Traffic Channel and  
REJECTED\_TYPE is '00000011', '00101000',  
'00001110', or '00101010',  
the order-specific fields also include the following field:

REJECTED_RECORD	8
-----------------	---

If the ORDQ is '00010000', '00010001', or '00010010', the  
order-specific fields also include the following fields:

CON_REF	8
---------	---

If the ORDQ is '00010011', the order-specific fields also  
include the following fields:

CON_REF	8
TAG	4

REJECTED_PDU_TYPE	0 or 2
RESERVED_2	0 - 7 (as needed)

3

1	ORDQ	-	Order qualification code.
2			The mobile station shall set this field to the ORDQ value
3			shown in Table 2.7.3-1 corresponding to the reason for
4			rejecting the message.
5	REJECTED_TYPE	-	Message type of rejected message.
6			The mobile station shall set this field to the value of the
7			MSG_TYPE or the MSG_ID (see [4]) field of the message being
8			rejected.
9			If the MSG_TYPE or the MSG_ID (see [4]) field is not 8 bits,
10			the mobile station shall set the least significant bits of this
11			field to the value of the MSG_TYPE field and set all the
12			remaining bits to '0'.
13	RESERVED_1	-	Reserved bits.
14			The mobile station shall set this field to '00'.
15	REJECTED_ORDER	-	Order type of rejected message.
16			If the rejected message was an <i>Order Message</i> , the mobile
17			station shall set this field to the value of the ORDER field in
18			the rejected message.
19			Otherwise, the mobile station shall omit this field.
20	REJECTED_ORDQ	-	Order qualification code of rejected message.
21			If the rejected message was an <i>Order Message</i> including an
22			ORDQ field, the mobile station shall set this field to the value
23			of the ORDQ field in the rejected message. If the rejected
24			message was an <i>Order Message</i> not including an ORDQ field,
25			the mobile station shall set this field to '00000000'.
26			Otherwise, the mobile station shall omit this field.
27	REJECTED_PARAM_ID	-	Parameter identification of the rejected parameter.
28			If the rejected message was a <i>Set Parameters Message</i> , the
29			mobile station shall set this field to the PARAMETER_ID of
30			the first parameter for which the requested operation could
31			not be completed.
32			Otherwise, the mobile station shall omit this field.
33	REJECTED_RECORD	-	Record type of the rejected information record.
34			If the rejected message was a <i>Feature Notification Message</i> , an
35			<i>Alert With Information Message</i> , <i>Extended Alert With</i>
36			<i>Information Message</i> , <i>Extended Flash With Information</i>
37			<i>Message</i> , or a <i>Flash With Information Message</i> , the mobile
38			station shall set this field to the RECORD_TYPE field of the
39			first information record that could not be accepted.
40			Otherwise, the mobile station shall omit this field.
41	CON_REF	-	Connection reference.

1 The mobile station shall set this field to the value of the  
2 connection reference of the service option connection  
3 corresponding to the call.

4 TAG - Transaction identifier.

5 The mobile station shall set this field to the transaction  
6 identifier (received from the base station) of the call  
7 assignment being rejected.

8 REJECTED\_PDU\_TYPE - PDU type of the rejected message.

9 If P\_REV\_IN\_USE<sub>s</sub> is less than six, the mobile station shall  
10 omit this field; otherwise, the mobile station shall set this  
11 field to the REJECTED\_PDU\_TYPE code shown in Table  
12 2.7.3.4-1 corresponding to the PDU type of the message being  
13 rejected.

14

15 **Table 2.7.3.4-1. REJECTED\_PDU\_TYPE codes**

REJECTED_PDU_ TYPE (binary)	Description
00	20 ms regular message
01	5 ms mini message
01	Reserved
11	Reserved

16 RESERVED\_2 - Reserved bits.

17 The mobile station shall add reserved bits as needed in order  
18 to make the total length of this record containing order-  
19 specific fields equal to an integer number of octets. The  
20 mobile station shall set these bits to '0'.

21

## 2.7.3.5 Release Order

Order-Specific Field	Length (bits)
ORDQ	8

If the ORDQ is '00000011', the mobile station shall include the following order-specific record:

RSC_MODE_IND	1
RSCI	0 or 4
RSC_END_TIME_UNIT	0 or 2
RSC_END_TIME_VALUE	0 or 4

ORDQ – Order qualification code.

The mobile station shall set this field to the order qualification code, in accordance with Table 2.7.3-1.

RSC\_MODE\_IND – Reduced slot cycle mode indicator.

If ORDQ is equal to '00000011', the mobile station shall include this field and set it as specified below; otherwise, the mobile station shall omit this field.

The mobile station shall set this field to '1' to indicate that it will operate in the reduced slot cycle mode following release of the traffic channel; otherwise, the mobile station shall set this field to '0'.

RSCI – Reduced slot cycle index.

If RSC\_MODE\_IND is included and equal to '1', the mobile station shall include this field and set it to the value of the reduced slot cycle index, as specified in Table 2.7.1.3.2.1-8; otherwise, the mobile station shall omit this field.



1 The mobile station shall set this field to a value less than the  
2 registered slot cycle index, SLOT\_CYCLE\_INDEX\_REG.

3 RSC\_END\_TIME\_UNIT – Reduced slot cycle mode end time unit.

4 If RSC\_MODE\_IND is equal to '0', the mobile station shall  
5 omit this field; otherwise, the mobile station shall set this  
6 field according to Table 2.7.3.5-1 to indicate the units of the  
7 RSC\_END\_TIME\_VALUE field.

8 **Table 2.7.3.5-1. RSC\_END\_TIME\_UNIT and**  
9 **MAX\_RSC\_END\_TIME\_UNIT values**

Field (binary)	Description
00	unit is 4 seconds
01	unit is 20 seconds
10	unit is 100 seconds
11	RESERVED

10 RSC\_END\_TIME\_VALUE – Reduced slot cycle mode end time value.

11 If RSC\_MODE\_IND is equal to '0', the mobile station shall  
12 omit this field; otherwise, the mobile station shall include  
13 this field and set it as follows:

14 The mobile station shall set this field to the system time, in  
15 units of time specified by RSC\_END\_TIME\_UNIT(modulo 16),  
16 at which the mobile station is to exit the reduced slot cycle  
17 mode.

18

19

## 2.7.3.6 Fast Call Setup Order

Order-Specific Field	Length (bits)
ORDQ	8
RSC_MODE_IND	1
RSCI	0 or 4
RSC_END_TIME_UNIT	0 or 2
RSC_END_TIME_VALUE	0 or 4

ORDQ – Order qualification code.

The mobile station shall set this field to the ORDQ value shown in Table 2.7.3-1.

RSC\_MODE\_IND – Reduced slot cycle mode indicator.

The mobile station shall set this field to '1' to indicate that it will operate in the reduced slot cycle mode; otherwise, the mobile station shall set this field to '0'.

RSCI – Reduced slot cycle index.

If RSC\_MODE\_IND is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the value of the reduced slot cycle index, as specified in Table 2.7.1.3.2.1-8.

The mobile station shall set this field to a value less than the registered slot cycle index, SLOT\_CYCLE\_INDEX\_REG.

RSC\_END\_TIME\_UNIT – Reduced slot cycle mode end time unit.

If RSC\_MODE\_IND is equal to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field according to Table 2.7.3.5-1 to indicate the units of the RSC\_END\_TIME\_VALUE field.

RSC\_END\_TIME\_VALUE – Reduced slot cycle mode end time value.

If RSC\_MODE\_IND is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the system time, in units of time specified by RSC\_END\_TIME\_UNIT(modulo 16), at which the mobile station is to exit the reduced slot cycle mode.

#### 2.7.4 Information Records

On the r-csch, information records may be included in the *Status Response Message*, the *Extended Status Response Message*, and the *Device Information Message*. On the r-dsch, information records may be included in the *Origination Continuation Message*, the *Enhanced Origination Message*, the *Flash With Information Message*, the *Extended Flash With Information Message*, the *Service Request Message*, the *Service Response Message*, the *Status Message*, and the *Status Response Message*. Table 2.7.4-1 lists the information record type values that may be used with each message type. The following sections describe the contents of each of the record types in detail.

1

**Table 2.7.4-1. Information Record Types (Part 1 of 3)**

<b>Information Record</b>	<b>Record Type (binary)</b>	<b>QUAL_INFO_TYPE (binary)</b>	<b>Message Type</b>	<b>r-csch</b>	<b>r-dsch</b>	<b>P_REV_IN_USE<sup>6</sup></b>
Reserved	00000001	-	None	-	-	-
Reserved for Obsolete Identification	00000010	-				-
Keypad Facility	00000011	-	Flash	N	Y	All
Called Party Number	00000100	-	Flash	N	Y	All
Calling Party Number	00000101	-	Flash	N	Y	All
		-	Origination Continuation	N	Y	
		-	Enhanced Origination Message	N	Y	
Reserved for Obsolete Identification	00000110	-	-	-	-	-
Call Mode	00000111	00000000	Status [1]	N	Y	< 7
Terminal Information	00001000	00000010	Status [1]	Y	Y	All
Roaming Information	00001001	00000010	Status [1]	Y	Y	All
Security Status	00001010	00000000	Status [1]	N	Y	All
Connected Number	00001011		Flash	N	Y	All
IMSI	00001100	00000000	Status [1]	Y	Y	All
ESN	00001101	00000000	Status [1]	Y	Y	All
Band Class Information	00001110	00000000	Status [2]	Y	Y	1, ≥ 3
Power Class Information	00001111	00000010	Status [2]	Y	Y	1, ≥ 3
Operating Mode Information	00010000	00000001	Status [2]	Y	Y	1, ≥ 3
Service Option Information	00010001	00000010	Status [2]	Y	Y	1, ≥ 3
Multiplex Option Information	00010010	00000010	Status [2]	Y	Y	1, ≥ 3
Service Configuration Information	00010011	00000000	Status [2]	N	Y	1, ≥ 3
		-	Service Request	N	Y	
		-	Service Response	N	Y	

2

<sup>6</sup> P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.

1

**Table 2.7.4-1. Information Record Types (Part 2 of 3)**

<b>Information Record</b>	<b>Record Type (binary)</b>	<b>QUAL_INFO – TYPE (binary)</b>	<b>Message Type</b>	<b>r-csch</b>	<b>r-dsch</b>	<b>P_REV_IN_USE</b>
Called Party Subaddress	00010100	-	Flash	N	Y	≥ 4
		-	Origination Continuation	N	Y	
		-	Enhanced Origination Message	N	Y	
Calling Party Subaddress	00010101	-	Flash	N	Y	≥ 4
		-	Origination Continuation	N	Y	
		-	Enhanced Origination Message	N	Y	
Connected Subaddress	00010110	-	Flash	N	Y	≥ 4
Power Control Information	00010111	00000000	Status [2]	Y	Y	≥ 4
IMSI_M	00011000	00000000	Status [2]	Y	Y	≥ 4
IMSI_T	00011001	00000000	Status [2]	Y	Y	≥ 4
Capability Information	00011010	00000000	Status [2]	Y	Y	≥ 4
Channel Configuration Capability Information	00011011	00000000	Status [2]	Y	Y	≥ 6
Extended Multiplex Option Information	00011100	00000000	Status [2]	Y	Y	≥ 6
Reserved for Obsolete Identification	00011101	-	-	-	-	-
Geo-Location Capability	00011110	00000000	Status [2]	Y	Y	≥ 6
Band Subclass Information	00011111	00000001	Status [2]	Y	Y	≥ 6
Global Emergency Call	00100000	-	Flash	N	Y	≥ 7
Hook Status	00100001	-	DIM	Y	Y	≥ 7
		00000000	Status [2]	Y	Y	
QoS Parameters	00100010	-	Origination Continuation	N	Y	≥ 7
		-	Enhanced Origination	N	Y	
Encryption Capability	00100011	00000000	Status [2]	Y	Y	≥ 7

2

1

**Table 2.7.4-1. Information Record Types (Part 3 of 3)**

<b>Information Record</b>	<b>Record Type (binary)</b>	<b>QUAL_INFO_TYPE (binary)</b>	<b>Message Type</b>	<b>r-csch</b>	<b>r-dsch</b>	<b>P_REV_IN_USE</b>
Signaling Message Integrity Capability	00100100	00000000	Status [2]	Y	Y	≥ 10
UIM_ID	00100101	00000000	Status [2]	Y	Y	≥ 9
ESN_ME	00100110	00000000	Status [2]	Y	Y	≥ 9
MEID	00100111	00000000	Status [2]	Y	Y	≥ 11
Extended Keypad Facility	00101000	-	Flash	N	Y	≥ 11
SYNC_ID	00101001	00000000	Status [2]	Y	Y	≥ 11
Extended Terminal Information	00101010	00000010	Status [2]	Y	Y	≥ 11
Extended Service Option Information	00101011	00000010	Status [2]	Y	Y	≥ 11
Band Class and Band Subclass Information	00101100	00000000	Status [2]	Y	Y	≥ 11
EXT_UIM_ID	00101101	00000000	Status [2]	Y	Y	≥ 11
MEID_ME	00101110	00000000	Status [2]	Y	Y	≥ 12
Additional Geo-Location Capability	00101111	00000000	Status [2]	Y	Y	≥ 12
Extended Record Type — International	11111110	-	Country-Specific			1, ≥ 4

All other record type values are reserved.

“Flash” refers to either the *Flash With Information Message* or the *Extended Flash With Information Message*.

“DIM” refers to the *Device Information Message*.

[1] This information record may be included in a *Status Message*, a *Status Response Message*, or an *Extended Status Response Message*.

[2] This information record may be included in a *Status Response Message* or an *Extended Status Response Message*.

2

1 2.7.4.1 Reserved  
2

## 2.7.4.2 Keypad Facility

This information record can be included in a *Flash With Information Message* and allows the user to send characters entered via a keyboard or other such terminal.

Type-Specific Field	Length (bits)
---------------------	---------------

One or more occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

CHAR<sub>i</sub> – Character.

The mobile station shall include one occurrence of this field for each character entered. The mobile station shall set each occurrence of this field to the ASCII representation corresponding to the character entered, as specified in [9], with the most significant bit set to '0'.



### 2.7.4.3 Called Party Number

This information record identifies the called party's number.

Type-Specific Field	Length (bits)
NUMBER_TYPE	3
NUMBER_PLAN	4

Zero or more occurrences of the following field:

{

CHARi	8
-------	---

}

RESERVED	1
----------	---

3

4       NUMBER\_TYPE    –   Type of number.

5                       The mobile station shall set this field to the NUMBER\_TYPE  
6                       value shown in Table 2.7.1.3.2.4-2 corresponding to the type  
7                       of the called number, as defined in [7], Section 4.5.9.

8                       If the mobile station determines that the user has entered an  
9                       international number (for example, with a leading “+” as  
10                      specified in [39] for Plus Code Dialing or an international  
11                      access code), the mobile station should set this field to ‘001’.

12       NUMBER\_PLAN   –   Numbering plan.

13                      The mobile station shall set this field to the NUMBER\_PLAN  
14                      value shown in Table 2.7.1.3.2.4-3 corresponding to the  
15                      numbering plan used for the called number, as defined in [7],  
16                      Section 4.5.9.

17               CHARi   –   Character.

18                      The mobile stations shall include one occurrence of this field  
19                      for each character in the called number. The mobile station  
20                      shall set each occurrence of this field to the ASCII  
21                      representation corresponding to the character, as specified in  
22                      [9], with the most significant bit set to ‘0’.

23       RESERVED       –   Reserved bit.

24                      The mobile station shall set this field to ‘0’.

25

## 2.7.4.4 Calling Party Number

This information record can be included in a *Flash With Information Message* and identifies the calling party's number.

Type-Specific Field	Length (bits)
NUMBER_TYPE	3
NUMBER_PLAN	4
PI	2
SI	2

Zero or more occurrences of the following field:

{	
CHARi	8
}	
RESERVED	5

**NUMBER\_TYPE** – Type of number.

The mobile station shall set this field to the NUMBER\_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the calling number, as defined in [7], Section 4.5.9.

If the mobile station determines that this number is an international number (for example, with a leading “+” as specified in [39] for Plus Code Dialing or an international access code), the mobile station should set this field to ‘001’.

**NUMBER\_PLAN** – Numbering plan.

The mobile station shall set this field to the NUMBER\_PLAN value shown in Table 2.7.1.3.2.4-3 corresponding to the numbering plan used for the calling number, as defined in [7], Section 4.5.9.

**PI** – Presentation indicator.

This field indicates whether or not the calling number should be displayed.

The mobile station shall set this field to the PI value shown in Table 2.7.4.4-1 corresponding to the presentation indicator, as defined in [7], Section 4.5.9.

1

**Table 2.7.4.4-1. Presentation Indicators**

<b>Description</b>	<b>PI (binary)</b>
Presentation allowed	00
Presentation restricted	01
Number not available	10
Reserved	11

2

3

SI – Screening indicator.

4

This field indicates how the calling number was screened.

5

6

7

The mobile station shall set this field to the SI value shown in Table 2.7.4.4-2 corresponding to the screening indicator value, as defined in [7], Section 4.5.9.

8

9

**Table 2.7.4.4-2. Screening Indicators**

<b>Description</b>	<b>SI (binary)</b>
User-provided, not screened	00
User-provided, verified and passed	01
User-provided, verified and failed	10
Network-provided	11

10

11

CHARi – Character.

12

13

14

15

16

The mobile stations shall include one occurrence of this field for each character in the calling number. The mobile station shall set each occurrence of this field to the ASCII representation corresponding to the character, as specified in [9], with the most significant bit set to '0'.

17

RESERVED – Reserved bits.

18

The mobile station shall set this field to '00000'.

19

1 2.7.4.5 Reserved

2

3

#### 1 2.7.4.6 Call Mode

2 This information record can be included in a *Status Message* or a *Status Response*  
3 *Message* to return the mobile station's preferred call mode and call-related information.

4 If P\_REV\_IN\_USE<sub>s</sub> is equal to or greater than seven, this information record will not be  
5 requested by the base station (see 3.7.2.3.2.15 & 3.7.4.4).

6

Type-Specific Field	Length (bits)
ORIG_MODE	1
PRI_SERVICE	16
SEC_SERVICE	16
RESERVED	7

7

8 ORIG\_MODE – Origination mode indicator.

9 If the current call is a mobile-originated call, the mobile  
10 station shall set this field to '0'. If the current call is a  
11 mobile-terminated call, the mobile station shall set this field  
12 to '1'.

13 PRI\_SERVICE – Primary service option.

14 The mobile station shall set this field to the value specified in  
15 [30], corresponding to the current primary service option. If  
16 no primary service option is active, the mobile station shall  
17 set this field to '0000000000000000'.

18 SEC\_SERVICE – Secondary service option.

19 The mobile station shall set this field to the value specified in  
20 [30], corresponding to the current secondary service option.  
21 If no secondary service option is active, the mobile station  
22 shall set this field to '0000000000000000'.

23 RESERVED – Reserved bits.

24 The mobile station shall set this field to '0000000'.

25

## 2.7.4.7 Terminal Information

This information record can be included in a *Status Message*, a *Status Response Message*, or an *Extended Status Response Message* to return configuration information about the mobile station.

Type-Specific Field	Length (bits)
MOB_P_REV	8
MOB_MFG_CODE	8
MOB_MODEL	8
MOB_FIRM_REV	16
SCM	8
LOCAL_CTRL	1
SLOT_CYCLE_INDEX	3

One or more occurrences of the following field:

{

SERVICE_OPTION	16
----------------	----

}

SIGN_SLOT_CYCLE_INDEX	0 or 1
RESERVED	0 – 7 (as needed)

**MOB\_P\_REV** – Protocol revision of the mobile station.

If the status request does not specify a band class, the mobile station shall set this field to '00001100'; otherwise, the mobile station shall set this field to the MOB\_P\_REV associated with the requested band class and operating mode.

**MOB\_MFG\_CODE** – Manufacturer code.

This field identifies the manufacturer of the mobile station.

The mobile station shall set this field to the manufacturer code assigned to its manufacturer.

**MOB\_MODEL** – Model number.

This number is assigned by the manufacturer for a particular model.

The mobile station shall set this field to the model number assigned by the manufacturer for this mobile station.

1	MOB_FIRM_REV	-	Firmware revision number.
2			This number is assigned by the manufacturer for a particular
3			firmware version.
4			The mobile station shall set this field to the revision number
5			assigned by the manufacturer for the firmware version
6			running in this mobile station.
7	SCM	-	Station class mark.
8			The mobile station shall set this field to its station class
9			mark. See 2.3.3.
10	LOCAL_CTRL	-	Local control indicator.
11			If local control is enabled, the mobile station shall set this
12			field to '1'. If local control is disabled, the mobile station shall
13			set this field to '0'. See [6].
14	SLOT_CYCLE_INDEX	-	Slot cycle index.
15			If the requested operating mode is not CDMA or the mobile
16			station is not configured for slotted mode operation, the
17			mobile station shall set this field to '000'; otherwise, the
18			mobile station shall set this field as follows.
19			If P_REV_IN_USE <sub>s</sub> is less than eleven, the mobile station
20			shall set this field to max (0, SLOT_CYCLE_INDEX_REG) (see
21			2.6.2.1.1).
22			If P_REV_IN_USE <sub>s</sub> is greater or equal to eleven, the mobile
23			station shall set this field to the absolute value of the
24			registered slot cycle index, SLOT_CYCLE_INDEX_REG (see
25			2.6.2.1.1). The sign of the registered slot cycle,
26			SLOT_CYCLE_INDEX_REG, is specified in the
27			SIGN_SLOT_CYCLE_INDEX field of this message (see Table
28			2.7.1.3.2.1-8).
29	SERVICE_OPTION	-	Supported service option.
30			If the requested operating mode is CDMA, the mobile station
31			shall include one occurrence of this field for each service
32			option supported by the mobile station (see [30]); otherwise,
33			the mobile station shall include one occurrence of this field
34			with the value set to '0000000000000000'.
35	SIGN_SLOT_CYCLE_INDEX	-	Sign of the slot cycle index.
36			If the SLOT_CYCLE_INDEX field is set to '000', the mobile
37			station shall omit this field; otherwise, the mobile station
38			shall include this field and set it as follows:
39			The mobile station shall set this field as specified in Table
40			2.7.1.3.2.1-8 to the sign of the registered slot cycle index,
41			SLOT_CYCLE_INDEX_REG (see 2.6.2.1.1). The absolute value
42			of the registered slot cycle index, SLOT_CYCLE_INDEX_REG,
43			is specified in the SLOT_CYCLE_INDEX field of this message.

1	RESERVED	-	Reserved bits.
2			
3			The mobile station shall add reserved bits as needed in order
4			to make the length of the entire information record equal to
5			an integer number of octets. The mobile station shall set
6			these bits to '0'.



#### 2.7.4.8 Roaming Information

This information record can be included in a *Status Message*, a *Status Response Message*, or an *Extended Status Response Message* to return roaming information about the mobile station.

Type-Specific Field	Length (bits)
ACCOLC	4
MOB_TERM_HOME	1
MOB_TERM_FOR_SID	1
MOB_TERM_FOR_NID	1

Zero or more occurrences of the following record:

{

SID	15
NID	16

}

RESERVED	0 - 7 (as needed)
----------	-------------------

5

6            ACCOLC    –    Overload class.

7                            The mobile station shall set this field to the access overload  
8                            class assigned to the mobile station.

9            MOB\_TERM\_HOME    –    Home (non-roaming) registration enable indicator.

10                           If the mobile station is configured to receive mobile station  
11                           terminated calls when not roaming, the mobile station shall  
12                           set this field to '1'; otherwise, the mobile station shall set this  
13                           field to '0'. See 2.6.5.3.

14           MOB\_TERM\_FOR\_SID    –    Foreign SID roaming registration enable indicator.

15                           If the mobile station is configured to receive mobile station  
16                           terminated calls when it is a foreign SID roamer, the mobile  
17                           station shall set this field to '1'; otherwise, the mobile station  
18                           shall set this field to '0'. See 2.6.5.3.

19           MOB\_TERM\_FOR\_NID    –    Foreign NID roaming registration enable indicator.

20                           If the mobile station is configured to receive mobile station  
21                           terminated calls when it is a foreign NID roamer, the mobile  
22                           station shall set this field to '1'; otherwise, the mobile station  
23                           shall set this field to '0'. See 2.6.5.3.

24

1 The mobile station shall include one occurrence of the following two-field record for each  
2 home (non-roaming) (SID, NID) pair (see 2.6.5.2):

3                   SID    –   System identification.

4                               The mobile station shall set this field to the SID value for this  
5                               (SID, NID) pair.

6                   NID    –   Network identification.

7                               The mobile station shall set this field to the NID value for this  
8                               (SID, NID) pair.

9           RESERVED   –   Reserved bits.

10                           The mobile station shall add reserved bits as needed in order  
11                           to make the length of the entire information record equal to  
12                           an integer number of octets. The mobile station shall set  
13                           these bits to '0'.  
14

#### 2.7.4.9 Security Status

This information record can be included in a *Status Message* or a *Status Response Message* to return the authentication, encryption, and voice privacy modes of the mobile station.

Type-Specific Field	Length (bits)
AUTH_MODE	2
ENCRYPT_MODE	2
PRIVATE_LCM	1
RESERVED	3

**AUTH\_MODE** – Authentication mode.

If the mobile station provided standard authentication information at the initiation of this call, the mobile station shall set this field to '01'; otherwise, the mobile station shall set this field to '00'. All other values are reserved.

**ENCRYPT\_MODE** – Message encryption mode.

The mobile station shall set this field to the value shown in Table 3.7.2.3.2.8-2 corresponding to the message encryption mode currently in use for this call.

**PRIVATE\_LCM** – Private long code mask indicator.

If the mobile station is using the private long code mask for this call, the mobile station shall set this field to '1'. If the mobile station is using the public long code mask for this call, the mobile station shall set this field to '0'.

**RESERVED** – Reserved bits.

The mobile station shall set this field to '000'.

## 1 2.7.4.10 Connected Number

2 This information record can be included in a *Flash With Information Message* to identify  
 3 the responding party to a call.

Type-Specific Field	Length (bits)
NUMBER_TYPE	3
NUMBER_PLAN	4
PI	2
SI	2

Zero or more occurrences of the following field:

{

CHARi	8
-------	---

}

RESERVED	5
----------	---

4 NUMBER\_TYPE – Type of number.

5 The mobile station shall set this field to the NUMBER\_TYPE  
 6 value shown in Table 2.7.1.3.2.4-2 corresponding to the type  
 7 of the connected number as defined [7], Section 4.5.9.

8 If the mobile station determines that this number is an  
 9 international number (for example, with a leading “+” as  
 10 specified in [39] for Plus Code Dialing or an international  
 11 access code), the mobile station should set this field to ‘001’.

12 NUMBER\_PLAN – Numbering plan.

13 The mobile station shall set this field to the NUMBER\_PLAN  
 14 value shown in Table 2.7.1.3.2.4-3 corresponding to the  
 15 numbering plan used for the connected number, as defined,  
 16 in [7], Section 4.5.9.

17 PI – Presentation indicator.

18 This field indicates whether or not the connected number  
 19 should be displayed. The mobile station shall set this field to  
 20 the PI value shown in Table 2.7.4.4-1 corresponding to the  
 21 presentation indicator, as defined in [7], Section 4.5.9.

22 SI – Screening indicator.

23 This field indicates how the connected number was screened.  
 24 The mobile station shall set this field to the SI value shown in  
 25 Table 2.7.4.4-2 corresponding to the screening indicator  
 26 value, as defined in [7], Section 4.5.9.

- 1                   CHARi    -   Character.
- 2                               The mobile station shall include one occurrence of this field
- 3                               for each character in the connected number. The mobile
- 4                               station shall set each occurrence of this field to the ASCII
- 5                               representation corresponding to the character, as specified in
- 6                               [9], with the most significant bit set to '0'.
- 7                   RESERVED   -   Reserved bits.
- 8                               The mobile station shall set this field to '00000'.
- 9

## 1 2.7.4.11 IMSI

2 This information record can be included in a *Status Message*, a *Status Response Message*,  
 3 or an *Extended Status Response Message* to return the mobile station's operational IMSI.

Type-Specific Field	Length (bits)
IMSI_CLASS	1
IMSI_ADDR_NUM	3
MCC_O	10
IMSI_O_11_12	7
IMSI_O_S	34
RESERVED	1

- 4
- 5           IMSI\_CLASS    – If IMSI\_O is a class 0 IMSI, the mobile station shall set this  
 6                           field to '0'; otherwise, the mobile station shall set this field to  
 7                           '1'.
- 8           IMSI\_ADDR\_NUM – Number of IMSI\_O address digits.  
 9                           If IMSI\_O is a class 1 IMSI, the mobile station shall set this  
 10                          field to four less than the number of digits in the NMSI;  
 11                          otherwise, the mobile station shall set this field to '000'.
- 12           MCC\_O        – Mobile Country Code of the operational IMSI.  
 13                           The mobile station shall set this field to MCC\_O<sub>S</sub>. (see 2.3.1).
- 14           IMSI\_O\_11\_12 – The 11th and 12th digits of the operational IMSI.  
 15                           The mobile station shall set this field to IMSI\_O\_11\_12<sub>S</sub>.  
 16                           (see 2.3.1).
- 17           IMSI\_O\_S     – Last ten digits of the operational IMSI.  
 18                           The mobile station shall set this field to IMSI\_O\_S. (see  
 19                           2.3.1.)
- 20           RESERVED    – Reserved bit.  
 21                           The mobile station shall set this field to '0'.  
 22

1    2.7.4.12 ESN

2    This information record can be included in a *Status Message*, a *Status Response Message*,  
3    or an *Extended Status Response Message* to return the mobile station ESN.

Type-Specific Field	Length (bits)
ESN	32

4

5                    ESN    –    Mobile station electronic serial number.

6                    If the mobile station has a R-UIM which indicates that UIM ID  
7                    is to be used, the mobile station shall set this field to UIM ID  
8                    (see [40]); otherwise, the mobile station shall set this field to  
9                    its ESN<sub>p</sub> (see 2.3.2).

10

### 2.7.4.13 Band Class Information

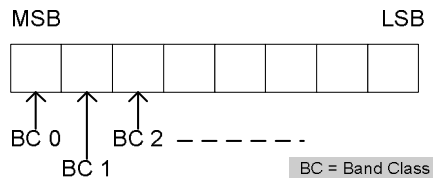
This information record can be included in a *Status Response Message*, or an *Extended Status Response Message* to return band class information about the mobile station.

Type-Specific Field	Length (bits)
BAND_CLASS_INFO	$8 \times \text{RECORD\_LEN}$

**BAND\_CLASS\_INFO** – Band class information.

This field indicates which band classes are supported by the mobile station.

The mobile station shall set the Nth most significant bit of this field to '1' if the Nth band class defined in [45] is supported by the mobile station; otherwise, the mobile station shall set the Nth most significant bit of this field to '0'. Example of this field coding is shown in Figure 2.7.4.13-1.



**Figure 2.7.4.13-1. BAND\_CLASS\_INFO field coding**

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to '0'.



#### 2.7.4.14 Power Class Information

This information record can be included in a *Status Response Message*, or an *Extended Status Response Message* to return power class information about the mobile station.

Type-Specific Field	Length (bits)
MAX_EIRP	8

MAX\_EIRP – Maximum effective isotropic radiated power (EIRP).

The mobile station shall set this field to the minimum EIRP at maximum output (in dBW) for the mobile station plus 60 (see [11]). When the mobile station output power is expressed in ERP, it may be converted to EIRP by adding 2 dB to the ERP value.<sup>7</sup>

---

<sup>7</sup> For example, if a mobile station has a minimum ERP at maximum output of -4 dBW, then the mobile station sets this field to 58.

## 2.7.4.15 Operating Mode Information

This information record can be included in a *Status Response Message* or an *Extended Status Response Message* to return operating mode information about the mobile station.

Type-Specific Field	Length (bits)
OP_MODE_INFO	$8 \times \text{RECORD\_LEN}$

OP\_MODE\_INFO – Operating mode information.

This field indicates which operating modes are supported by the mobile station in the band class for which information is requested.

This field currently consists of the following subfields which are included in the information record in the order shown in Table 2.7.4.15-1 for P\_REV\_IN\_USE<sub>S</sub> less than or equal to three and in Table 2.7.4.15-2 for P\_REV\_IN\_USE<sub>S</sub> greater than three.

**Table 2.7.4.15-1. OP\_MODE for P\_REV\_IN\_USE<sub>S</sub> Less Than or Equal to Three**

Subfield	Length (bits)	Subfield Description
OP_MODE0	1	CDMA mode in Band Class 1 and Band Class 4
OP_MODE1	1	CDMA mode in Band Class 0 and Band Class 3
OP_MODE2	1	Reserved (Previously: Analog mode)
OP_MODE3	1	Reserved (Previously: wide analog mode)
OP_MODE4	1	Reserved (Previously: narrow analog mode)
RESERVED	3	Reserved Bits

1  
2  
  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18

**Table 2.7.4.15-2. OP\_MODE for P\_REV\_IN\_USE<sub>s</sub> Greater Than Three**

Subfield	Length (bits)	Subfield Description	Standards
OP_MODE0	1	CDMA mode	
OP_MODE1	1	CDMA mode <sup>8</sup>	
OP_MODE2	1	Reserved (Previously: Analog mode)	
OP_MODE3	1	Reserved (Previously: Wide analog mode)	
OP_MODE4	1	Reserved (Previously: Narrow analog mode)	
OP_MODE5	1	DS-41	[32]
OP_MODE6	1	MC-MAP	[31]
RESERVED	1	–	–

The mobile station shall set each subfield to ‘1’, if the corresponding operating mode is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

**RESERVED** – Reserved bits.

The mobile station shall set each bit in this field to ‘0’.

When more operating modes are defined, the reserved bits will be used for the new corresponding subfields. Sufficient octets will also be added to this field to accommodate the corresponding new subfields. All the undefined bits in an additional octet will be reserved bits.

If all bits are set to ‘0’ in an octet and all succeeding octets, the mobile station shall omit the octet and the succeeding octets.

<sup>8</sup> The mobile station shall set OP\_MODE1 the same as OP\_MODE0.

## 2.7.4.16 Service Option Information

This information record can be included in a *Status Response Message*, or an *Extended Status Response Message* to return service option information about the mobile station.

Type-Specific Field	Length (bits)
---------------------	---------------

One or more occurrences of the following field:

{

RESERVED	6
FORWARD_SUPPORT	1
REVERSE_SUPPORT	1
SERVICE_OPTION	16

}

The mobile station shall include one occurrence of the following record for each service option supported:

RESERVED – Reserved bits.

The mobile station shall set this field to '000000'.

FORWARD\_SUPPORT – Support indicator for Forward Traffic Channel.

The mobile station shall set this field to '1' if the service option specified in the SERVICE\_OPTION field is supported on the Forward Traffic Channel.

REVERSE\_SUPPORT – Support indicator for Reverse Traffic Channel.

The mobile station shall set this field to '1' if the service option specified in the SERVICE\_OPTION field is supported on the Reverse Traffic Channel.

SERVICE\_OPTION – Service option.

The mobile station shall set this field to the value specified in [30] for the service option supported.

#### 2.7.4.17 Multiplex Option Information

This information record can be included in a *Status Response Message* or an *Extended Status Response Message* to return multiplex option information about the mobile station. The mobile station shall include at least one, and not more than six, instances of the record within the type-specific field according to the following rules:

- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX\_OPTION is set to 1. If this instance is included, the mobile station shall support Multiplex Option 1 for forward and reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX\_OPTION is set to 2. If this instance is included, the mobile station shall support Multiplex Option 2 for forward and reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX\_OPTION is set to 3, 5, 7, 9, 11, 13, or 15 and with FOR\_NUM\_BITS set to '00000000'. If this instance is included, the mobile station shall set MULTIPLEX\_OPTION to the highest numbered multiplex option from the set {3, 5, 7, 9, 11, 13, 15} which the mobile station supports for reverse operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX\_OPTION from that set for reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX\_OPTION is set to 4, 6, 8, 10, 12, 14, or 16 and with FOR\_NUM\_BITS set to '00000000'. If this instance is included, the mobile station shall set MULTIPLEX\_OPTION to the highest numbered multiplex option from the set {4, 6, 8, 10, 12, 14, 16} which the mobile station supports for reverse operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX\_OPTION from that set for reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX\_OPTION is set to 3, 5, 7, 9, 11, 13, or 15 and with REV\_NUM\_BITS set to '00000000'. If this instance is included, the mobile station shall set MULTIPLEX\_OPTION to the highest numbered multiplex option from the set {3, 5, 7, 9, 11, 13, 15} which the mobile station supports for forward operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX\_OPTION from that set for forward operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX\_OPTION is set to 4, 6, 8, 10, 12, 14, or 16 and with REV\_NUM\_BITS set to '00000000'. If this instance is included, the mobile station shall set MULTIPLEX\_OPTION to the highest numbered multiplex option from the set {4, 6, 8, 10, 12, 14, 16} which the mobile station supports for forward operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX\_OPTION from that set for forward operation.
- Within the type-specific field, the mobile station shall include at least one instance of a record in which FOR\_NUM\_BITS is set to a value other than '00000000'.

- Within the type-specific field, the mobile station shall include at least one instance of a record in which REV\_RATES is set to a value other than '00000000'.

Type-Specific Field	Length (bits)
---------------------	---------------

One or more occurrences of the following record:

{

MULTIPLEX_OPTION	16
FOR_NUM_BITS	8
REV_NUM_BITS	8

}

The mobile station shall include one occurrence of the following record for each specified multiplex option according to the previously stated rules:

**MULTIPLEX\_OPTION** – Supported multiplex option.

The mobile station shall set this field to the number of the supported multiplex option from the set {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16} (e.g., 1 corresponds to Multiplex Option 1).

**FOR\_NUM\_BITS** – Forward Traffic Channel number of bits per frame.

If FOR\_NUM\_BITS = '00000000', then the specified multiplex option in this record shall indicate the supported multiplex option for the Reverse Traffic Channel only. In this case, no further interpretation of the FOR\_NUM\_BITS field shall be made. The mobile station shall not set both FOR\_NUM\_BITS and REV\_NUM\_BITS equal to '00000000' in the same information record.

If MULTIPLEX\_OPTION is equal to 1, 3, 5, 7, 9, 11, 13, or 15, this field consists of the subfields specified in Table 2.7.4.17-1 which are included in the information record in the order shown in the table. The subfields in Table 2.7.4.17-1 refer to the number of bits per frame supported on the Fundamental Channel of the Forward Traffic Channel.

**Table 2.7.4.17-1. Forward Fundamental Traffic Channel  
Number of Bits per Frame for Forward Multiplex Option 1**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
RS1_9600_FOR	1	172 bits per F-FCH frame
RS1_4800_FOR	1	80 bits per F-FCH
RS1_2400_FOR	1	40 bits per F-FCH frame
RS1_1200_FOR	1	16 bits per F-FCH frame
RESERVED	4	Reserved Bits

If MULTIPLEX\_OPTION is equal to 2, 4, 6, 8, 10, 12, 14, or 16, this field consists of the subfields specified in Table 2.7.4.17-2 which are included in the information record in the order shown in the table. The subfields in Table 2.7.4.17-2 refer to the number of bits per frame supported on the Fundamental Channel of the Forward Traffic Channel.

**Table 2.7.4.17-2. Forward Fundamental Traffic Channel  
Number of Bits per Frame for Forward Multiplex Option equal  
to 2**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
RS2_14400_FOR	1	267 bits per F-FCH frame
RS2_7200_FOR	1	125 bits per F-FCH frame
RS2_3600_FOR	1	55 bits per F-FCH frame
RS2_1800_FOR	1	21 bits per F-FCH frame
RESERVED	4	Reserved Bits

The mobile station shall set the subfields specified in Tables 2.7.4.17-1 and 2.7.4.17-2, corresponding to the Forward Traffic Channel number of bits per frame supported by the mobile station for this multiplex option to '1', and shall set the remaining subfields to '0'. The mobile station shall set RESERVED to '0000'.

REV\_NUM\_BITS – Reverse Traffic Channel transmission rates.

If REV\_NUM\_BITS is equal to '00000000', then the specified multiplex option in this record indicate the supported multiplex option for the Forward Traffic Channel only. In this case, no further interpretation of the REV\_NUM\_BITS field shall be made. The mobile station shall not set both FOR\_NUM\_BITS and REV\_NUM\_BITS equal to '00000000' in the same information record.

If MULTIPLEX\_OPTION is equal to 1, 3, 5, 7, 9, 11, 13, or 15, this field consists of the subfields specified in Table 2.7.4.17-3 which are included in the information record in the order shown in the table. The subfields in Table 2.7.4.17-3 refer to the number of bits per frame supported on the Fundamental Channel of the Reverse Traffic Channel.

**Table 2.7.4.17-3. Reverse Fundamental Traffic Channel  
Number of Bits per Frame for Reverse Multiplex Option equal  
to 1**

Subfield	Length (bits)	Subfield Description
RS1_9600_REV	1	172 bits per R-FCH frame
RS1_4800_REV	1	80 bits per R-FCH frame
RS1_2400_REV	1	40 bits per R-FCH frame
RS1_1200_REV	1	16 bits per R-FCH frame
RESERVED	4	Reserved Bits

If MULTIPLEX\_OPTION is equal to 2, 4, 6, 8, 10, 12, 14, or 16, this field consists of the subfields specified in Table 2.7.4.17-4 which are included in the information record in the order shown in the table. The subfields in Table 2.7.4.17-4 refer to the number of bits per frame supported on the Fundamental Channel of the Reverse Traffic Channel.

**Table 2.7.4.17-4. Reverse Fundamental Traffic Channel  
Number of Bits per Frame for Reverse Multiplex Option equal  
to 2**

Subfield	Length (bits)	Subfield Description
RS2_14400_REV	1	267 bits per R-FCH frame
RS2_7200_REV	1	125 bits per R-FCH frame
RS2_3600_REV	1	55 bits per R-FCH frame
RS2_1800_REV	1	21 bits per R-FCH frame
RESERVED	4	Reserved Bits

The mobile station shall set the subfields specified in Table 2.7.4.17-3 and Table 2.7.4.17-4 corresponding to the Reverse Traffic Channel transmission number of bits per frame supported by the mobile station for this multiplex option to '1', and shall set the remaining subfields to '0'. The mobile station shall set RESERVED to '0000'.



1    2.7.4.18 Service Configuration

2    The format of the Service Configuration information record is defined in 3.7.5.7.

3

4

## 2.7.4.19 Called Party Subaddress

This information record identifies the called party subaddress.

Type-Specific Field	Length (bits)
EXTENSION_BIT	1
SUBADDRESS_TYPE	3
ODD/EVEN_INDICATOR	1
RESERVED	3

Zero or more occurrences of the following field:

{

CHARi	8
-------	---

}

**EXTENSION\_BIT** – The extension bit.

The mobile station shall set this field to '1'.

**SUBADDRESS\_TYPE** – Type of subaddress.

The mobile station shall set this field to the SUBADDRESS\_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.8.

**Table 2.7.4.19-1. Subaddress Types**

Description	SUBADDRESS TYPE (binary)
NSAP (see [34])	000
User specified	010
Reserved	others

**ODD/EVEN\_INDICATOR** – The indicator of odd/even bits.

The mobile station shall set this field to the ODD/EVEN\_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.8. This field is only used when the type of subaddress is "User specified" and the coding is BCD.

1

**Table 2.7.4.19-2. Odd/Even Indicator**

<b>Description</b>	<b>ODD/EVEN INDICATOR (binary)</b>
Even number of address signals	0
Odd number of address signals	1

2

3

RESERVED    -    Reserved bits.

4

The mobile station shall set this field to '000'.

5

CHARi    -    Character.

6

The mobile station shall include one occurrence of this field for each character in the called party subaddress.

7

8

When the SUBADDRESS\_TYPE field is equal to '000', the NSAP address shall be encoded using the preferred binary encoding specified in [35].

9

10

11

When the SUBADDRESS\_TYPE field is set to '010', the user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with CCITT Recommendation X.25 networks, BCD coding should be applied.

12

13

14

15

16

## 2.7.4.20 Calling Party Subaddress

This information record identifies the calling party subaddress.

Type-Specific Field	Length (bits)
EXTENSION_BIT	1
SUBADDRESS_TYPE	3
ODD/EVEN_INDICATOR	1
RESERVED	3

Zero or more occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

**EXTENSION\_BIT** – The extension bit.

The mobile station shall set this field to '1'.

**SUBADDRESS\_TYPE** – Type of subaddress.

The mobile station shall set this field to the SUBADDRESS\_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.10.

**ODD/EVEN\_INDICATOR** – The indicator of odd/even bits.

The mobile station shall set this field to the ODD/EVEN\_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.10. It is only used when the type of subaddress is "User specified" and the coding is BCD.

**RESERVED** – Reserved bits.

The mobile station shall set this field to '000'.

**CHAR<sub>i</sub>** – Character.

The mobile station shall include one occurrence of this field for each character in the calling party subaddress.

When the SUBADDRESS\_TYPE field is equal to '000', the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS\_TYPE field is set to '010', user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with [36] networks, BCD coding should be applied.

## 2.7.4.21 Connected Subaddress

This information record identifies the subaddress of the responding party.

Type-Specific Field	Length (bits)
EXTENSION_BIT	1
SUBADDRESS_TYPE	3
ODD/EVEN_INDICATOR	1
RESERVED	3

Zero or more occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

- EXTENSION\_BIT** – The extension bit.  
The mobile station shall set this field to '1'.
- SUBADDRESS\_TYPE** – Type of subaddress.  
The mobile station shall set this field to the SUBADDRESS\_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.14.
- ODD/EVEN\_INDICATOR** – The indicator of odd/even bits.  
The mobile station shall set this field to the ODD/EVEN\_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.14. It is only used when the type of subaddress is "User specified" and the coding is BCD.
- RESERVED** – Reserved bits.  
The mobile station shall set this field to '000'.
- CHAR<sub>i</sub>** – Character.  
The mobile station shall include one occurrence of this field for each character in the connected subaddress.  
When the SUBADDRESS\_TYPE field is equal to '000', the NSAP address shall be encoded using the preferred binary encoding specified in [35].  
When the SUBADDRESS\_TYPE field is set to '010', user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with [36] networks, BCD coding should be applied.





## 1 2.7.4.24 IMSI\_T

2 This information record can be included in a *Status Response Message*, or an *Extended*  
 3 *Status Response Message* to return the mobile station's IMSI\_T.

Type-Specific Field	Length (bits)
IMSI_T_CLASS	1
IMSI_T_ADDR_NUM	3
MCC_T	10
IMSI_T_11_12	7
IMSI_T_S	34
RESERVED	1

4

5 IMSI\_T\_CLASS – IMSI\_T Class assignment of the mobile station.

6 If the mobile station's IMSI\_T is a class 0 IMSI, the mobile  
 7 station shall set this field to '0'; otherwise, the mobile station  
 8 shall set this field to '1'.

9 IMSI\_T\_ADDR\_NUM – Number of IMSI\_T<sub>p</sub> address digits.

10 If the mobile station's IMSI\_T is a class 1 IMSI, the mobile  
 11 station shall set this field to four less than the number of  
 12 digits in the NMSI; otherwise, the mobile station shall set this  
 13 field to '000'.

14 MCC\_T – Mobile Country Code of the IMSI\_T.

15 The mobile station shall set this field to the MCC\_T<sub>p</sub>.  
 16 See 2.3.1.

17 IMSI\_T\_11\_12 – The 11th and 12th digits of the IMSI\_T<sub>p</sub>.

18 The mobile station shall set this field to IMSI\_T\_11\_12<sub>p</sub>.  
 19 See 2.3.1.

20 IMSI\_T\_S – Last ten digits of the IMSI\_T<sub>p</sub>.

21 The mobile station shall set this field to IMSI\_T\_S<sub>p</sub>. See  
 22 2.3.1.

23 RESERVED – Reserved bit.

24 The mobile station shall set this field to '0'.

25



1 2.7.4.25 Capability Information

2 This information record identifies whether the following optional or MOB\_P\_REV  
3 dependent features are supported by the mobile station.

4

Type-Specific Field	Length (bits)
ACCESS_ENTRY_HO	1
ACCESS_PROBE_HO	1
ANALOG_SEARCH	1
HOPPING_BEACON	1
MAHHO	1
PUF	1
ANALOG_553A	1
QPCH	1
SLOTTED_TIMER	1
CHM_SUPPORTED	1
GATING_RATE_SET	0 or 2
EXT_CAP_INCLUDED	1
MABO	0 or 1
SDB	0 or 1
RLP_INFO_LEN	3
RLP_BLOB	$8 \times \text{RLP\_INFO\_LEN}$
FLEX_SUPPORTED	1
F_FCH_FLEX_SUPPORTED	0 or 1
R_FCH_FLEX_SUPPORTED	0 or 1

(continues on next page)

5

6

1

Type-Specific Field	Length (bits)
F_DCCH_FLEX_SUPPORTED	0 or 1
R_DCCH_FLEX_SUPPORTED	0 or 1
F_SCH_FLEX_SUPPORTED	0 or 1
R_SCH_FLEX_SUPPORTED	0 or 1
VAR_SUPPORTED	1
F_SCH_VAR_SUPPORTED	0 or 1
R_SCH_VAR_SUPPORTED	0 or 1
MAX_SUM_NUM_BITS_C	0 or 16
MAX_SUM_NUM_BITS_T	0 or 16
CS_SUPPORTED	1
F_SCH_LTU_TAB_SUPPORTED	1
R_SCH_LTU_TAB_SUPPORTED	1
ERAM_SUPPORTED	0 or 1
PDCH_CHM_SUPPORTED	1
REV_FCH_GATING_SUPPORTED	1
RER_MODE_SUPPORTED	1
ADD_NUM_SYNC_ID_INCL	1
ADD_NUM_SYNC_ID	0 or 4
RSC_MODE_SUPPORTED	1
TKZ_MODE_SUPPORTED	1
F_SCH_EARLY_TERM_SUPPORTED	1
POWER_CONTROL_MODE_01_SUPPORTED	1
RESERVED	0 - 7 (as needed)

2

3 ACCESS\_ENTRY\_HO - Access Entry Handoff Support.

4 This field identifies the mobile station's support for access  
5 entry handoff (see 2.6.2.3). The mobile station shall set this  
6 field to '1' if access entry handoff is supported; otherwise, the  
7 mobile station shall set this field to '0'.

8 ACCESS\_PROBE\_HO - Access Probe Handoff Support.

1			This field identifies the mobile station's support for access
2			probe handoff (see 2.6.3.1.3.3). The mobile station shall set
3			this field to '1' if access probe handoff is supported;
4			otherwise, the mobile station shall set this field to '0'.
5	ANALOG_SEARCH	-	Analog Search Support.
6			This field identifies the mobile station's support for analog
7			searching (see 2.6.6.2.10). The mobile station shall set this
8			field to '1' if analog searching is supported; otherwise, the
9			mobile station shall set this field to '0'. The mobile station
10			shall set this field to '0'.
11	HOPPING_BEACON	-	Hopping Beacon Support.
12			This field identifies the mobile station's support for hopping
13			pilot beacons. The mobile station shall set this field to '1' if
14			hopping pilot beacons are supported; otherwise, this field shall
15			be set to '0'.
16	MAHHO	-	Mobile Assisted Hard Handoff Support.
17			This field identifies the mobile station's support for mobile
18			assisted hard handoff. The mobile station shall set this field to
19			'1'.
20	PUF	-	Location Power Up Function Support.
21			This field identifies the mobile station's support for location
22			power up function (see 2.6.4.1.7).
23			If MOB_P_REV <sub>p</sub> is equal to '00000101', the mobile station shall
24			set this field to '1'; otherwise the mobile station shall set this
25			field as follows:
26			If the mobile station supports location power up function, the
27			mobile station shall set this field to '1', otherwise, the mobile
28			station shall set this field to '0'.
29	ANALOG_553A	-	Analog Support.
30			This field identifies the mobile station's compatibility with [12].
31			The mobile station shall set this field to '0'.
32	QPCCH	-	Quick Paging Channel Support.
33			This field identifies the mobile station's support for the Quick
34			Paging Channel. The mobile station shall set this field to '1' if
35			the Quick Paging Channel is supported; otherwise, the mobile
36			station shall set this field to '0'.
37	SLOTTED_TIMER	-	Slotted Timer Support.
38			This field identifies the mobile station's support for the Slotted
39			Timer. The mobile station shall set this field to '1' if the Slotted
40			Timer is supported; otherwise, the mobile station shall set this
41			field to '0'.
42	CHM_SUPPORTED	-	Control Hold Mode supported indicator.

The mobile station shall set this field to '1' to indicate that the mobile station supports the Control Hold Mode; otherwise, the mobile station shall set this field to '0'.

**GATING\_RATE\_SET** – Set of supported Reverse Pilot gating rates.

If CHS\_SUPPORTED is included and is set to '1', the mobile station shall set this field to value shown in Table 2.7.4.25-1 corresponding to the set of supported reverse pilot gating rates; otherwise the mobile station shall omit this field.

**Table 2.7.4.25-1. Set of Supported Reverse Pilot Gating Rates**

<b>GATING_RATE_SET field (binary)</b>	<b>Gating Rates Capability</b>
00	Gating rates 1
01	Gating rates 1 and ½
10	Gating rates 1, ½ and ¼
11	Reserved

**EXT\_CAP\_INCLUDED** – Extended Capabilities Included indicator.

The mobile station shall set this field to '1' to indicate that extended capability indicators are included in this record; otherwise, the mobile station shall set this field to '0'.

**MABO** – Mobile Assisted Burst Operation capability indicator.

If EXT\_CAP\_INCLUDED is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' if it supports the Mobile Assisted Burst Operation capability; otherwise, the mobile station shall set this field to '0'.

**SDB** – Short Data Burst supported indicator.

If EXT\_CAP\_INCLUDED is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If MOB\_P\_REV<sub>p</sub> is greater or equal to 11 and if the mobile station supports packet data service as specified in [42], the mobile station shall set this field to '1'<sup>9</sup>.

---

<sup>9</sup> Short Data Burst Capability support is mandatory for the mobile station with MOB\_P\_REV<sub>p</sub> greater than or equal to 11 that supports packet data service as specified in [42]

1 Otherwise, the mobile station shall set this field to '1' if it  
 2 supports Short Data Burst capability; otherwise, the mobile  
 3 station shall set this field to '0'.

4 RLP\_INFO\_LEN - RLP capability information length.

5 The mobile station shall set this field to '000' if the  
 6 RLP\_BLOB field is not included in this record; otherwise, it  
 7 shall set this field to the size of the RLP\_BLOB field in integer  
 8 number of octets.

9 RLP\_BLOB - Radio Link Protocol information block of bits.

10 If the RLP\_INFO\_LEN field is set to '000', the mobile station  
 11 shall omit this field; otherwise, the mobile station shall set  
 12 this field as follows:

13 If P\_REV\_IN\_USE<sub>S</sub> is equal or greater than seven<sup>10</sup>, the  
 14 mobile station shall set this field to the Radio Link Protocol  
 15 information block of bits (see [42]).

16 If P\_REV\_IN\_USE<sub>S</sub> equals six, the mobile station shall set this  
 17 field to the Radio Link Protocol capability information block of  
 18 bits, as shown in Table 2.7.4.25-2.

19 **Table 2.7.4.25-2. RLP Capability Information Block**

Subfields	Length
MAX_MS_NAK_ROUNDS_FWD	3
MAX_MS_NAK_ROUNDS_REV	3
RESERVED	2

20

21 MAX\_MS\_NAK\_ROUNDS\_FWD - Maximum number of RLP NAK rounds supported by  
 22 the mobile station on the forward traffic channel.

23 The mobile station shall set this field to the maximum  
 24 number of NAK round(s) it supports on the forward traffic  
 25 channel (BS RLP transmitting function) (see [42]).

26 MAX\_MS\_NAK\_ROUNDS\_REV - Maximum number of RLP NAK rounds supported by  
 27 the mobile station on the reverse traffic channel.

28 The mobile station shall include this field and set it to the  
 29 maximum number of NAK round(s) it supports on the reverse  
 30 traffic channel (MS RLP transmitting function) (see [42]).

31 FLEX\_SUPPORTED - Flexible rate feature supported indicator.

---

<sup>10</sup> P\_REV\_IN\_USE<sub>S</sub> >= 7 can not work with TIA/EIA/IS-707-A

1		The mobile station shall set this field to '1' if it supports the
2		flexible rate feature (the capability to support a non-listed
3		frame format) on any of the forward or reverse Fundamental,
4		Supplemental or Dedicated Control channels; otherwise, the
5		mobile station shall set this field to '0'.
6	F_FCH_FLEX_SUPPORTED	- Forward Fundamental channel flexible rate feature
7		supported indicator.
8		The mobile station shall include this field only if
9		FLEX_SUPPORTED is equal to '1'. If this field is included, the
10		mobile station shall set this field to '1' if it supports the
11		flexible rate feature for the Forward Fundamental Channel;
12		otherwise, the mobile station shall set this field to '0'.
13	R_FCH_FLEX_SUPPORTED	- Reverse Fundamental channel flexible rate feature
14		supported indicator.
15		The mobile station shall include this field only if
16		FLEX_SUPPORTED is equal to '1'. If this field is included, the
17		mobile station shall set this field to '1' if it supports the
18		flexible rate feature for the Reverse Fundamental Channel;
19		otherwise, the mobile station shall set this field to '0'.
20	F_DCCH_FLEX_SUPPORTED	- Forward Dedicated Control channel flexible rate
21		feature supported indicator.
22		The mobile station shall include this field only if
23		FLEX_SUPPORTED is equal to '1'. If this field is included, the
24		mobile station shall set this field to '1' if it supports the
25		flexible rate feature for the Forward Dedicated Control
26		Channel; otherwise, the mobile station shall set this field to
27		'0'.
28	R_DCCH_FLEX_SUPPORTED	- Reverse Dedicated Control channel flexible rate
29		feature supported indicator.
30		The mobile station shall include this field only if
31		FLEX_SUPPORTED is equal to '1'. If this field is included, the
32		mobile station shall set this field to '1' if it supports the
33		flexible rate feature for the Reverse Dedicated Control
34		Channel; otherwise, the mobile station shall set this field to
35		'0'.
36	F_SCH_FLEX_SUPPORTED	- Forward Supplemental channel flexible rate feature
37		supported indicator.
38		The mobile station shall include this field only if
39		FLEX_SUPPORTED is equal to '1'. If this field is included, the
40		mobile station shall set this field to '1' if it supports the
41		flexible rate feature for the Forward Supplemental Channel;
42		otherwise, the mobile station shall set this field to '0'.
43	R_SCH_FLEX_SUPPORTED	- Reverse Supplemental channel flexible rate feature
44		supported indicator.

1		The mobile station shall include this field only if
2		FLEX_SUPPORTED is equal to '1'. If this field is included, the
3		mobile station shall set this field to '1' if it supports the
4		flexible rate feature for the Reverse Supplemental Channel;
5		otherwise, the mobile station shall set this field to '0'.
6	VAR_SUPPORTED	- Variable rate feature supported indicator.
7		The mobile station shall set this field to '1' if it supports the
8		variable rate feature (the capability to support rate
9		determination) on any of the forward or reverse Supplemental
10		channels; otherwise, the mobile station shall set this field to
11		'0'.
12	F_SCH_VAR_SUPPORTED	- Forward Supplemental Channel Variable Rate supported
13		indicator.
14		The mobile station shall include this field only if
15		VAR_SUPPORTED is equal to '1'. If this field is included, the
16		mobile station shall set this field to '1' if it supports the
17		variable rate feature on the Forward Supplemental Channels.
18	R_SCH_VAR_SUPPORTED	- Reverse Supplemental Channel Variable Rate supported
19		indicator.
20		The mobile station shall include this field only if
21		VAR_SUPPORTED is equal to '1'. If this field is included, the
22		mobile station shall set this field to '1' if it supports the
23		variable rate feature on the Reverse Supplemental Channels.
24	MAX_SUM_NUM_BITS_C	- Maximum sum of number of bits corresponding to
25		Convolutional rates in the variable rate set.
26		The mobile station shall include this field only if
27		F_SCH_VAR_SUPPORTED is equal to '1'. If this field is
28		included, the mobile station shall set this field to the
29		maximum of the sum of possible information bits per 20 ms
30		corresponding to the Convolutional Code rates in the Variable
31		Rate Set for a Forward Supplemental Channel below which
32		the mobile station is capable of performing rate determination
33		on the forward supplemental channel when Convolutional
34		coding is used.
35	MAX_SUM_NUM_BITS_T	- Maximum sum of number of bits corresponding to Turbo
36		Code rates in the variable rate set
37		The mobile station shall include this field only if
38		F_SCH_VAR_SUPPORTED is equal to '1'. If this field is
39		included, the mobile station shall set this field to the
40		maximum of the sum of possible information bits per 20 ms
41		corresponding to the Turbo Code rates in the Variable Rate
42		Set for a Forward Supplemental Channel below which the
43		mobile station is capable of performing rate determination on
44		the forward supplemental channel when Turbo coding is
45		used.

1	CS_SUPPORTED	-	Concurrent Services supported indicator.
2			If the mobile station supports concurrent services, the mobile
3			station shall set this field to '1'; otherwise, the mobile station
4			shall set this field to '0'.
5	F_SCH_LTU_TAB_SUPPORTED	-	Forward Supplemental Channel Downloadable LTU
6			tables supported indicator.
7			If the mobile station supports downloadable LTU Tables for
8			Forward Supplemental Channel, the mobile station shall set
9			this field to '1'; otherwise, the mobile station shall set this
10			field to '0'.
11	R_SCH_LTU_TAB_SUPPORTED	-	Reverse Supplemental Channel Downloadable LTU
12			tables supported indicator.
13			If the mobile station supports downloadable LTU Tables for
14			Reverse Supplemental Channel, the mobile station shall set
15			this field to '1'; otherwise, the mobile station shall set this
16			field to '0'.
17	ERAM_SUPPORTED	-	Enhanced Rate Adaptation Mode supported indicator.
18			If FLEX_SUPPORTED or VAR_SUPPORTED is set to '1', the
19			mobile station shall include this field; otherwise, the mobile
20			station shall omit this field. If included, the mobile station
21			shall set this field to '1' if the mobile station supports the
22			Enhanced Rate Adaptation Mode; otherwise, the mobile
23			station shall set this field to '0'.
24	PDCH_CHM_SUPPORTED	-	PDCH Control Hold Mode supported indicator.
25			The mobile station shall set this field to '1' to indicate that the
26			mobile station supports the PDCH Control Hold Mode;
27			otherwise, the mobile station shall set this field to '0'.
28	REV_FCH_GATING_SUPPORTED	-	Reverse Fundamental eighth gating mode
29			supported indicator.
30			If the Reverse Fundamental Traffic Channel gating mode is
31			supported, the mobile station shall set this field to '1';
32			otherwise, the mobile station shall set this field to '0'.
33	RER_MODE_SUPPORTED	-	Radio environment reporting mode supported indicator.
34			The mobile station shall set this field to '1' if it supports radio
35			environment reporting mode; otherwise, the mobile station
36			shall set this field to '0'.
37	ADD_NUM_SYNC_ID_INCL	-	Additional number of synchronization identifiers included
38			indicator.
39			If this record is to contain the ADD_NUM_SYNC_ID field, the
40			mobile station shall set this field to '1'; otherwise, the mobile
41			station shall set this field to '0'.
42	ADD_NUM_SYNC_ID	-	Additional <u>n</u> umber of synchronization identifiers.



1		If ADD_NUM_SYNC_ID_INCL field is set to '1', the mobile
2		station shall include this field and set it to the number of
3		SYNC_ID's supported minus 5; otherwise it shall omit this
4		field.
5	RSC_MODE_SUPPORTED	- Reduced Slot Cycle Mode supported indicator.
6		The mobile station shall set this field to '1' if it supports the
7		reduced slot cycle mode; otherwise, the mobile station shall
8		set this field to '0'.
9	TKZ_MODE_SUPPORTED	- Tracking zone mode supported indicator.
10		The mobile station shall set this field to '1' if it supports
11		tracking zone mode; otherwise, the mobile station shall set
12		this field to '0'.
13	F_SCH_EARLY_TERM_SUPPORTED	- Forward Supplemental Channel early termination
14		supported indicator.
15		The mobile station shall set this field to '1' if the mobile
16		station supports early termination for Forward Supplemental
17		Channel; otherwise, the mobile station shall set this field to
18		'0'.
19	POWER_CONTROL_MODE_01_SUPPORTED	- Power Control Mode 01 supported
20		indicator.
21		The mobile station shall set this field to '1' if the mobile
22		station supports power control mode '01' for RC11 and RC12;
23		otherwise, the mobile station shall set this field to '0'.
24	RESERVED	- Reserved bits.
25		The mobile station shall add reserved bits as needed in order
26		to make the length of the entire information record equal to
27		an integer number of octets. The mobile station shall set
28		these bits to '0'.
29		

1    2.7.4.26 Extended Record Type - International

2    The use of this record type is country-specific. The first ten bits of the type-specific fields  
3    shall include the Mobile Country Code (MCC) associated with the national standards  
4    organization administering the use of the record type. Encoding of the MCC shall be as  
5    specified in 2.3.1.3. The remaining six bits of the first two octets of the type-specific fields  
6    shall be used to specify the country-specific record type.

7

#### 2.7.4.27 Channel Configuration Capability Information

This information record can be included in a *Status Response Message* or an *Extended Status Response Message* to return channel configuration capability information about the mobile station.

Type-Specific Field	Length (bits)
OTD_SUPPORTED	1
FCH_SUPPORTED	1
FCH Type-specific fields	0 or Variable
DCCH_SUPPORTED	1
DCCH Type-specific fields	0 or Variable
FOR_SCH_SUPPORTED	1
FOR_SCH Type-specific fields	0 or Variable
REV_SCH_SUPPORTED	1
REV_SCH Type-specific fields	0 or Variable
RESERVED_1	0 or 2
STS_SUPPORTED	1
3X_CCH_SUPPORTED	1
CCSH_SUPPORTED	0 or 1
FOR_PDCH_SUPPORTED	1
FOR_PDCH Capability Type-specific fields	0 or variable
FOR_PDCH_SCH_SUPPORTED	0 or 1
REV_PDCH_SUPPORTED	0 or 1
REV_PDCH Capability Type-specific fields	0 or variable
FUNDICATED_BCNC_SUPPORTED	1
FUNDICATED_BCNC Type-specific fields	0 or variable
SCH_BCNC_SUPPORTED	1
RESERVED	0 - 7 (as needed)

OTD\_SUPPORTED – OTD supported indicator.

The mobile station shall set this field to '1' if the mobile station supports orthogonal transmission diversity; otherwise, the mobile station shall set this field to '0'.

1	FCH_SUPPORTED	-	Fundamental Channel supported indicator.
2			The mobile station shall set this field to '1', if the mobile
3			station supports the Fundamental Channel; otherwise, the
4			mobile station shall set this field to '0'.
5	FCH Type-specific fields	-	Fundamental Channel configuration capability information.
6			If the FCH_SUPPORTED field is set to '1', the mobile station
7			shall include this field and set it as described in 2.7.4.27.1;
8			otherwise the mobile station shall omit this field.
9	DCCH_SUPPORTED	-	Dedicated Control Channel supported indicator.
10			The mobile station shall set this field to '1' if the mobile
11			station supports the Dedicated Control Channel; otherwise,
12			the mobile station shall set this field to '0'.
13	DCCH Type specific fields	-	Fundamental Channel configuration capability
14			information.
15			If the DCCH_SUPPORTED field is set to '1', the mobile station
16			shall include this field and set it as described in 2.7.4.27.2;
17			otherwise the mobile station shall omit this field.
18	FOR_SCH_SUPPORTED	-	Forward Supplemental Channel supported indicator.
19			The mobile station shall set this field to '1' if the mobile
20			station supports the Forward Supplemental Channel;
21			otherwise, the mobile station shall set this field to '0'.
22	FOR_SCH Type-		
23	specific fields	-	Forward Supplemental Channel Configuration Capability
24			Information.
25			If the FOR_SCH_SUPPORTED field is set to '1', the mobile
26			station shall include this field and set it as described in
27			2.7.4.27.3; otherwise the mobile station shall omit this field.
28	REV_SCH_SUPPORTED	-	Reverse Supplemental Channel supported indicator.
29			The mobile station shall set this field to '1' if the mobile
30			station supports the Reverse Supplemental Channel;
31			otherwise, the mobile station shall set this field to '0'.
32	REV_SCH Type-		
33	specific fields	-	Reverse Supplemental Channel Configuration capability
34			information.
35			If the REV_SCH_SUPPORTED field is set to '1', the mobile
36			station shall include this field and set it as described in
37			2.7.4.27.4; otherwise the mobile station shall omit this field.
38	RESERVED_1	-	Reserved bits.
39			If both the FOR_SCH_SUPPORTED and
40			REV_SCH_SUPPORTED fields are set to '0', the mobile station
41			shall omit this field. Otherwise, the mobile station shall
42			include this field and set this field to '00'.
43	STS_SUPPORTED	-	STS supported indicator.

1		The mobile station shall set this field to '1' if the mobile
2		station supports Space Time Spreading Transmit Diversity;
3		otherwise, the mobile station shall set this field to '0'.
4	3X_CCH_SUPPORTED	- 3X Common Channel supported.
5		The mobile station shall set this field to '1' if the mobile
6		station supports the Spreading Rate 3 common channels (3X
7		BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile
8		station shall set this field to '0'.
9	CCSH_SUPPORTED	- CCSH supported indicator.
10		If the FOR_SCH_SUPPORTED field is set to '0', the mobile
11		station shall omit this field; otherwise the mobile station shall
12		include this field and set it as follows.
13		If the mobile station supports Code Combining Soft Handoff,
14		the mobile station shall set this field to '1'; otherwise, the
15		mobile station shall set this field to '0'.
16	FOR_PDCH_SUPPORTED	- Forward Packet Data Channel supported indicator.
17		If the mobile station supports the Forward Packet Data
18		Channel, then the mobile station shall set this field to '1';
19		otherwise, the mobile station shall set this field to '0'.
20	FOR_PDCH Capability	
21	Type-specific fields	- Forward Packet Data Channel capability information.
22		If the FOR_PDCH_SUPPORTED field is set to '1', the mobile
23		station shall include this field and set it as described in
24		2.7.4.27.5; otherwise the mobile station shall omit this field.
25	FOR_PDCH_SCH_SUPPORTED	- Simultaneous support of F-PDCH and F-SCH indicator.
26		If FOR_PDCH_SUPPORTED is set to '0', or
27		FOR_SCH_SUPPORTED is set to '0', the mobile station shall
28		omit this field; otherwise, the mobile station shall include this
29		field and set it as follows:
30		The mobile station shall set this field to '1' if it supports the
31		simultaneous assignment of F-PDCH and F-SCH; otherwise,
32		the mobile station shall set this field to '0'.
33	REV_PDCH_SUPPORTED	- Reverse Packet Data Channel supported indicator.
34		If FOR_PDCH_SUPPORTED is set to '0', the mobile station
35		shall omit this field; otherwise, the mobile station shall
36		include this field and set it as follows.
37		If the mobile station supports the Reverse Packet Data
38		Channel (R-PDCH), the mobile station shall set this field to
39		'1'; otherwise, the mobile station shall set this field to '0'.
40	REV_PDCH Capability	
41	Type-specific fields	- Forward Packet Data Channel capability information.

1		If the REV_PDCH_SUPPORTED field included and is set to '1',
2		the mobile station shall include this field and set it as
3		described in 2.7.4.27.6; otherwise the mobile station shall
4		omit this field.
5	FUNDICATED_BCMC_SUPPORTED	- Fundicated Channel BCMC supported indicator.
6		The mobile station shall set this field to '1' to indicate that the
7		mobile station supports the BCMC reception on shared Forward
8		Fundicated Channels in <i>Mobile Station Control on the Traffic</i>
9		<i>Channel State</i> ; otherwise, the mobile station shall set this field
10		to '0'.
11	FUNDICATED_BCMC Type-specific fields	- Fundicated Channel BCMC capability
12		information.
13		If the FUNDICATED_BCMC_SUPPORTED field is set to '0', the
14		mobile station shall omit this field; otherwise, the mobile
15		station shall include this field and set it as described in
16		2.7.4.27.7.
17	SCH_BCMC_SUPPORTED	- Supplemental Channel BCMC supported indicator.
18		The mobile station shall set this field to '1' to indicate that the
19		mobile station supports the BCMC reception on shared Forward
20		Supplemental Channels in <i>Mobile Station Control on the Traffic</i>
21		<i>Channel State</i> ; otherwise, the mobile station shall set this field
22		to '0'.
23	RESERVED	- Reserved bits.
24		The mobile station shall add reserved bits as needed in order
25		to make the length of the entire information record equal to
26		an integer number of octets. The mobile station shall set
27		these bits to '0'.
28		
29		

#### 2.7.4.27.1 FCH Type-specific Fields

The Fundamental Channel configuration capability information included in the FCH Type-specific fields contains the following subfields:

FCH_FRAME_SIZE	1
FOR_FCH_LEN	3
FOR_FCH_RC_MAP	$3 \times \text{FOR\_FCH\_LEN}$
REV_FCH_LEN	3
REV_FCH_RC_MAP	$3 \times \text{REV\_FCH\_LEN}$

**FCH\_FRAME\_SIZE** – Fundamental Channel Frame Size capability indicator.

If in addition to the 20 ms frame size the mobile station also supports the 5 ms frame size on the Fundamental Channel, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

FOR\_FCH\_LEN – Forward Fundamental Channel Configuration information length.

The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the FOR FCH RC MAP field.

**FOR\_FCH\_RC\_MAP** – Forward Fundamental Radio Configuration information.

The mobile station shall set this field as described below to indicate which Radio Configurations (see [2] Table 3.1.3.1-1) are supported by the mobile station on the Forward Fundamental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific Radio Configuration. Bit positions of these indicators in the field and corresponding Radio Configurations are specified in Table 2.7.4.27.1-1.

The mobile station shall set each indicator to '1' if the corresponding Radio Configuration on the Forward Fundamental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'. The mobile station shall set any unused bits in the field to '0'.

1           **Table 2.7.4.27.1-1. Forward Channel Radio Configurations Supported**

Subfield	Length (bits)	Subfield Description
RC1	1	Radio Configuration 1
RC2	1	Radio Configuration 2
RC3	1	Radio Configuration 3
RC4	1	Radio Configuration 4
RC5	1	Radio Configuration 5
RC6	1	Radio Configuration 6
RC7	1	Radio Configuration 7
RC8	1	Radio Configuration 8
RC9	1	Radio Configuration 9
RC11	1	Radio Configuration 11
RC12	1	Radio Configuration 12

2  
3           REV\_FCH\_LEN    – Reverse Fundamental Channel Configuration information  
4                                   length.

5                                   The mobile station shall set this field to the number of 3 bit units  
6                                   required to specify the length, in bits, of the  
7                                   REV\_FCH\_RC\_MAP field.

8           REV\_FCH\_RC\_MAP   – Reverse Fundamental Radio Configuration information.

9                                   The mobile station shall set this field as described below to  
10                                  indicate which Radio Configurations (see [2] Table 2.1.3.1-1)  
11                                  are supported by the mobile station on the Reverse  
12                                  Fundamental Channel.

13                               This field consists of the sequence of 1-bit indicators, each  
14                               indicating the mobile station support for specific Radio  
15                               Configuration. Bit positions of these indicators in the field  
16                               and corresponding Radio Configurations are specified in  
17                               Table 2.7.4.27.1-2.

18                               The mobile station shall set each indicator to '1' if the  
19                               corresponding Radio Configuration on the Reverse  
20                               Fundamental Channel is supported by the mobile station;  
21                               otherwise, the mobile station shall set the indicator to '0'.  
22                               The mobile station shall set any unused bits in the field to '0'.  
23



1                   **Table 2.7.4.27.1-2. Reverse Channel Radio Configurations Supported**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
RC1	1	Radio Configuration 1
RC2	1	Radio Configuration 2
RC3	1	Radio Configuration 3
RC4	1	Radio Configuration 4
RC5	1	Radio Configuration 5
RC6	1	Radio Configuration 6
RC8	1	Radio Configuration 8

2  
3

## 2.7.4.27.2 DCCH Type-Specific Fields

The Dedicated Control Channel configuration capability information included in the DCCH Type-specific fields contains the following subfields:

DCCH_FRAME_SIZE	2
FOR_DCCH_LEN	3
FOR_DCCH_RC_MAP	$3 \times \text{FOR\_DCCH\_LEN}$
REV_DCCH_LEN	3
REV_DCCH_RC_MAP	$3 \times \text{REV\_DCCH\_LEN}$

**DCCH\_FRAME\_SIZE** – Frame Size supported indicator on the Dedicated Control Channel.

The mobile station shall set this field to the frame size supported for the forward and reverse DCCH, as shown in Table 2.7.4.27.2-1.

**Table 2.7.4.27.2-1. DCCH Frame Size Supported**

<b>DCCH_FRAME_SIZE (binary)</b>	<b>Description</b>
00	Either 5 ms or 20 ms frame sizes (not dynamically switchable)
01	20 ms frame size only
10	5 ms frame size only
11	Both 5 ms and 20 ms frame sizes (Dynamically switchable)

**FOR\_DCCH\_LEN** – Forward Dedicated Control Channel Configuration information length.

The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the FOR\_DCCH\_RC\_MAP field.

**FOR\_DCCH\_RC\_MAP** – Forward Dedicated Channel Radio Configuration information.

The mobile station shall set this field as described below to indicate which Radio Configurations (see [2]) are supported by the mobile station on the Forward Dedicated Control Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific Radio Configuration. Bit positions of these indicators in the field and corresponding Radio Configurations are specified in Table 2.7.4.27.1-1.

1			The mobile station shall set each indicator to '1' if the
2			corresponding Radio Configuration on the Forward Dedicated
3			Control Channel is supported by the mobile station;
4			otherwise, the mobile station shall set the indicator to '0'.
5			The mobile station shall set any unused bits in the field to '0'.
6	REV_DCCH_LEN	-	Reverse Dedicated Control Channel Configuration
7			information length.
8			The mobile station shall set this field to the number of 3 bit
9			units required to specify the length, in bits, of the
10			REV_DCCH_RC_MAP field.
11	REV_DCCH_RC_MAP	-	Reverse Dedicated Control Channel Radio Configuration
12			information.
13			The mobile station shall set this field as described below to
14			indicate which Radio Configurations (see [2]) are supported
15			by the mobile station on the Reverse Dedicated Control
16			Channel.
17			This field consists of the sequence of 1-bit indicators, each
18			indicating the mobile station support for specific Radio
19			Configuration. Bit positions of these indicators in the field
20			and corresponding Radio Configurations are specified in
21			Table 2.7.4.27.1-2.
22			The mobile station shall set each indicator to '1' if the
23			corresponding Radio Configuration on the Reverse Dedicated
24			Control Channel is supported by the mobile station;
25			otherwise, the mobile station shall set the indicator to '0'.
26			The mobile station shall set any unused bits in the field to '0'.
27			

## 2.7.4.27.3 FOR\_SCH Type-Specific Fields

The Forward Supplemental Channel configuration capability information included in the FOR\_SCH Type-specific fields contains the following subfields:

FOR_SCH_LEN	3
FOR_SCH_RC_MAP	$3 \times \text{FOR\_SCH\_LEN}$
FOR_SCH_NUM	2

FOR\_SCH\_NUM occurrences of the following fields:

{ (FOR\_SCH\_NUM)

FOR_TURBO_SUPPORTED	1
FOR_MAX_TURBO_BLOCK_SIZE	0 or 4
FOR_CONV_SUPPORTED	1
FOR_MAX_CONV_BLOCK_SIZE	0 or 4
FOR_FRAME_40_SUPPORTED	1
FOR_FRAME_80_SUPPORTED	1
FOR_MAX_RATE	4

} (FOR\_SCH\_NUM)

FOR\_SCH\_LEN – Forward Supplemental Channel information length in units of 3 bits.

The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the FOR\_SCH\_RC\_MAP field.

FOR\_SCH\_RC\_MAP – Forward Supplemental Channel Radio Configuration capability.

The mobile station shall set this field as described below to indicate which Radio Configurations (see [2] Table 3.1.3.1-1) are supported by the mobile station on the Forward Supplemental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific Radio Configuration. Bit positions of these indicators in the field and corresponding Radio Configurations are specified in Table 2.7.4.27.1-1.

The mobile station shall set each indicator to '1' if the corresponding Radio Configuration on the Forward Supplemental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'. The mobile station shall set any unused bits in the field to '0'.

- |    |                          |   |   |
|----|--------------------------|---|---|
| 1  | FOR_SCH_NUM              | - | Number of Forward Supplemental Channels.                          |
| 2  |                          |   | The mobile station shall set this field to the number of          |
| 3  |                          |   | Forward Supplemental Channels supported by the mobile             |
| 4  |                          |   | station.  |
| 5  |                          |   | If the FOR_SCH_NUM field is greater than zero, the mobile         |
| 6  |                          |   | station shall include one occurrence of the following 8 fields    |
| 7  |                          |   | for each Forward Supplemental Channel supported by the            |
| 8  |                          |   | mobile station. The first occurrence is SCH0 related              |
| 9  |                          |   | information. The second occurrence (if any) is SCH1 related       |
| 10 |                          |   | information.  |
| 11 | FOR_TURBO_SUPPORTED      | - | Forward Turbo Coding supported indicator.                         |
| 12 |                          |   | If the mobile station supports Turbo Coding on this Forward       |
| 13 |                          |   | Supplemental Channel, it shall set this field to '1'; otherwise,  |
| 14 |                          |   | the mobile station shall set this field to '0'.                   |
| 15 | FOR_MAX_TURBO_BLOCK_SIZE | - | Forward maximum Turbo Coding block size.                          |
| 16 |                          |   | If the field FOR_TURBO_SUPPORTED is set to '0', the mobile        |
| 17 |                          |   | station shall omit this field; otherwise the mobile station shall |
| 18 |                          |   | include this field and set it to the maximum block size           |
| 19 |                          |   | allowed for Turbo coding (see Table 2.7.4.27.3-1).                |

**Table 2.7.4.27.3-1. Block Size**

<b>FOR_MAX_TURBO_BLOCK_SIZE</b> <b>REV_MAX_TURBO_BLOCK_SIZE</b> <b>FOR_MAX_CONV_BLOCK_SIZE</b> <b>REV_MAX_CONV_BLOCK_SIZE</b> <b>(binary)</b>	<b>Block Size</b>	
	<b>R-SCH RC 3 and 5</b> <b>F-SCH RC 3, 4, 6, and 7</b>	<b>R-SCH RC 4 and 6</b> <b>F-SCH RC 5, 8 and 9</b>
0000	172	267
0001	360	552
0010	744	1128
0011	1512	2280
0100	3048	4584
0101	6120	9192
0110	12264	20712

RESERVED	All other values are reserved
----------	-------------------------------

1	
2	FOR_CONV_SUPPORTED - Forward Convolutional Coding supported indicator.
3	If the mobile station supports Convolutional Coding on this
4	Forward Supplemental Channel, it shall set this field to '1';
5	otherwise, the mobile station shall set this field to '0'.
6	FOR_MAX_CONV_BLOCK_SIZE - Forward maximum Convolutional Coding block size.
7	If the field FOR_CONV_SUPPORTED is set to '0', the mobile
8	station shall omit this field; otherwise the mobile station shall
9	include this field and set it to the maximum block size
10	allowed for Convolutional coding. (see Table 2.7.4.27.3-1)
11	FOR_FRAME_40_SUPPORTED - Forward 40ms frame indicator.
12	If the mobile station supports 40 ms frames on this Forward
13	Supplemental Channel, it shall set this field to '1'; otherwise,
14	the mobile station shall set this field to '0'.
15	FOR_FRAME_80_SUPPORTED - Forward 80ms frame Indicator.
16	If the mobile station supports 80 ms frames on this Forward
17	Supplemental Channel, it shall set this field to '1'; otherwise,
18	the mobile station shall set this field to '0'.
19	FOR_MAX_RATE - Maximum forward supplemental channels rate
20	The mobile station shall set this field according to Table
21	2.7.4.27.3-2 to indicate the maximum forward supplemental
22	channel frame rate supported.
23	
24	

1

2

Table 2.7.4.27.3-2. SCH Data Rate

REV_MAX_RATE FOR_MAX_RATE (binary)	Max Rate (kbps)	
	R-SCH RC 3, 5	R-SCH RC 4, 6
	F-SCH RC 3, 4, 6, 7	F-SCH RC 5, 8, 9
0000	9.6	14.4
0001	19.2	28.8
0010	38.4	57.6
0011	76.8	115.2
0100	153.6	230.4
0101	307.2	259.2
0110	614.4	460.8
0111	Reserved	518.4
1000	Reserved	1036.8
RESERVED	All other values are reserved	

3

## 2.7.4.27.4 REV\_SCH Type-Specific Fields

The Reverse Supplemental Channel configuration capability information included in the REV\_SCH Type-specific fields contains the following subfields:

REV_SCH_LEN	3
REV_SCH_RC_MAP	3 ×x REV_SCH_LEN
REV_SCH_NUM	2

REV\_SCH\_NUM occurrences of the following fields:

{ (REV\_SCH\_NUM)

REV_TURBO_SUPPORTED	1
REV_MAX_TURBO_BLOCK_SIZE	0 or 4
REV_CONV_SUPPORTED	1
REV_MAX_CONV_BLOCK_SIZE	0 or 4
REV_FRAME_40_SUPPORTED	1
REV_FRAME_80_SUPPORTED	1
REV_MAX_RATE	4

} (REV\_SCH\_NUM)

REV\_SCH\_LEN – Reverse Supplemental Channel information length in units of 3 bits.

The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the REV\_SCH\_RC\_MAP field.

REV\_SCH\_RC\_MAP – Reverse Supplemental Channel Radio Configuration capability.

The mobile station shall set this field as described below to indicate which Radio Configurations (See [2] Table 2.1.3.1-1) are supported by the mobile station on the Reverse Supplemental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific Radio Configuration. Bit positions of these indicators in the field and corresponding Radio Configurations are specified in Table 2.7.4.27.1-2.

The mobile station shall set each indicator to '1' if the corresponding Radio Configuration on the Reverse Supplemental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'. The mobile station shall set any unused bits in the field to '0'.



1	REV_SCH_NUM	-	Number of Reverse Supplemental Channels
2			The mobile station shall set this field to the number of
3			Reverse Supplemental Channels supported by the mobile
4			station.
5			If the REV_SCH_NUM field is greater than zero, the mobile
6			station shall include one occurrence of the following 8 fields
7			for each Reverse Supplemental Channel supported by the
8			mobile station. The first occurrence is SCH0 related
9			information. The second occurrence (if any) is SCH1 related
10			information.
11	REV_TURBO_SUPPORTED	-	Reverse Turbo Coding supported indicator.
12			If the mobile station supports Turbo Coding on this Reverse
13			Supplemental Channel, it shall set this field to '1'; otherwise,
14			the mobile station shall set this field to '0'.
15	REV_MAX_TURBO_BLOCK_SIZE	-	Reverse maximum Turbo Coding block size.
16			If the field REV_TURBO_SUPPORTED is set to '0', the mobile
17			station shall omit this field; otherwise the mobile station shall
18			include this field and set it to the maximum block size
19			allowed for Turbo coding (see Table 2.7.4.27.3-1).
20	REV_CONV_SUPPORTED	-	Reverse Convolutional Coding supported indicator.
21			If the mobile station supports Convolutional Coding on this
22			Reverse Supplemental Channel, it shall set this field to '1';
23			otherwise, the mobile station shall set this field to '0'.
24	REV_MAX_CONV_BLOCK_SIZE	-	Reverse maximum Convolutional Coding block size.
25			If the field REV_CONV_SUPPORTED is set to '0', the mobile
26			station shall omit this field; otherwise the mobile station shall
27			include this field and set it to the maximum block size
28			allowed for Convolutional coding (see Table 2.7.4.27.3-1).
29	REV_FRAME_40_SUPPORTED	-	Reverse 40ms frame indicator.
30			If the mobile station supports 40 ms frames on this Reverse
31			Supplemental Channel, it shall set this field to '1'; otherwise,
32			the mobile station shall set this field to '0'.
33	REV_FRAME_80_SUPPORTED	-	Reverse 80ms frame indicator.
34			If the mobile station supports 80 ms frames on this Reverse
35			Supplemental Channel, it shall set this field to '1'; otherwise,
36			the mobile station shall set this field to '0'.
37	REV_MAX_RATE	-	Maximum reverse supplemental channels rate
38			The mobile station shall set this field according to Table
39			2.7.4.27.3-2 to indicate the maximum reverse supplemental
40			channel frame rate supported.
41			
42			

## 2.7.4.27.5 FOR\_PDCH Type-specific Fields

The Forward Packet Data Channel configuration capability information included in the FOR\_PDCH Type-specific fields contains the following subfields:

ACK_DELAY	1
NUM_ARQ_CHAN	2
FOR_PDCH_LEN	2
FOR_PDCH_RC_MAP	$3 \times (\text{FOR\_PDCH\_LEN} + 1)$
CH_CONFIG_SUP_MAP_LEN	2
CH_CONFIG_SUP_MAP	$3 \times (\text{CH\_CONFIG\_SUP\_MAP\_LEN} + 1)$

**ACK\_DELAY** – Delay for the acknowledgment sent on the Reverse Acknowledgment Channel.

If the mobile station requires a 2-slot delay to send an acknowledgment on the R-ACKCH, then the mobile station shall set this subfield to '1'; otherwise (the mobile station requires a 1-slot delay), the mobile station shall set this subfield to '0'.

**NUM\_ARQ\_CHAN** – Number of Physical Layer ARQ Channels supported.

The mobile station shall set this subfield to the number of Physical Layer ARQ Channels that it supports, minus two.

The mobile station shall not set this field to '11'.

**FOR\_PDCH\_LEN** – Forward Packet Data Channel Configuration information length.

The mobile station shall set this subfield to one less than the number of 3 bit units required to specify the length of the FOR\_PDCH\_RC\_MAP subfield.

**FOR\_PDCH\_RC\_MAP** – Forward Packet Data Channel Radio Configuration information.

The mobile station shall set this subfield as described below to indicate which Radio Configurations (see [2]) are supported by the mobile station on the Forward Packet Data Channel.

This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific Radio Configuration. Bit positions of these indicators in the subfield and corresponding Radio Configurations are specified in Table 2.7.4.27.5-1.

The mobile station shall set each indicator to '1' if the corresponding Radio Configuration on the Forward Packet Data Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'. The mobile station shall set any unused bits in the subfield to '0'.

**Table 2.7.4.27.5-1. Forward Packet Data Channel Radio Configurations Supported**

Subfield	Length (bits)	Subfield Description
RC10	1	Radio Configuration 10
Reserved	$3 \times (\text{FOR\_PDCH\_LEN} + 1) - 1$	Reserved

**CH\_CONFIG\_SUP\_MAP\_LEN** – Channel Configuration Supported Bitmap length.

The mobile station shall set this field to one less than the number of 3 bit units required to specify the length, in bits, of the CH\_CONFIG\_SUP\_MAP field.

**CH\_CONFIG\_SUP\_MAP** – Channel Configuration Supported Bitmap.

The mobile station shall set this subfield as described below to indicate which physical channel configurations are supported by the mobile station.

This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific channel configuration. Bit positions of these indicators in the subfield and corresponding channel configurations are specified in Table 2.7.4.27.5-2.

The mobile station shall set each indicator to '1' if the corresponding channel configuration is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'. The mobile station shall set any unused bits in the field to '0'.

The mobile station shall set the subfield F-PDCH\_1 to '1', or the subfield F-PDCH\_2 to '1', or the subfields F-PDCH\_1 and F-PDCH\_2 to '1'.

The mobile station shall set the subfields F-PDCH\_1 and F-PDCH\_3 to the same value.

The mobile station shall set the subfields F-PDCH\_2 and F-PDCH\_4 to the same value.

1

**Table 2.7.4.27.5-2. F-PDCH Channel Configurations Supported**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
F-PDCH_1	1	F-PDCH + F-CPCCH + R-FCH
F-PDCH_2	1	F-PDCH + F-CPCCH + R-DCCH
F-PDCH_3	1	F-PDCH + F-FCH + R-FCH
F-PDCH_4	1	F-PDCH + F-DCCH + R-DCCH
F-PDCH_5	1	F-PDCH + F-FCH + R-FCH + R-DCCH
F-PDCH_6	1	F-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH

2

#### 2.7.4.27.6 REV\_PDCH Type-specific Fields

The Reverse Packet Data Channel configuration capability information included in the REV\_PDCH Type-specific fields contains the following subfields:

REV_PDCH_LEN	2
REV_PDCH_RC_MAP	$3 \times (\text{REV\_PDCH\_LEN} + 1)$
REV_PDCH_CH_CONFIG_SUP_MAP_LEN	2
REV_PDCH_CH_CONFIG_SUP_MAP	$3 \times (\text{REV\_CH\_CONFIG\_SUP\_MAP\_LEN} + 1)$
REV_PDCH_MAX_SIZE_SUPPORTED_ENCODE R_PACKET	2

**REV\_PDCH\_LEN** – Reverse Packet Data Channel Configuration information length.

The mobile station shall set this subfield to one less than the number of 3 bit units required to specify the length of the REV\_PDCH\_RC\_MAP subfield.

**REV\_PDCH\_RC\_MAP** – Reverse Packet Data Channel Radio Configuration information.

The mobile station shall set this subfield as described below to indicate which Radio Configurations (see [2]) are supported by the mobile station on the Reverse Packet Data Channel.

This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific Radio Configuration. Bit positions of these indicators in the subfield and corresponding Radio Configurations are specified in Table 2.7.4.27.6-1.

The mobile station shall set each indicator to '1' if the corresponding Radio Configuration on the Reverse Packet Data Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'. The mobile station shall set any unused bits in the subfield to '0'.

**Table 2.7.4.27.6-1. Reverse Packet Data Channel Radio Configurations Supported**

Subfield	Length (bits)	Subfield Description
RC7	1	Radio Configuration 7
Reserved	$3 \times (\text{REV\_PDCH\_LEN} + 1) - 1$	Reserved

1 REV\_PDCH\_CH\_CONFIG\_SUP\_MAP\_LEN - Reverse Packet Data Channel Channel  
2 Configuration Supported Bitmap length.  
3 The mobile station shall set this field to one less than the  
4 number of 3 bit units required to specify the length, in bits, of  
5 the REV\_PDCH\_CH\_CONFIG\_SUP\_MAP field.

6 REV\_PDCH\_CH\_CONFIG\_SUP\_MAP - Reverse Packet Data Channel Channel  
7 Configuration Supported Bitmap.  
8 The mobile station shall set this subfield as described below  
9 to indicate which physical channel configurations are  
10 supported by the mobile station.  
11 This subfield consists of the sequence of 1-bit indicators,  
12 each indicating the mobile station support for a specific  
13 channel configuration. Bit positions of these indicators in  
14 the subfield and corresponding channel configurations are  
15 specified in Table 2.7.4.27.6-2.  
16 The mobile station shall set each indicator to '1' if the  
17 corresponding channel configuration is supported by the  
18 mobile station; otherwise, the mobile station shall set the  
19 indicator to '0'. The mobile station shall set any unused bits  
20 in the field to '0'. The mobile station shall set the  
21 indicator corresponding to the channel configuration F/R-  
22 PDCH\_0 to '1'.  
23 The mobile station shall set the subfield F/R-PDCH\_1 to '1',  
24 or the subfield F/R-PDCH\_2 to '1', or the subfields F/R-  
25 PDCH\_1 and F/R-PDCH\_2 to '1'.  
26 The mobile station shall set the subfields F/R-PDCH\_1 and  
27 F/R-PDCH\_3 to the same value.  
28 The mobile station shall set the subfields F/R-PDCH\_2 and  
29 F/R-PDCH\_4 to the same value.

1

**Table 2.7.4.27.6-2. F/R-PDCH Channel Configurations Supported**

<b>Subfield of F/R-PDCH Channel Configurations</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
F/R-PDCH_0	1	F-PDCH + R-PDCH + F-CPCCH
F/R-PDCH_1	1	F-PDCH + R-PDCH + F-CPCCH + R-FCH
F/R-PDCH_2	1	F-PDCH + R-PDCH + F-CPCCH + R-DCCH
F/R-PDCH_3	1	F-PDCH + R-PDCH + F-FCH + R-FCH
F/R-PDCH_4	1	F-PDCH + R-PDCH + F-DCCH + R-DCCH
F/R-PDCH_5	1	F-PDCH + R-PDCH + F-FCH + R-FCH + R-DCCH
F/R-PDCH_6	1	F-PDCH + R-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH

2

3 **REV\_PDCH\_MAX\_SIZE\_SUPPORTED\_ENCODER\_PACKET** - Reverse Packet Data Channel  
4 Maximum Size Encoder Packet supported

5 The mobile station shall set this field to the maximum size  
6 encoder packet it supports as specified in Table 2.7.4.27.6-3.  
7 (see [2] and [3]).

8

**Table 2.7.4.27.6-3. Maximum supported encoder packet size.**

<b>REV_PDCH_MAX_SIZE_SUPPORTED_ENCODER_PACKET (binary)</b>	<b>Maximum supported encoder packet size. (bits)</b>
00	12312
01	15384
10	18456
11	Reserved

9

10

#### 2.7.4.27.7 FUNDICATED\_BCMC Type-specific Fields

The Fundicated Channel BCMC capability information included in the FUNDICATED\_BCMC Type-specific fields contains the following subfields:

FUNDICATED_BCMC_CH_SUP_MAP_LEN	2
FUNDICATED_BCMC_CH_SUP_MAP	3 × (FUNDICATED_B CMC_CH_SUP_M AP_LEN +1)

FUNDICATED\_BCMC\_CH\_SUP\_MAP\_LEN – Fundicated Channel BCMC channel configurations supported bitmap length.

The mobile station shall set this field to one less than the number of 3 bit units required to specify the length, in bits, of the FUNDICATED\_BCMC\_CH\_SUP\_MAP field.

FUNDICATED\_BCMC\_CH\_SUP\_MAP – Fundicated Channel BCMC channel configurations supported bitmap.

The mobile station shall set this subfield as described below to indicate which physical channel configurations are supported by the mobile station.

This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific channel configuration. Bit positions of these indicators in the subfield and corresponding channel configurations are specified in Table 2.7.4.27.7-1.

The mobile station shall set each indicator to '1' if the corresponding channel configuration is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'. The mobile station shall set any unused bits in the field to '0'.

The mobile station shall not set all the indicators in this subfield to '0'.



1      **Table 2.7.4.27.7-1. Fundicated BCMC Channel Configurations Supported**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
Fundicated BCMC Channel Configuration 1	1	a) F-FCH + F-DCCH + R-DCCH b) F-PDCH + F-FCH + F-DCCH + R-DCCH, if F-PDCH is supported c) F-PDCH + R-PDCH + F-FCH + F-DCCH + R-DCCH, if R-PDCH is supported
Fundicated BCMC Channel Configuration 2	1	a) F-FCH + R-FCH + F-DCCH + R-DCCH b) F-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH, if F-PDCH is supported c) F-PDCH + R-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH, if R-PDCH is supported
Fundicated BCMC Channel Configuration 3	1	a) F-CPCCH + F-DCCH + R-DCCH b) F-PDCH + F-CPCCH + F-DCCH + R-DCCH, if F-PDCH is supported c) F-PDCH + R-PDCH + F-CPCCH + F-DCCH + R-DCCH, if R-PDCH is supported
Fundicated BCMC Channel Configuration 4	1	a) F-CPCCH + F-FCH + F-DCCH + R-DCCH b) F-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH is supported c) F-PDCH + R-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH, if R-PDCH is supported
Fundicated BCMC Channel Configuration 5	1	a) F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH b) F-PDCH + F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH is supported c) F-PDCH + R-PDCH + F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH, if R-PDCH is supported
Reserved	1	Reserved

2

3

1    2.7.4.28 Extended Multiplex Option Information

2    This information record can be included in a *Status Response Message* or an *Extended*  
3    *Status Response Message* to return multiplex option information about the mobile station.

4

Type-Specific Field	Length (bits)
NUM_MO_FOR_FCH	4

NUM\_MO\_FOR\_FCH occurrences of the following record:

{ (NUM\_MO\_FOR\_FCH)

MO_FOR_FCH	16
FOR_NUM_BITS_FCH	8

} (NUM\_MO\_FOR\_FCH)

NUM_MO_REV_FCH	4
----------------	---

NUM\_MO\_REV\_FCH occurrences of the following record:

{ (NUM\_MO\_REV\_FCH)

MO_REV_FCH	16
REV_NUM_BITS_FCH	8

} (NUM\_MO\_REV\_FCH)

NUM_MO_FOR_DCCH	4
-----------------	---

NUM\_MO\_FOR\_DCCH occurrences of the following record:

{ ( NUM\_MO\_FOR\_DCCH)

MO_FOR_DCCH	16
-------------	----

} (NUM\_MO\_FOR\_DCCH)

NUM_MO_REV_DCCH	4
-----------------	---

NUM\_MO\_REV\_DCCH occurrences of the following record:

{ ( NUM\_MO\_REV\_DCCH)

MO_REV_DCCH	16
-------------	----

} (NUM\_MO\_REV\_DCCH)

NUM_MO_FOR_SCH	4
----------------	---

NUM\_MO\_FOR\_SCH occurrences of the following record:

{ (NUM\_MO\_FOR\_SCH)

FOR_SCH_ID	1
MO_FOR_SCH	16

} (NUM\_MO\_FOR\_SCH)

(continued on next page)

Type-Specific Field	Length (bits)
NUM_MO_REV_SCH	4

NUM\_MO\_REV\_SCH occurrences of the following record:

{ (NUM\_MO\_REV\_SCH)

REV_SCH_ID	1
MO_REV_SCH	16

} (NUM\_MO\_REV\_SCH)

NUM_MO_FOR_PDCH	4
-----------------	---

NUM\_MO\_FOR\_PDCH occurrences of the following record:

{ (NUM\_MO\_FOR\_PDCH)

MO_FOR_PDCH	16
-------------	----

} (NUM\_MO\_FOR\_PDCH)

NUM_MO_REV_PDCH	4
-----------------	---

NUM\_MO\_REV\_PDCH occurrences of the following record:

{ (NUM\_MO\_REV\_PDCH)

MO_REV_PDCH	16
-------------	----

} (NUM\_MO\_REV\_PDCH)

RESERVED	0 - 7 (as needed)
----------	-------------------

- 1
- 2     NUM\_MO\_FOR\_FCH   –   Number of Forward Fundamental Channel Multiplex Options.
- 3     The mobile station shall set this field to the number of the
- 4     Forward Fundamental Channel Multiplex Options supported
- 5     by the mobile station.
- 6     If NUM\_MO\_FOR\_FCH is not equal to '0000', the mobile
- 7     station shall include NUM\_MO\_FOR\_FCH occurrences of the
- 8     following two fields for each supported Forward Fundamental
- 9     Channel multiplex option:
- 10       MO\_FOR\_FCH   –   Forward Fundamental Channel multiplex option.
- 11     The mobile station shall set this field to the Forward
- 12     Fundamental Channel multiplex option.
- 13   FOR\_NUM\_BITS\_FCH–   Forward Fundamental Channel number of bits per frame.
- 14     The mobile station shall set this field as described below to
- 15     indicate which number of bits per frame are supported by the
- 16     mobile station on the Forward Fundamental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific number of bits per frame. Bit positions of these indicators in the field and corresponding number of bits per frame are specified in Table 2.7.4.28-1 if MO\_FOR\_FCH is equal to 1, Table 2.7.4.28-2 if MO\_FOR\_FCH is equal to 2, and Table 2.7.4.28-3 if MO\_FOR\_FCH is equal to 0x704.

The mobile station shall set each indicator to '1' if the corresponding number of bits per frame on the Forward Fundamental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'.

**Table 2.7.4.28-1. Forward Fundamental Channel Number of Bits per Frame for MO\_FOR\_FCH equal to 1**

Subfield	Length (bits)	Subfield Description
RS1_9600_FOR	1	172 bits per F-FCH frame
RS1_4800_FOR	1	80 bits per F-FCH frame
RS1_2400_FOR	1	40 bits per F-FCH frame
RS1_1200_FOR	1	16bits per F-FCH frame
RESERVED	4	Reserved Bits

**Table 2.7.4.28-2. Forward Fundamental Channel Number of Bits per Frame for MO\_FOR\_FCH equal to 2**

Subfield	Length (bits)	Subfield Description
RS2_14400_FOR	1	267 bits per F-FCH frame
RS2_7200_FOR	1	125 bits per F-FCH frame
RS2_3600_FOR	1	55 bits per F-FCH frame
RS2_1800_FOR	1	21 bits per F-FCH frame
RESERVED	4	Reserved Bits

**Table 2.7.4.28-3. Forward Fundamental Channel Number of Bits per Frame for MO\_FOR\_FCH equal to 0x704**

Subfield	Length (bits)	Subfield Description
R1	1	Highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0000])
R2	1	Second highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0001])
R3	1	Third highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0010])
R4	1	Forth highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0011])
R5	1	Fifth Second highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0100])
R6	1	Sixth highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0101])
R7	1	Seventh highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0110])
R8	1	Eighth highest possible number of bits on F-FCH (specified by NUM_BITS <sub>S</sub> [FFCH_NBIT_TABLE_ID][0111])

NUM\_MO\_REV\_FCH – Number of Reverse Fundamental Channel Multiplex Options.

The mobile station shall set this field to the number of the Reverse Fundamental Channel Multiplex Options supported by the mobile station.

If NUM\_MO\_REV\_FCH is not equal to '0000', the mobile station shall include NUM\_MO\_REV\_FCH occurrences of the following two fields for each supported Reverse Fundamental Channel multiplex option:

MO\_REV\_FCH – Reverse Fundamental Channel multiplex option.

The mobile station shall set this field to the Reverse Fundamental Channel multiplex option.

REV\_NUM\_BITS\_FCH– Reverse Fundamental Channel number of bits per frame.

The mobile station shall set this field as described below to indicate which number of bits per frame are supported by the mobile station on the Reverse Fundamental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for number of bits per frame. Bit positions of these indicators in the field and corresponding number of bits per frame are specified in Table 2.7.4.28-4 if MO\_REV\_FCH is equal to 1, Table 2.7.4.28-5 if MO\_REV\_FCH is equal to 2, and Table 2.7.4.28-6 if MO\_REV\_FCH is equal to 0x704.

The mobile station shall set each indicator to '1' if the corresponding number of bits per frame on the Reverse Fundamental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to '0'.

**Table 2.7.4.28-4. Reverse Fundamental Channel Number of Bits per Frame for MO\_REV\_FCH equal to 1**

Subfield	Length (bits)	Subfield Description
RS1_9600_REV	1	172 bits per R-FCH frame
RS1_4800_REV	1	80 bits per R-FCH frame
RS1_2400_REV	1	40 bits per R-FCH frame
RS1_1200_REV	1	16 bits per R-FCH frame
RESERVED	4	Reserved Bits

**Table 2.7.4.28-5. Reverse Fundamental Channel Number of Bits per Frame for MO\_REV\_FCH equal to 2**

Subfield	Length (bits)	Subfield Description
RS2_14400_REV	1	267 bits per R-FCH frame
RS2_7200_REV	1	125 bits per R-FCH frame
RS2_3600_REV	1	55 bits per R-FCH frame
RS2_1800_REV	1	21 bits per R-FCH frame
RESERVED	4	Reserved Bits

**Table 2.7.4.28-6. Reverse Fundamental Channel Number of Bits per Frame for MO\_REV\_FCH equal to 0x704**

Subfield	Length (bits)	Subfield Description
R1	1	Highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0000])
R2	1	Second highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0001])
R3	1	Third highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0010])
R4	1	Forth highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0011])
R5	1	Fifth Second highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0100])
R6	1	Sixth highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0101])
R7	1	Seventh highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0110])
R8	1	Eighth highest possible number of bits on R-FCH (specified by NUM_BITS <sub>S</sub> [RFCH_NBIT_TABLE_ID][0111])

NUM\_MO\_FOR\_DCCH – Number of Forward Dedicated Control Channel Multiplex Options.

The mobile station shall set this field to the number of the Forward Dedicated Control Channel Multiplex Options supported by the mobile station.

If NUM\_MO\_FOR\_DCCH is not equal to '0000', the mobile station shall include NUM\_MO\_FOR\_DCCH occurrence of the following one field for each supported Forward Dedicated Control Channel multiplex option:

MO\_FOR\_DCCH – Forward Dedicated Control Channel multiplex option.

The mobile station shall set this field to the Forward Dedicated Control Channel multiplex option.



1	NUM_MO_REV_DCCH	-	Number of Reverse Dedicated Control Channel Multiplex Options.
2			
3			The mobile station shall set this field to the number of the
4			Reverse Dedicated Control Channel Multiplex Options
5			supported by the mobile station.
6			If NUM_MO_REV_DCCH is not equal to '0000', the mobile
7			station shall include NUM_MO_REV_DCCH occurrence of the
8			following one field for each supported Reverse Dedicated
9			Control Channel multiplex option:
10	MO_REV_DCCH	-	Reverse Dedicated Control Channel multiplex option.
11			The mobile station shall set this field to the Reverse
12			Dedicated Control Channel multiplex option.
13	NUM_MO_FOR_SCH	-	Number of Forward Supplemental Channel Multiplex Options.
14			
15			The mobile station shall set this field to the number of
16			Forward Supplemental Channel Multiplex Options supported
17			by the mobile station included in this message. The mobile
18			station shall include the multiplex option associated with the
19			highest data rate it supports for each combination of
20			MuxPDU type, rate set, and block size <sup>11</sup> .
21			If NUM_MO_FOR_SCH is not equal to '0000', the mobile
22			station shall include NUM_MO_FOR_SCH occurrence of the
23			following two fields:
24	FOR_SCH_ID	-	Forward Supplemental Channel identifier.
25			The mobile station shall set this field to specify the Forward
26			Supplemental Channel to which the Forward Supplemental
27			multiplex option supported by the mobile station
28			corresponds.
29	MO_FOR_SCH	-	Forward Supplemental Channel multiplex option.
30			The mobile station shall set this field to the Forward
31			Supplemental Channel multiplex option associated with the
32			maximum data rate (see [3]) that the mobile station
33			supports <sup>12</sup> .
34	NUM_MO_REV_SCH	-	Number of Reverse Supplemental Channel Multiplex Options.

---

<sup>11</sup> If any Rate Set 1 multiplex option is included, then mobile station support of MuxPDU Type 1 is implied and the mobile station is not required to include multiplex option 0x03. If any Rate Set 2 multiplex option is included, then mobile station support of MuxPDU Type 2 is implied and the mobile station is not required to include multiplex option 0x04 (see [3]).

<sup>12</sup> If the mobile station supports the multiplex option associated with the maximum data rate, the mobile station shall support all lower data rates as specified in [3].

- 1 The mobile station shall set this field to the number of  
 2 Reverse Supplemental Channel Multiplex Options included in  
 3 this message. The mobile station shall include the multiplex  
 4 option associated with the highest data rate it supports for  
 5 each combination of MuxPDU type, rate set, and block size<sup>13</sup>.
- 6 If NUM\_MO\_REV\_SCH is not equal to '0000', the mobile  
 7 station shall include NUM\_MO\_REV\_SCH occurrence of the  
 8 following two fields:
- 9       REV\_SCH\_ID    – Reverse Supplemental Channel identifier.
- 10       The mobile station shall set this field to specify the Reverse  
 11 Supplemental Channel to which the Reverse Supplemental  
 12 multiplex option supported by the mobile station  
 13 corresponds.
- 14       MO\_REV\_SCH    – Reverse Supplemental Channel multiplex option.
- 15       The mobile station shall set this field to the Reverse  
 16 Supplemental Channel multiplex option associated with the  
 17 maximum data rate (see [3]) that the mobile station  
 18 supports<sup>14</sup>.
- 19 NUM\_MO\_FOR\_PDCH   – Number of Forward Packet Data Channel multiplex options.
- 20       The mobile station shall set this field to the number of  
 21 Forward Packet Data Channel Multiplex Options supported  
 22 by the mobile station.
- 23 If NUM\_MO\_FOR\_PDCH is not equal to '0000', the mobile station shall include  
 24 NUM\_MO\_FOR\_PDCH occurrences of the following one-field record:
- 25       MO\_FOR\_PDCH   – Forward Packet Data Channel multiplex option.
- 26       The mobile station shall set this field to the Forward Packet  
 27 Data Channel multiplex option.
- 28 NUM\_MO\_REV\_PDCH   – Number of Reverse Packet Data Channel multiplex options.
- 29       The mobile station shall set this field to the number of  
 30 Reverse Packet Data Channel Multiplex Options supported by  
 31 the mobile station.
- 32 If NUM\_MO\_REV\_PDCH is not equal to '0000', the mobile station shall include  
 33 NUM\_MO\_REV\_PDCH occurrences of the following one-field record:

---

<sup>13</sup> If any Rate Set 1 multiplex option is included, then mobile station support of MuxPDU Type 1 is implied and the mobile station is not required to include multiplex option 0x03. If any Rate Set 2 multiplex option is included, then mobile station support of MuxPDU Type 2 is implied and the mobile station is not required to include multiplex option 0x04 (see [3]).

<sup>14</sup> If the mobile station supports the multiplex option associated with the maximum data rate, the mobile station shall support all lower data rates as specified in [3].

- 1           MO\_REV\_PDCH    -   Reverse Packet Data Channel multiplex option.  
2                            The mobile station shall set this field to the Reverse Packet  
3                            Data Channel multiplex option (see [3]).  
4           RESERVED       -   Reserved bits.  
5                            The mobile station shall add reserved bits as needed in order  
6                            to make the length of the entire information record equal to  
7                            an integer number of octets. The mobile station shall set  
8                            these bits to '0'.  
9

## 2.7.4.29 Geo-Location Capability

This information record identifies the geo-location capabilities of the mobile station. The mobile station shall use the following fixed-length format for the type-specific fields:

Type-Specific Field	Length (bits)
GEO_LOC	3
RESERVED	5

GEO\_LOC – Geo-location.

The mobile station shall set this field to the value shown in Table 2.7.4. 29-1.

**Table 2.7.4.29-1. Geo-location Codes**

GEO_LOC (binary)	Type of Wireless Assisted GPS Identifiers
000	No mobile station assisted geo-location capabilities
001	IS-801 capable (Advanced Forward Link Triangulation only)
010	IS-801 capable (Advanced Forward Link Triangulation and Global Positioning Systems)
011	Global Positioning Systems only
All other GEO_LOC_TYPE values are reserved.	

RESERVED – Reserved bit.

The mobile station shall set this field to '00000'.

#### 2.7.4.30 Band Subclass Information

This information record can be included in a *Status Response Message*, or an *Extended Status Response Message* to return band subclass information about the mobile station.

Type-Specific Field	Length (bits)
BAND_SUBCLASS_INFO	$8 \times \text{RECORD\_LEN}$

**BAND\_SUBCLASS\_INFO** – Band subclass information.

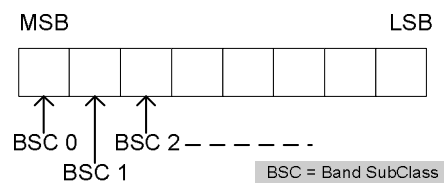
This field indicates which band subclasses are supported by the mobile station.

The mobile station shall set this field to the band subclass information corresponding to the BAND\_CLASS specified in the *Status Request Message*.

The mobile station shall set this field as follows:

- If the mobile station does support the BAND\_CLASS specified in the the *Status Request Message* but there is no subclass defined for this band class, the mobile station shall set this field to '10000000' and set the RECORD LEN field for this record to '00000001'.

Otherwise, the mobile station shall set the Nth most significant bit of this field to '1' if the Nth sub-band class defined in [45] corresponding to the BAND\_CLASS specified in the *Status Request Message* is supported by the mobile station; otherwise, the mobile station shall set the Nth most significant bit of this field to '0'. Example of this field coding is shown in Figure 2.7.4.30-1.



**Figure 2.7.4.30-1. BAND\_SUBCLASS\_INFO field coding**

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to '0'.

## 2.7.4.31 Global Emergency Call

This information record identifies that an emergency call is being originated. This record may be included in a *Flash With Information Message* or an *Extended Flash With Information Message* and allows the user to originate an emergency call.

Type-Specific Field	Length (bits)
NUM_INCL	1
DIGIT_MODE	0 or 1
NUMBER_TYPE	0 or 3
NUMBER_PLAN	0 or 4
NUM_CHAR	0 or 8

NUM\_CHAR occurrences of the following field:

{ ( NUM\_CHAR)

CHAR <sub>i</sub>	4 or 8
-------------------	--------

} (NUM\_CHAR)

MS_ORIG_POS_LOC_IND	1
RESERVED	0 to 7 (as needed)

NUM\_INCL – Dialed number included indicator.

The mobile station shall set this field to '1' to indicate that the dialed digits are included in this information record; otherwise, the mobile station shall set this field to '0'.

DIGIT\_MODE – Digit mode indicator.

If NUM\_INCL is set to '1', the mobile station shall set this field to indicate whether the dialed digits are 4-bit DTMF codes or 8-bit ASCII codes using a specified numbering plan; otherwise, the mobile station shall omit this field.

To originate the call using the binary representation of DTMF digits, the mobile station shall set this field to '0'. To originate the call using ASCII characters, the mobile station shall set this field to '1'.

NUMBER\_TYPE – Type of number.

If NUM\_INCL is set to '1' and the DIGIT\_MODE field is set to '1', the mobile station shall set this field to the NUMBER\_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the called number, as defined in [7], Section 4.5.9; otherwise, the mobile station shall omit this field.

NUMBER\_PLAN – Numbering plan.

1			If NUM_INCL is set to '1' and the DIGIT_MODE field is set to
2			'1', the mobile station shall set this field to the
3			NUMBER_PLAN value shown in Table 2.7.1.3.2.4-3
4			corresponding to the numbering plan used for the called
5			number, as defined in [7], Section 4.5.9; otherwise, the
6			mobile station shall omit this field.
7	NUM_CHAR	-	Number of characters.
8			If NUM_INCL is set to '1', the mobile station shall set this field
9			to the number of characters included in this record;
10			otherwise, the mobile station shall omit this field.
11	CHARi	-	Character.
12			If the NUM_INCL is set to '1', the mobile stations shall include
13			NUM_CHAR occurrences of this field.
14			If the DIGIT_MODE field is set to '0', the mobile station shall
15			set each occurrence of this field to the code value shown in
16			Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the
17			DIGIT_MODE field is set to '1', the mobile station shall set
18			each occurrence of this field to the ASCII representation
19			corresponding to the character, as specified in [9], with the
20			most significant bit set to '0'.
21	MS_INIT_POS_LOC_IND	-	Mobile Initiated Position Location Session indicator.
22			The mobile station shall set this field to '1' if
23			MS_INIT_POS_LOC_SUP_IND <sub>s</sub> is equal to '1' and if the mobile
24			station is to initiate a position location session associated
25			with this emergency call; otherwise, the mobile station shall
26			set this field to '0'.
27	RESERVED	-	Reserved bits.
28			The mobile station shall add reserved bits as needed in order
29			to make the length of the entire information record equal to
30			an integer number of octets. The mobile station shall set
31			these bits to '0'.
32			

## 1 2.7.4.32 Hook Status

2 This information record shall indicate the status of the hook switch in Wireless Local Loop  
3 mobile stations. The mobile station shall use the following fixed-length format for the  
4 type-specific fields:

5

Type-Specific Field	Length (bits)
HOOK_STATUS	4
RESERVED	4

6

7 HOOK\_STATUS – WLL terminal hook status.

8 The mobile station shall set this sub-field to the value shown  
9 in Table 2.7.1.3.2.1-4 corresponding to the hook state.

10 RESERVED – Reserved bits.

11 The mobile station shall set this field to '0000'.

12



1    2.7.4.33 QoS Parameters

2    This information record conveys to the user the QoS parameters associated with the  
3    service to be provided:

Type-Specific Field	Length (bits)
QoS Parameters	variable
RESERVED	0 - 7 (as needed)

4

5            QoS Parameters    -    Block containing the QoS Parameters.

6                                    The mobile station shall set this field to the QoS parameters  
7                                    associated with the user (per subscription), service type (e.g.,  
8                                    assured vs. non-assured services) and the service option.  
9                                    The details of the QoS parameters may be found in  
10                                   documents describing the service options.

11            RESERVED    -    Reserved bits for octet alignment.

12                                   The mobile station shall add the minimum number of bits  
13                                   necessary to make the record length in bits an integral  
14                                   multiple of 8. The mobile station shall set these bits to '0'.  
15

## 2.7.4.34 Encryption Capability

This information record identifies the encryption capability of the mobile station.

Type-Specific Field	Length (bits)
SIG_ENCRYPT_SUP	8
UI_ENCRYPT_SUP	8

**SIG\_ENCRYPT\_SUP** – Signaling Encryption supported indicator.

The mobile station shall set this field to indicate which signaling encryption algorithms are supported by the mobile station, as shown in Table 2.7.1.3.2.1-5.

The mobile station shall set the subfields as follows:

The mobile station shall set the CMEA subfield to '1'.

The mobile station shall set each subfield to '1' if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to '0'.

The mobile station shall set the RESERVED subfield to '00000'.

**UI\_ENCRYPT\_SUP** – User information encryption supported indicator.

The mobile station shall set this field to indicate the supported user information encryption algorithms, as shown in Table 2.7.1.3.2.4-9.

The mobile station shall set each subfield to '1' if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to '0'.

The mobile station shall set the RESERVED subfield to '000000'.

1    2.7.4.35 Signaling Message Integrity Capability

2    This information record identifies the signaling message integrity capability of the mobile  
3    station.

4

Type-Specific Field	Length (bits)
SIG_INTEGRITY_SUP	8

5

6    SIG\_INTEGRITY\_SUP    -    Signaling message integrity supported by the mobile station.

7                            The mobile station shall set this field to indicate the  
8                            supported message integrity algorithm in addition to the  
9                            default integrity algorithm.

10                          This field consists of the subfields shown in Table  
11                          2.7.1.3.2.1-6.

12                          The mobile station shall set each subfield to '1' if the  
13                          corresponding message integrity algorithm is supported by  
14                          the mobile station; otherwise, the mobile station shall set the  
15                          subfield to '0'.

16                          The mobile station shall set the RESERVED subfield to  
17                          '00000000'.

18

19

## 1 2.7.4.36 UIM\_ID

2 This information record can be included in a *Status Response Message* or an *Extended*  
 3 *Status Response Message* to return the mobile station UIM\_ID.

4

Type-Specific Field	Length (bits)
UIM_ID_LEN	4
UIM_ID	$8 \times \text{UIM\_ID\_LEN}$
RESERVED	0 - 7 (as needed)

5

6 UIM\_ID\_LEN – The length of mobile station User Identity Module identifier.

7 The mobile station shall set this field to the length, in units of  
 8 octets, of its User Identity Module identifier. If the mobile  
 9 station does not have a User Identity Module identifier, the  
 10 mobile station shall set this field to '0000'.

11 UIM\_ID – Mobile station User Identity Module identifier.

12 The mobile station shall set this field to its User Identity  
 13 Module identifier (see [40]).

14 RESERVED – Reserved bits for octet alignment.

15 The mobile station shall add the minimum number of bits  
 16 necessary to make the record length in bits an integral  
 17 multiple of 8. The mobile station shall set these bits to '0'.

18

1 2.7.4.37 ESN\_ME

2 This information record can be included in a *Status Response Message* or an *Extended*  
3 *Status Response Message* to return the mobile station ESN\_ME.

4

Type-Specific Field	Length (bits)
ESN_ME_LEN	4
ESN_ME	$8 \times \text{ESN\_ME\_LEN}$
RESERVED	0 - 7 (as needed)

5

6 ESN\_ME\_LEN – The length of mobile equipment electronic serial number.  
7 The mobile station shall set this field to the length, in units of  
8 octets, of its mobile equipment electronic serial number.

9 ESN\_ME<sup>15</sup> – Mobile equipment electronic serial number.  
10 The mobile station shall set this field to ESN<sub>p</sub> (see 2.3.2).

11 RESERVED – Reserved bits for octet alignment.  
12 The mobile station shall add the minimum number of bits  
13 necessary to make the record length in bits an integral  
14 multiple of 8. The mobile station shall set these bits to '0'.  
15

---

<sup>15</sup> The ESN\_ME field is always set to ESN<sub>p</sub> and never carries UIM ID value.

## 1 2.7.4.38 MEID

2 This information record can be included in a *Status Response Message* or an *Extended*  
 3 *Status Response Message* to return the mobile station MEID.

Type-Specific Field	Length (bits)
MEID_LEN	4
MEID	$8 \times \text{MEID\_LEN}$
RESERVED	0 - 7 (as needed)

4

5 MEID\_LEN - The length of MEID.

6 The mobile station shall set this field to the length, in units of  
 7 octets, of the MEID field in this record.

8 MEID - Mobile Equipment Identifier.

9 If the mobile station has a R-UIM which indicates that  
 10 SF\_EUIMID is to be used in place of MEID, the mobile station  
 11 shall set this field to SF\_EUIMID (see [40]); otherwise, the  
 12 mobile station shall set this field to its MEID<sub>p</sub> (see 2.3.2).

13 RESERVED - Reserved bits for octet alignment.

14 The mobile station shall add the minimum number of bits  
 15 necessary to make the record length in bits an integral  
 16 multiple of 8. The mobile station shall set these bits to '0'.

17

#### 2.7.4.39 Extended Keypad Facility

This information record can be included in a *Flash With Information Message* and allows the user to send characters entered via a keyboard or other such terminal.

Type-Specific Field	Length (bits)
NUMBER_INFO_INCL	1
NUMBER_TYPE	0 or 3
NUMBER_PLAN	0 or 4
NUM_FIELDS	6

NUM\_FIELDS occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

RESERVED	0 - 7 (as needed)
----------	-------------------

- NUMBER\_INFO\_INCL – Number included indicator.  
The mobile station shall set this field to '1' if NUMBER\_TYPE and NUMBER\_PLAN fields are included in this record; otherwise, the mobile station shall set this field to '0'.
- NUMBER\_TYPE – Type of number.  
If NUMBER\_INFO\_INCL is set to '0', the mobile station shall omit this field; otherwise, the mobile shall set this field to the NUMBER\_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the characters included in this record, as defined in [7], Section 4.5.9.  
If the mobile station determines that this number is an international number (for example, with a leading "+" or as specified in [39] for Plus Code Dialing or an international access code), the mobile station should set this field to '001'.
- NUMBER\_PLAN – Numbering plan.  
If NUMBER\_INFO\_INCL is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to the NUMBER\_PLAN value shown in Table 2.7.1.3.2.4-3 corresponding to the numbering plan used for the characters in this record, as defined in [7], Section 4.5.9.
- NUM\_FIELDS – Number of characters in this message.  
The mobile station shall set this field to the number of CHAR<sub>i</sub> fields in this message.
- CHAR<sub>i</sub> – Character.

1			The mobile station shall include one occurrence of this field
2			for each character entered. The mobile station shall set each
3			occurrence of this field to the ASCII representation
4			corresponding to the character entered, as specified in [9],
5			with the most significant bit set to '0'.
6	RESERVED	-	Reserved bits for octet alignment.
7			The mobile station shall add the minimum number of bits
8			necessary to make the record length in bits an integral
9			multiple of 8. The mobile station shall set these bits to '0'.
10			



## 2.7.4.40 SYNC\_ID

This information record can be included in a *Status Response Message* or an *Extended Status Response Message* to return the SYNC\_IDs corresponding to stored service configurations.

Type-Specific Field	Length (bits)
NUM_SYNC_ID	5
SID	0 or 15
NID	0 or 16

NUM\_SYNC\_ID occurrences of the following fields:

{ (NUM\_SYNC\_ID)

SYNC_ID_LEN	4
SYNC_ID	(8 x SYNC_ID_LEN)

} (NUM\_SYNC\_ID)

RESERVED	0 - 7 (as needed)
----------	-------------------

NUM\_SYNC\_ID - The number of SYNC\_IDs included in this message.

The mobile station shall set this field to the number of SYNC\_IDs, corresponding to the stored service configurations associated with SID<sub>s</sub> and NID<sub>s</sub>, included in this message. If the mobile station does not have any stored service configuration associated with SID<sub>s</sub> and NID<sub>s</sub>, the mobile station shall set this field to '00000'.

SID - System identification.

If the NUM\_SYNC\_ID field is set to '00000', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to SID<sub>s</sub>.

NID - Network identification.

If the NUM\_SYNC\_ID field is set to '00000', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to NID<sub>s</sub>.

1 The mobile station shall include NUM\_SYNC\_ID occurrences of the following variable  
2 length record:

3       SYNC\_ID\_LEN    -   Service Configuration synchronization identifier length.

4                        The mobile station shall set this field to the length (in octets)  
5                        of the SYNC\_ID field included in this message. The mobile  
6                        station shall set this field to a value larger than zero.

7       SYNC\_ID       -   Service Configuration synchronization identifier.

8                        The mobile station shall set this field to the synchronization  
9                        identifier corresponding to a stored service configuration  
10                       associated with SID and NID included in this message.

11       RESERVED     -   Reserved bits for octet alignment.

12                        The mobile station shall add the minimum number of bits  
13                        necessary to make the record length in bits an integral  
14                        multiple of 8. The mobile station shall set these bits to '0'.  
15  
16

1 2.7.4.41 Extended Terminal Information

- 2 This information record can be included in a *Status Response Message*, or an *Extended*  
 3 *Status Response Message* to return configuration information about the mobile station.

Type-Specific Field	Length (bits)
MOB_P_REV	8
MOB_MFG_CODE	8
MOB_MODEL	8
MOB_FIRM_REV	16
SCM	8
LOCAL_CTRL	1
SLOT_CYCLE_INDEX	3
SIGN_SLOT_CYCLE_INDEX	0 or 1
SO_INCL	1
NUM_SO	0 or 6
{(NUM_SO + 1)}	
SERVICE_OPTION	16
}(NUM_SO+ 1)	
SO_GROUP_INCL	1
NUM_SO_GROUP	0 or 5
{ (NUM_SO_GROUP + 1)	
SO_BITMAP_IND	2
SO_GROUP_NUM	0 or 5
SO_BITMAP	0 or 2^(1+ SO_BITMAP_IND)
} (NUM_SO_GROUP + 1)	
RESERVED	0 to 7 (as needed)

4

5 MOB\_P\_REV – Protocol revision of the mobile station.

6 If the status request does not specify a band class, the mobile  
 7 station shall set this field to '00001100'; otherwise, the  
 8 mobile station shall set this field to the MOB\_P\_REV  
 9 associated with the requested band class and operating  
 10 mode.

1	MOB_MFG_CODE	-	Manufacturer code.
2			This field identifies the manufacturer of the mobile station.
3			The mobile station shall set this field to the manufacturer
4			code assigned to its manufacturer.
5	MOB_MODEL	-	Model number.
6			This number is assigned by the manufacturer for a particular
7			model.
8			The mobile station shall set this field to the model number
9			assigned by the manufacturer for this mobile station.
10	MOB_FIRM_REV	-	Firmware revision number.
11			This number is assigned by the manufacturer for a particular
12			firmware version.
13			The mobile station shall set this field to the revision number
14			assigned by the manufacturer for the firmware version
15			running in this mobile station.
16	SCM	-	Station class mark.
17			The mobile station shall set this field to its station class
18			mark. See 2.3.3.
19	LOCAL_CTRL	-	Local control indicator.
20			If local control is enabled, the mobile station shall set this
21			field to '1'. If local control is disabled, the mobile station shall
22			set this field to '0'. See [6].
23	SLOT_CYCLE_INDEX	-	Slot cycle index.
24			If the requested operating mode is CDMA and the mobile
25			station is configured for slotted mode operation, the mobile
26			station shall set this field to the absolute value of the
27			registered slot cycle index, SLOT_CYCLE_INDEX_REG (see
28			2.6.2.1.1); otherwise, the mobile station shall set this field to
29			'000'. The sign of the registered slot cycle,
30			SLOT_CYCLE_INDEX_REG, is specified in the
31			SIGN_SLOT_CYCLE_INDEX field of this message (see Table
32			2.7.1.3.2.1-8).
33	SIGN_SLOT_CYCLE_INDEX	-	Sign of the slot cycle index.
34			If the SLOT_CYCLE_INDEX field is set to '000', the mobile
35			station shall omit this field; otherwise, the mobile station
36			shall include this field and set it as follows:
37			The mobile station shall set this field as specified in Table
38			2.7.1.3.2.1-8 to the sign of the registered slot cycle index,
39			SLOT_CYCLE_INDEX_REG (see 2.6.2.1.1). The absolute value
40			of the registered slot cycle index, SLOT_CYCLE_INDEX_REG,
41			is specified in the SLOT_CYCLE_INDEX field of this message.
42	SO_INCL	-	Service option inclusion indicator.

1			If there is a service option supported by the mobile station
2			which does not belong to any service option group assigned
3			(see [30]), the mobile station shall set this field '1'; otherwise,
4			the mobile station shall set this field to '0'.
5	NUM_SO	-	Number of service option included indicator.
6			If the SO_INCL is set to '0', the mobile station shall omit this
7			field; otherwise, the mobile station shall set this field to the
8			number of service option to be included minus one.
9	If SO_INCL is set to '1', the mobile station shall include NUM_SO + 1 occurrences of the		
10	following variable-field record:		
11	SERVICE_OPTION	-	Supported service option.
12			If the SO_INCL is set to '0', the mobile station shall omit this
13			field; otherwise, the mobile station shall set this field as
14			follow:
15			If the requested operating mode is CDMA, the mobile station
16			shall includes one occurrence of this field for each service
17			option supported by the mobile station (see [30]) which has
18			no service option group number assigned.
19	SO_GROUP_INCL	-	Service option group inclusion indicator.
20			If the requested operating mode is CDMA, the mobile station
21			shall set this field to '1' if any of the supported service option
22			belongs to a service option group; otherwise, the mobile
23			station shall set this field to '0'.
24	NUM_SO_GROUP	-	Number of service option group included indicator.
25			If the SO_GROUP_INCL is set to '0', the mobile station shall
26			omit this field; otherwise, the mobile station shall set this
27			field to the number of service option groups to be included
28			minus one.
29	If SO_GROUP_INCL is set to '1', the mobile station shall include NUM_SO_GROUP + 1		
30	occurrences of the following variable-field record:		
31	SO_BITMAP_IND	-	Service option bitmap indicator.
32			The mobile station shall set this field as defined in Table
33			2.7.1.3.2.4-10.
34	SO_GROUP_NUM	-	Service option group number.
35			If SO_BITMAP_IND is included and not set to '00', the mobile
36			station shall include this field and set this field to service
37			option group number defined in [30], of the bitmap to be
38			included in this message; otherwise, the mobile station shall
39			omit this field.
40	SO_BITMAP	-	Service option bitmap.
41			If SO_BITMAP_IND is included and is not set to '00', the
42			mobile station shall include the bitmap of the service option
43			group (SO_GROUP_NUM); otherwise, the mobile station shall
44			omit this field.

1				When the service option bitmap is included, if there are more
2				than $(2^{(1+SO\_BITMAP\_IND)})$ service options defined in [30]
3				for the service option group [SO\_GROUP\_NUM], the mobile
4				station shall include the bitmap containing the least
5				significant bits $(2^{(1+SO\_BITMAP\_IND)})$ for the service option
6				group.
7	RESERVED	–	Reserved bits.	
8				The mobile station shall set this field to '0' to make the entire
9				record octet-aligned.
10				

#### 2.7.4.42 Extended Service Option Information

This information record can be included in a *Status Response Message* or an *Extended Status Response Message* to return service option information about the mobile station or the service option group information requested by the base station.

Type-Specific Field	Length (bits)
SO_GROUP_INCL	1
NUM_SO_GROUP	0 or 5

{ (NUM\_SO\_GROUP+1)

SO_BITMAP_IND	2
SO_GROUP_NUM	0 or 5
REV_BITMAP_INCL	0 or 1
FOR_SUP_SO_BITMAP	0 or $2^{(1+SO\_BITMAP\_IND)}$
REV_SUP_SO_BITMAP	0 or $2^{(1+SO\_BITMAP\_IND)}$

} (NUM\_SO\_GROUP + 1)

SO_INCL	1
NUM_SO	0 or 6
REVERSE_SUPPORT_INCL	0 or 1

{ (NUM\_SO + 1)

FORWARD_SUPPORT	1
REVERSE_SUPPORT	0 or 1
SERVICE_OPTION	16

} (NUM\_SO + 1)

RESERVED	0 - 7 (as needed)
----------	-------------------

6

7 SO\_GROUP\_INCL - Service option group inclusion indicator.

8 If the requested operating mode is CDMA, the mobile station  
9 shall set this field to '1' if any of the supported service option  
10 belongs to a service option group; otherwise, the mobile  
11 station shall set this field to '0'.

12 NUM\_SO\_GROUP - Number of service option group included indicator.

1                   If the SO\_GROUP\_INCL is set to '0', the mobile station shall  
2                   omit this field; otherwise, the mobile station shall set this  
3                   field to the number of service option groups to be included  
4                   minus one.

5   If SO\_GROUP\_INCL is set to '1', the mobile station shall include NUM\_SO\_GORUP +1  
6   occurrences of the following variable-field record:

7           SO\_BITMAP\_IND   -   Service option bitmap indicator.  
8                                The mobile station shall set this field as defined in Table  
9                                2.7.1.3.2.4-10.

10          SO\_GROUP\_NUM   -   Service option group number.  
11                               If SO\_BITMAP\_IND is included and not set to '00', the mobile  
12                               station shall include this field and set this field to service  
13                               option group number defined in [30], of the bitmap to be  
14                               included in this message; otherwise, the mobile station shall  
15                               omit this field.

16          REV\_BITMAP\_INCL -   Reverse traffic channel bitmap included indicator.  
17                               If SO\_BITMAP\_IND is included and set to '00', the mobile  
18                               station shall omit this field; otherwise the mobile station shall  
19                               set this field as follow:  
20                               The mobile station shall set this field to '0' to indicate  
21                               FOR\_SUP\_SO\_BITMAP is used to specify the service option  
22                               supports for both forward traffic channel and reverse traffic  
23                               channel; otherwise the mobile station shall set this field to '1'.

24          FOR\_SUP\_SO\_BITMAP -   Support bitmap indicator for Forward Traffic Channel.  
25                               If SO\_BITMAP\_IND is included and set to '00', the mobile  
26                               station shall omit this field; otherwise the mobile station shall  
27                               include the bitmap of the service option group  
28                               (SO\_GROUP\_NUM) as follow:

29                               If REV\_BITMAP\_INCL is set to '1':

30                               •   If the service option specified by FOR\_SUP\_SO\_BITMAP is  
31                               supported on forward traffic channel, the mobile station  
32                               shall set the corresponding bit to '1'; otherwise, the  
33                               mobile station shall set this bit to '0'.

34                               Otherwise,

35                               •   If the service option specified by FOR\_SUP\_SO\_BITMAP is  
36                               supported on forward traffic channel and on reverse traffic  
37                               channel, the mobile station shall set the corresponding  
38                               bit to '1'; otherwise, the mobile station shall set this bit to  
39                               '0'.

40          REV\_SUP\_SO\_BITMAP -   Support bitmap indicator for Reverse Traffic Channel.



1			If REV_BITMAP_INCL is included and set to '0', the mobile
2			station shall omit this field; otherwise the mobile station shall
3			include the bitmap of the service option group
4			(SO_GROUP_NUM) as follow:
5			If the service option specified by REV_SUP_SO_BITMAP is
6			supported on reverse traffic channel, the mobile station shall
7			set the corresponding bit to '1'; otherwise, the mobile station
8			shall set this bit to '0'.
9	SO_INCL	-	Service option inclusion indicator.
10			If there is a service option supported by the mobile station
11			which does not belong to any service option group assigned
12			(see [30]), the mobile station shall set this field '1'; otherwise,
13			the mobile station shall set this field to '0'.
14	NUM_SO	-	Number of service option included indicator.
15			If the SO_INCL is set to '0', the mobile station shall omit this
16			field; otherwise, the mobile station shall set this field to the
17			number of service option to be included minus one.
18	REVERSE_SUPPORT_INCL	-	Reverse service option support included indicator.
19			If the SO_INCL is set to '0', the mobile station shall omit this
20			field; otherwise, the mobile station shall include this field and
21			set it as follow:
22			The mobile station shall set this field to '0' to indicate
23			FORWARD_SUPPORT is used to specify the service option
24			supports for both forward traffic channel and reverse traffic
25			channel; otherwise the mobile station shall set this field to '1'.
26	If SO_INCL is set to '1', the mobile station shall include NUM_SO + 1 occurrences of the		
27	following variable-field record:		
28	FORWARD_SUPPORT	-	Support indicator for Forward Traffic Channel.
29			The mobile station shall set this field as follow:
30			If REVERSE_SUPPORT_INCL is set to '1', the mobile station
31			shall set this field to '1' if the service option specified in the
32			SERVICE_OPTION field is supported on the Forward Traffic
33			Channel.
34			If REVERSE_SUPPORT_INCL is set to '0', the mobile station
35			shall set this field to '1' if the service option specified in the
36			SERVICE_OPTION field is supported on the forward traffic
37			channel and on reverse traffic channel
38	REVERSE_SUPPORT	-	Support indicator for Reverse Traffic Channel.
39			If REVERSE_SUPPORT_INCL field is not included or is set to
40			'0', the mobile station shall omit this field; otherwise the
41			mobile station shall include this field and set it as follows:

1			The mobile station shall set this field to '1' if the service
2			option specified in the SERVICE_OPTION field is supported
3			on the Reverse Traffic Channel.
4	SERVICE_OPTION	–	Service option.
5			If the requested operating mode is CDMA, the mobile station
6			shall includes one occurrence of this field for each service
7			option supported by the mobile station (see [30]) which has
8			no service option group number assigned.
9	RESERVED	–	Reserved bits.
10			The mobile station shall set all the bits of this field to '0' to
11			make the entire record octet-aligned.
12			
13			

#### 2.7.4.43 Band Class and Band Subclass Information

When this information record is included in a *Status Response Message* or an *Extended Status Response Message*, the mobile station shall include all the band classes and band subclasses that it supports.

Type-Specific Field	Length (bits)
NUM_BAND_CLASS	3

NUM\_BAND\_CLASS + 1 occurrences of the following record:

{ (NUM\_BAND\_CLASS + 1)

BAND_CLASS_REC_LEN	5
BAND_CLASS	5
SUBCLASS_INFO_INCL	1
SUBCLASS_REC_LEN	0 or 5

SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord:

{ (SUBCLASS\_REC\_LEN + 1)

SUBCLASS_SUP	1
--------------	---

} (SUBCLASS\_REC\_LEN + 1)

BAND_CLASS_RESERVED	0 – 7 (as needed)
---------------------	-------------------

} (NUM\_BAND\_CLASS + 1)

RESERVED	0 – 7 (as needed)
----------	-------------------

NUM\_BAND\_CLASS – Number of band classes.

The mobile station shall set this field to the number of band classes included in the record minus one.

The mobile station shall include NUM\_BAND\_CLASS + 1 occurrences of the following record:

BAND\_CLASS\_REC\_LEN – Band class information record length.

The mobile station shall set this field to the number of octets included in this record starting from this field and ending with BAND\_CLASS\_RESERVED.

BAND\_CLASS – Band class

This field specifies a band class supported by the mobile station. The mobile station shall set this field according to the values defined in [45].

SUBCLASS\_INFO\_INCL – Band subclass information included

1		The mobile station shall set this field to '0' when it is not
2		aware of any band subclasses associated with the
3		BAND_CLASS field above; otherwise, the base station shall
4		set this field to '1'.
5	SUBCLASS_REC_LEN	- Band subclass subrecord length
6		If SUBCLASS_INFO_INCL is set to '0', the base station shall
7		omit this field; otherwise, the mobile station shall set this
8		field to the number of band subclass supported indicator
9		fields included in the subrecord minus 1.
10	If the SUBCLASS_REC_LEN field is included, the mobile station shall include	
11	SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included	
12	corresponds to band subclass '0' and the N <sup>th</sup> field included corresponds to band subclass	
13	'N-1'.	
14	SUBCLASS_SUP	- Band subclass supported indicator
15		The mobile station shall set this field to '1' if the
16		corresponding band subclass is supported for the associated
17		BAND_CLASS; otherwise, the mobile station shall set this
18		field to '0'.
19	BAND_CLASS_RESERVED	- Reserved bits.
20		The mobile station shall add reserved bits as needed in order
21		to make the length of the record equal to an integer number
22		of octets. The mobile station shall set each of these bits to '0'.
23	RESERVED	- Reserved bits.
24		The mobile station shall add reserved bits as needed in order
25		to make the length of the entire record equal to an integer
26		number of octets. The mobile station shall set each of these
27		bits to '0'.
28		
29		

1 2.7.4.44 EXT\_UIM\_ID

2 This information record can be included in a *Status Response Message* or an *Extended*  
3 *Status Response Message* to return the mobile station EXT\_UIM\_ID.

4

Type-Specific Field	Length (bits)
EXT_UIM_ID_LEN	4
EXT_UIM_ID	$8 \times \text{EXT\_UIM\_ID\_LEN}$
RESERVED	0 - 7 (as needed)

5

6 EXT\_UIM\_ID\_LEN - The length of mobile station Extended User Identity Module  
7 identifier.

8 The mobile station shall set this field to the length, in units of  
9 octets, of its Extended User Identity Module identifier. If the  
10 mobile station does not have an Extended User Identity  
11 Module identifier, the mobile station shall set this field to  
12 '0000'.

13 EXT\_UIM\_ID - Mobile station Extended User Identity Module identifier.  
14 The mobile station shall set this field to its Extended User  
15 Identity Module identifier (see [40]).

16 RESERVED - Reserved bits for octet alignment.  
17 The mobile station shall add the minimum number of bits  
18 necessary to make the record length in bits an integral  
19 multiple of 8. The mobile station shall set these bits to '0'.

20

21

## 1 2.7.4.45 MEID\_ME

2 This information record can be included in a *Status Response Message* or an *Extended*  
 3 *Status Response Message* to return the mobile station MEID\_ME.

4

Type-Specific Field	Length (bits)
MEID_ME_LEN	4
MEID_ME	$8 \times \text{MEID\_ME\_LEN}$
RESERVED	0 - 7 (as needed)

5

6 MEID\_ME\_LEN – The length of MEID\_ME.

7 The mobile station shall set this field to the length, in units of  
 8 octets, of the MEID\_ME field. If the mobile station does not  
 9 have an MEID\_ME, the mobile station shall set this field to  
 10 '0000'.

11 MEID\_ME<sup>16</sup> – Mobile equipment MEID.

12 The mobile station shall set this field to MEID<sub>p</sub> (see 2.3.2).

13 RESERVED – Reserved bits for octet alignment.

14 The mobile station shall add the minimum number of bits  
 15 necessary to make the record length in bits an integral  
 16 multiple of 8. The mobile station shall set these bits to '0'.

17

---

<sup>16</sup> The MEID\_ME field is always set to MEID<sub>p</sub> and never carries EUIM ID value.

#### 2.7.4.46 Additional Geo-Location Capability

This information record identifies the additional geo-location capabilities of the mobile station. The mobile station shall use the following fixed-length format for the type-specific fields:

Type-Specific Field	Length (bits)
ADD_GEO_LOC_LEN	4
ADD_GEO_LOC	$8 \times$ ADD_GEO_LOC_LEN
RESERVED	4

ADD_GEO_LOC_LEN	<p>– The length of Additional Geo-location.</p> <p>The mobile station shall set this field to the length, in units of octets, of the ADD_GEO_LOC field.</p>
ADD_GEO_LOC	<p>– Additional Geo-location.</p> <p>The mobile station shall set this field to indicate which geo-location capabilities are supported by the mobile station.</p> <p>This field consists of the subfields shown in 2.7.4.46-1.</p> <p>The mobile station shall set each subfield to ‘1’ if the corresponding capability is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.</p>

1

**Table 2.7.4.46-1. Encoding Additional Geo-location Codes<sup>17</sup>**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
QZSS	1	Support of QZSS
GLONASS	1	Support of GLONASS
Galileo	1	Support Galileo
Compass / BeiDou	1	Support of COMPASS_BEIDOU
WAAS	1	Support of WAAS
EGNOS	1	Support of EGNOS
MSAS	1	Support of MSAS
HRPD	1	Support of HRPD
UMB	1	Support of UMB
RESERVED	7	Reserved bits

2

RESERVED - Reserved bits for octet alignment.

3

The mobile station shall set these bits to '0'.

4

5

---

<sup>17</sup> Additional values for this field can be defined in [30].



### 1    **3. REQUIREMENTS FOR BASE STATION CDMA OPERATION**

2    This section defines requirements that are specific to CDMA base station equipment and  
3    operation.

#### 4    **3.1 Reserved**

#### 5    **3.2 Reserved**

#### 6    **3.3 Security and Identification**

##### 7    3.3.1 Authentication

8    The base station may be equipped with a database that includes unique mobile station  
9    authentication keys, shared secret data, or both for each registered mobile station in the  
10   system. This database is used for authentication of mobile stations that are equipped for  
11   authentication operation.

12   If the base station supports mobile station authentication, it shall provide the following  
13   capabilities: The base station shall send and receive authentication messages and perform  
14   the authentication calculations described in 2.3.12.1.

##### 15   3.3.2 Encryption

16   If the base station supports mobile station authentication (see 3.3.1), it may also support  
17   message encryption by providing the capability to send encryption control messages and  
18   the ability to perform the operations of encryption and decryption as specified in 2.3.12.2.

##### 19   3.3.3 Voice Privacy

20   If the base station supports mobile station authentication (see 3.3.1), it may also support  
21   voice privacy using the private long code mask, as specified in 2.3.12.3.

##### 22   3.3.4 Extended-Encryption

23   If the base station supports mobile station authentication (see 3.3.1), it may also support  
24   Extended-Encryption for Signaling Messages and User Information as specified in 2.3.12.4.

##### 25   3.3.5 Message Integrity

26   If the base station supports message integrity, it shall provide the message integrity  
27   capability as specified in 2.3.12.5.5.

#### 28   **3.4 Supervision**

##### 29   3.4.1 Access Channel or Enhanced Access Channel

30   The base station shall continually monitor each active Access Channel or Enhanced  
31   Access Channel or both. The base station should provide control in cases of overload by  
32   using either the *Access Parameters Message* or the *Enhanced Access Parameters Message*.

### 3.4.2 Reverse Traffic Channel

The base station shall continually monitor each active Reverse Traffic Channel to determine if the call is active. If the base station detects that the call is no longer active, the base station shall declare loss of Reverse Traffic Channel continuity (see 3.6.4).

## 3.5 Reserved

## 3.6 Layer 3 Processing

This section describes base station Layer 3 processing. It contains frequent references to the messages that flow between the base station and the mobile station. While reading this section, it may be helpful to refer to the message formats (see 2.7 and 3.7), and to the call flow examples (see Annex B and Annex C). The values for the time and numeric constants used in this section (e.g.,  $T_{1b}$  and  $N_{4m}$ ) are specified in Annex D.

Base station processing consists of the following types of processing:

- *Pilot and Sync Channel Processing* - During *Pilot and Sync Channel Processing*, the base station transmits the Pilot Channel and Sync Channel which the mobile station uses to acquire and synchronize to the CDMA system while the mobile station is in the *Mobile Station Initialization State*.
- *Common Channel Processing* - During *Common Channel Processing*, the base station transmits the Paging Channel and/or the Forward Common Control Channel/Broadcast Control Channel which the mobile station monitors to receive messages while the mobile station is in the *Mobile Station Idle State* and the *System Access State*.
- *Access Channel and Enhanced Access Channel Processing* - During *Access Channel and Enhanced Access Channel Processing*, the base station monitors the Access Channel and/or the Enhanced Access Channel to receive messages which the mobile station sends while the mobile station is in the *System Access State*.
- *Traffic Channel Processing* - During *Traffic Channel Processing*, the base station uses the Forward and Reverse Traffic Channels to communicate with the mobile station while the mobile station is in the *Mobile Station Control on the Traffic Channel State*.

### 3.6.1 Pilot and Sync Channel Processing

During *Pilot and Sync Channel Processing*, the base station transmits the Pilot and Sync Channels which the mobile station uses to acquire and synchronize to the CDMA system while the mobile station is in the *Mobile Station Initialization State*.

#### 3.6.1.1 Preferred Set of CDMA Channels

The preferred set of frequency assignments are the CDMA Channels on which the mobile station attempts to acquire the CDMA system (see [2]).

The base station shall support at least one member of the preferred set of frequency assignments. The base station may support additional CDMA Channels.

### 1 3.6.1.2 Pilot Channel Operation

2 The Pilot Channel (see [2]) is a reference channel which the mobile station uses for  
3 acquisition, timing, and as a phase reference for coherent demodulation.

4 The base station shall continually transmit a Pilot Channel for every CDMA Channel  
5 supported by the base station, unless the base station is classified as a hopping pilot  
6 beacon.

### 7 3.6.1.3 Sync Channel Operation

8 The Sync Channel (see [2]) provides the mobile station with system configuration and  
9 timing information.

10 The base station shall transmit at most one Sync Channel for each supported CDMA  
11 Channel. The base station shall support a Sync Channel on at least one member of the  
12 preferred set of frequency assignments that it supports. The base station should support a  
13 Sync Channel on every member of the preferred set of frequency assignments that it  
14 supports.

15 If the base station operates in Band Class 0 or Band Class 3, and supports the Primary  
16 CDMA Channel, then the base station shall transmit a Sync Channel on the Primary  
17 CDMA Channel.

18 The base station shall continually send the *Sync Channel Message* on each Sync Channel  
19 that the base station transmits.

## 20 3.6.2 Common Channel Processing

### 21 3.6.2.1 Paging Channel and Forward Common Control Channel Procedures

22 During *Common Channel Processing*, the base station transmits the Paging Channel or the  
23 Forward Common Control Channel (see [2]) which the mobile station monitors to receive  
24 messages while the mobile station is in the *Mobile Station Idle State* and the *System Access*  
25 *State*.

26 The base station may transmit up to seven Paging Channels on each supported CDMA  
27 Channel. The base station may transmit up to seven Forward Common Control Channels  
28 and one Primary Broadcast Control Channel on each supported CDMA Channel.

29 For each Paging Channel that the base station transmits, the base station shall  
30 continually send valid Paging Channel messages (see 3.7.2), which may include the *Null*  
31 *Message* (see [4]).

32 The base station shall not send any message which is not completely contained within two  
33 consecutive Paging Channel or Forward Common Control Channel slots, unless the  
34 processing requirements for the message explicitly specify a different size limitation.<sup>1</sup>

---

<sup>1</sup>See, for example, [14] which specifies processing requirements for the *Data Burst Message*.

### 3.6.2.1.1 CDMA Channel Determination

The base station may send the *CDMA Channel List Message Extended CDMA Channel List Message* and the *Flex Duplex CDMA Channel List Message* on the Paging Channel. When the base station supports Broadcast Control Channel, the base station shall send the *Extended CDMA Channel List Message* and may send the *Flex Duplex CDMA Channel List Message* on the Primary Broadcast Control Channel.

When the base station sends a *CDMA Channel List Message* or an *Extended CDMA Channel List Message* or a *Flex Duplex CDMA Channel List Message* on the Paging Channel or on the Primary Broadcast Control Channel, the base station shall determine the assigned band and CDMA Channel using the mobile station hashing procedures for the corresponding P\_REV\_IN\_USE.

### 3.6.2.1.2 Common Channel Determination

To determine the mobile station's assigned Paging Channel or Forward Common Control Channel, the base station shall use the hash function specified in 2.6.7.1 with the following inputs:

- IMSI\_S based on the IMSI with which the mobile station registered (see 2.3.1)
- Number of Paging Channels or Forward Common Control Channels which the base station transmits on the mobile station's assigned CDMA Channel.

### 3.6.2.1.3 Paging Slot Determination

To determine the assigned Paging Channel or Forward Common Control Channel slots for a mobile station with a given slot cycle index, the base station shall select a number PGSLOT using the hash function specified in 2.6.7.1 with the following inputs:

- IMSI\_S based on the IMSI with which the mobile station registered (see 6.3.1)
- Maximum number of Paging Channel or Forward Common Control Channel slots (2048).

The assigned Paging Channel or Forward Common Control Channel slots for the mobile station are those slots for which

$$(\lfloor t/4 \rfloor - \text{PGSLOT}) \bmod (16 \times T) = 0,$$

where  $t$  is the System Time in 20ms frames, and  $T$  is the slot cycle length in units of 1.28 seconds given by

$$T = 2^i,$$

where  $i$  is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, and 7.

When the base station is able to determine that the mobile station is operating in the slotted mode and is able to determine the mobile station's preferred slot cycle index, the base station determines the slot cycle index to use for the mobile station as follows:

- 1       • If the base station is able to determine that the mobile station is operating in the  
2       reduced slot cycle mode, the base station uses min(reduced slot cycle index,  
3       preferred slot cycle index, maximum slot cycle index) for the mobile station's slot  
4       cycle index.
- 5       • Otherwise:
  - 6           – If the base station supports negative values of slot cycle index, the base station  
7           uses min(preferred slot cycle index, maximum slot cycle index) for the mobile  
8           station's slot cycle index.
  - 9           – Otherwise, the base station uses max(0, min(preferred slot cycle index,  
10          maximum slot cycle index)) for the mobile station's slot cycle index.

11   When the base station is not able to determine whether the mobile station is operating in  
12   the slotted mode, or the base station is not able to determine the mobile station's preferred  
13   slot cycle index, the base station uses for the mobile station's slot cycle index the smaller  
14   of the maximum slot cycle index and 1.

#### 15   3.6.2.1.4 Message Transmission and Acknowledgment Procedures

16   The Paging Channel or Forward Common Control Channel acknowledgment procedures  
17   facilitate the reliable exchange of messages between the base station and the mobile  
18   station on the f-csch and r-csch. The acknowledgment procedures and requirements are  
19   described in [4].

#### 20   3.6.2.2 Overhead Information

21   The base station sends overhead messages to provide the mobile station with the  
22   information that it needs to operate with the base station. If the base station supports the  
23   Primary Broadcast Control Channel for overhead messages and is not a pilot beacon, it  
24   shall support the Forward Common Control Channel for all other general page  
25   information.

26   The base station with a P\_REV greater than six that supports Broadcast Control Channel  
27   shall send overhead messages on the Primary Broadcast Control Channel. The base  
28   station with a P\_REV greater than six that does not support the Broadcast Control  
29   Channel shall send overhead messages on each Paging Channel. The overhead messages  
30   sent on the Primary Broadcast Control Channel are:

- 31       1. *ANSI-41 System Parameters Message*
- 32       2. *User Zone Identification Message*
- 33       3. *Private Neighbor List Message*
- 34       4. *Extended Global Service Redirection Message*
- 35       5. *Extended CDMA Channel List Message*
- 36       6. *MC-RR Parameters Message*
- 37       7. *Universal Neighbor List Message*
- 38       8. *Enhanced Access Parameters Message*

- 1        9. *ANSI-41 RAND Message*
- 2        10. *BCMC Service Parameters Message*
- 3        11. *Access Point Identification Message*
- 4        12. *Access Point Identification Text Message*
- 5        13. *Access Point Pilot Information Message*
- 6        14. *General Overhead Information Message*
- 7        15. *Flex Duplex CDMA Channel List Message*
- 8        16. *Alternative Technologies Information Message*

9        The overhead messages on the Paging Channel are:

- 10       1. *System Parameters Message*
- 11       2. *Neighbor List Message* (Band Class 0 only)
- 12       3. *Access Parameters Message*
- 13       4. *CDMA Channel List Message*
- 14       5. *Extended System Parameters Message*
- 15       6. *Extended Neighbor List Message* (band classes other than Band Class 0)
- 16       7. *General Neighbor List Message*
- 17       8. *Global Service Redirection Message*
- 18       9. *User Zone Identification Message*
- 19       10. *Private Neighbor List Message*
- 20       11. *Extended Global Service Redirection Message*
- 21       12. *Extended CDMA Channel List Message*
- 22       13. *BCMC Service Parameters Message*
- 23       14. *Access Point Identification Message*
- 24       15. *Access Point Identification Text Message*
- 25       16. *Access Point Pilot Information Message*
- 26       17. *General Overhead Information Message*
- 27       18. *Flex Duplex CDMA Channel List Message*
- 28       19. *Alternative Technologies Information Message*

29       The base station shall maintain a configuration sequence number (CONFIG\_SEQ) for  
30       configuration messages transmitted on the Paging Channel, and shall increment  
31       CONFIG\_SEQ modulo 64 whenever the base station modifies the following messages:

- 32       1. *System Parameters Message*
- 33       2. *Neighbor List Message* (Band Class 0 only)

- 1        3. *CDMA Channel List Message*
- 2        4. *Extended System Parameters Message*
- 3        5. *Extended Neighbor List Message* (band classes other than Band Class 0)
- 4        6. *General Neighbor List Message*
- 5        7. *Global Service Redirection Message*
- 6        8. *User Zone Identification Message*
- 7        9. *Private Neighbor List Message*
- 8        10. *Extended Global Service Redirection Message*
- 9        11. *Extended CDMA Channel List Message*
- 10       12. *Access Point Identification Message*
- 11       13. *Access Point Identification Text Message*
- 12       14. *Access Point Pilot Information Message*
- 13       15. *General Overhead Information Message*
- 14       16. *Flex Duplex CDMA Channel List Message*
- 15       17. *Alternative Technologies Information Message*

The base station shall maintain a configuration sequence number (CONFIG\_SEQ) for configuration messages transmitted on the Primary Broadcast Control Channel, and shall increment CONFIG\_SEQ modulo 64 whenever the base station modifies the following messages:

- 20       1. *ANSI-41 System Parameters Message*
- 21       2. *User Zone Identification Message*
- 22       3. *Private Neighbor List Message*
- 23       4. *Extended Global Service Redirection Message*
- 24       5. *Extended CDMA Channel List Message*
- 25       6. *MC-RR Parameters Message*
- 26       7. *Universal Neighbor List Message*
- 27       8. *Access Point Identification Message*
- 28       9. *Access Point Identification Text Message*
- 29       10. *Access Point Pilot Information Message*
- 30       11. *General Overhead Information Message*
- 31       12. *Flex Duplex CDMA Channel List Message*
- 32       13. *Alternative Technologies Information Message*

The base station shall maintain an access configuration sequence number (ACC\_CONFIG\_SEQ) for the Access Channel, and shall increment ACC\_CONFIG\_SEQ modulo 64 whenever the base station modifies the *Access Parameters Message*.

The base station shall maintain an access configuration sequence number (ACC\_CONFIG\_SEQ) for the Enhanced Access Channel, and shall increment ACC\_CONFIG\_SEQ modulo 64 whenever the base station modifies the *Enhanced Access Parameters Message*.

On each Primary Broadcast Control Channel which the base station transmits, the base station shall send each of the following system overhead messages at least once per  $T_{1b}$  seconds:

1. *Extended CDMA Channel List Message*
2. *ANSI-41 System Parameters Message*
3. *MC-RR Parameters Message*
4. *Enhanced Access Parameters Message*
5. *Universal Neighbor List Message*

If the base station supports Primary Broadcast Control Channels, and the base station is sending the *ANSI-41 RAND Message*, it shall send it at least once per  $T_{1b}$  seconds.

If the base station supports Primary Broadcast Control Channels, and the base station is sending the *Access Point Pilot Information Message*, it shall send it completely at least once during every 16 paging slot interval that satisfies the following:

$\lfloor \text{SYS\_TIME}_s / 16 \rfloor \bmod 2^{\text{APPIM\_PERIOD\_INDEX}} = 0$ , where  $\text{SYS\_TIME}_s$  is the system time in units of 80 ms.

If the base station supports Primary Broadcast Control Channels, and the base station is sending the *Access Point Identification Message*, it shall send it at least once per  $T_{1b}$  seconds.

If the base station supports Primary Broadcast Control Channels, and the base station is sending the *Access Point Identification Text Message*, it shall send it at least once per  $T_{1b}$  seconds.

If the base station supports Primary Broadcast Control Channels, and the base station is sending the *General Overhead Information Message*, it shall send it completely at least once during every 16 paging slot interval that satisfies the following:

$\lfloor \text{SYS\_TIME}_s / 16 \rfloor \bmod 2^{\text{GEN\_OVHD\_CYCLE\_INDEX}} = 0$ , where  $\text{SYS\_TIME}_s$  is the system time in units of 80 ms.

If the base station supports Primary Broadcast Control Channels, and the base station is sending the *Alternative Technologies Information Message*, it shall send it completely at least once during every 16 paging slot interval that satisfies the following:

$\lfloor \text{SYS\_TIME}_s / 16 \rfloor \bmod 2^{\text{ATIM\_CYCLE\_INDEX}} = 0$ , where  $\text{SYS\_TIME}_s$  is the system time in units of 80 ms.



If the base station supports Primary Broadcast Control Channels, and the base station is sending the *Flex Duplex CDMA Channel List Message*, it shall send it at least once per  $T_{1b}$  seconds.

On each of the Paging Channels the base station transmits, the base station shall send each of the following system overhead messages at least once per  $T_{1b}$  seconds:

1. *Access Parameters Message*
2. *CDMA Channel List Message*
3. *Extended System Parameters Message*
4. *System Parameters Message*

For the messages sent on the Paging Channel, if the base station is operating in Band Class 1, Band Class 3, or Band Class 4 and MIN\_P\_REV is less than seven, the base station shall send the *Extended Neighbor List Message*, and may also send the *General Neighbor List Message*. If the base station is operating in Band Class 0 and MIN\_P\_REV is less than seven, the base station shall send the *Neighbor List Message*, and may also send the *General Neighbor List Message*. If the base station is sending the *Neighbor List Message*, it shall send it at least once per  $T_{1b}$  seconds. If the base station is sending the *Extended Neighbor List Message*, it shall send it at least once per  $T_{1b}$  seconds. If the base station is sending the *General Neighbor List Message*, it shall send it at least once per  $T_{1b}$  seconds. If the base station is sending *Access Point Pilot Information Message*, it shall send it completely at least once during every 16 paging slot interval that satisfies the following:

$\lfloor \text{SYS\_TIME}_s / 16 \rfloor \bmod 2^{\text{APPIM\_PERIOD\_INDEX}} = 0$ , where  $\text{SYS\_TIME}_s$  is the system time in units of 80 ms. If the base station is sending *Access Point Identification Message* and *Access Point Identification Text Message*, it shall send these messages at least once per  $T_{1b}$  seconds. If the base station is sending the *General Overhead Information Message*, it shall send it completely at least once during every 16 paging slot interval that satisfies the following:

$\lfloor \text{SYS\_TIME}_s / 16 \rfloor \bmod 2^{\text{GEN\_OVHD\_CYCLE\_INDEX}} = 0$ , where  $\text{SYS\_TIME}_s$  is the system time in units of 80 ms. If the base station is sending the *Alternative Technologies Information Message*, it shall send it completely at least once during every 16 paging slot interval that satisfies the following:

$\lfloor \text{SYS\_TIME}_s / 16 \rfloor \bmod 2^{\text{ATIM\_CYCLE\_INDEX}} = 0$ , where  $\text{SYS\_TIME}_s$  is the system time in units of 80 ms.

Overhead Messages sent on the Primary Broadcast Control Channel shall be transmitted on a continuous basis, consecutively.

If the base station uses addressing modes requiring use of only the IMSI\_M\_S, independent of values of the IMSI\_M\_11\_12 and MCC\_M, the base station shall set IMSI\_T\_SUPPORTED to '0', MCC to '111111111', and IMSI\_11\_12 to '1111111' in the *Extended System Parameters Message*, *MC-RR Parameters Message*, and *ANSI-41 System Parameters Message*.

If the base station sets IMSI\_T\_SUPPORTED to '1', the base station shall not set PREF\_MSID\_TYPE to '00' in the *Extended System Parameters Message* and *ANSI-41 System Parameters Message*.

The base station may send a *Global Service Redirection Message* on any given Paging Channel. If the message is sent, the base station shall send it at least once per  $T_{1b}$  seconds.

If  $P\_REV$  is greater than or equal to six, the base station may send an *Extended Global Service Redirection Message*. If the message is sent, the base station shall send it at least once per  $T_{1b}$  seconds. The base station may send this message to redirect only those mobile stations with  $MOB\_P\_REV$  equal to or greater than six.

When both the *Global Service Redirection Message* and the *Extended Global Service Redirection Message* are sent, the base station shall use the *Global Service Redirection Message* for mobile stations with  $MOB\_P\_REV$  less than six, and shall use the *Extended Global Service Redirection Message* for mobile stations with  $MOB\_P\_REV$  equal to or greater than six. When only the *Global Service Redirection Message* is sent and this message is for mobile station with  $MOB\_P\_REV$  less than six, the base station shall set  $EXCL\_P\_REV\_MS$  to '1'.

If only the *Global Service Redirection Message* is sent and this message is for redirecting all mobile stations, the base station shall set  $EXCL\_P\_REV\_MS$  to '0'.

The base station may send a *User Zone Identification Message*. If the message is sent, the base station shall send it at least once per  $T_{1b}$  seconds.

The base station may send a *Private Neighbor List Message*. If the message is sent, the base station shall send it at least once per  $T_{1b}$  seconds.

The base station may send an *Extended CDMA Channel List Message*. If the message is sent, the base station shall send it at least once per  $T_{1b}$  seconds.

The base station may send a *Flex Duplex CDMA Channel List Message*. If the message is sent, the base station shall send it at least once per  $T_{1b}$  seconds.

### 3.6.2.3 Mobile Station Directed Messages

The base station may send the following messages directed to a mobile station on the f-csch. If the base station sends a message, the base station shall comply with the specified requirements for sending the message, if any:

1. *Abbreviated Alert Order*
2. *Audit Order*
3. *Authentication Challenge Message*
4. *Base Station Challenge Confirmation Order*
5. *Channel Assignment Message* (if  $P\_REV\_IN\_USE < \text{eight}$ )
6. *Data Burst Message*
7. *Extended Channel Assignment Message*
8. *Fast Call Setup Order*
9. *Feature Notification Message*

- 1        10. *General Page Message*
- 2        11. *Intercept Order*
- 3        12. *Local Control Order*
- 4        13. *Lock Until Power-Cycled Order*
- 5        14. *Maintenance Required Order*
- 6        15. *PACA Message*
- 7        16. *Registration Accepted Order*
- 8        17. *Registration Rejected Order*
- 9        18. *Registration Request Order*
- 10       19. *Release Order*
- 11       20. *Reorder Order*
- 12       21. *Retry Order*
- 13       22. *Security Mode Command Message*
- 14       23. *Service Redirection Message*
- 15       24. *Slotted Mode Order*
- 16       25. *SSD Update Message*
- 17       26. *Status Request Message*
- 18       27. *TMSI Assignment Message*
- 19       28. *Universal Page Message* (Forward Common Control Channel Only)
- 20       29. *Unlock Order*
- 21       30. *User Zone Reject Message*
- 22       31. *General Extension Message*

23       The base station shall not send the *Channel Assignment Message* if P\_REV\_IN\_USE is  
 24       greater than or equal to nine.

25       The base station should send at least one *General Page Message* in each Paging Channel  
 26       slot. The base station shall not omit a *General Page Message* in two adjacent Paging  
 27       Channel slots.

28       The base station should send at least one *General Page Message* or *Universal Page*  
 29       *Message* in each Forward Common Control Channel slot. The base station shall not omit  
 30       both a *General Page Message* and a *Universal Page Message* in two adjacent slots.

#### 31       3.6.2.3.1 Processing when the General Page Message is Used

32       The base station shall use the following rules for selecting the Paging Channel or Forward  
 33       Common Control Channel slot in which to send a message to a mobile station:

- 1       • If the base station is able to determine that the mobile station is operating in the  
2       non-slotted mode, the base station may send the message to the mobile station in  
3       any Paging Channel or Forward Common Control Channel slot.
- 4       • If the base station is able to determine that the mobile station is operating in the  
5       slotted mode and is able to determine the mobile station's slot cycle index (see  
6       2.6.2.1.1.3), the base station shall send the message at least once in an assigned  
7       Paging Channel slot for the mobile station (see 3.6.2.1.3), with the position within  
8       the slot subject to the following limitations:
  - 9       – If the mobile station has registered with a class 0 IMSI, the base station shall  
10       not send the message in the assigned Paging Channel slot after sending a  
11       *General Page Message* with CLASS\_0\_DONE set to '1' in that slot.
  - 12       – If the mobile station has registered with a class 1 IMSI, the base station shall  
13       not send the message in the assigned Paging Channel slot after sending a  
14       *General Page Message* with CLASS\_1\_DONE set to '1' in that slot.
  - 15       – If the mobile station has been assigned a TMSI, the base station shall not send  
16       the message in the assigned Paging Channel slot after sending a *General Page*  
17       *Message* with TMSI\_DONE set to '1' in that slot.
- 18       • If the base station is able to determine that the mobile station is operating in the  
19       slotted mode and that the mobile station is not waiting for a priority access channel  
20       assignment and that the slotted timer in the mobile station is not active, and the  
21       base station is able to determine the mobile station's slot cycle index (see  
22       2.6.2.1.1.3), the base station shall send the message at least once in an assigned  
23       Forward Common Control Channel slot for the mobile station (see 3.6.2.1.3), with  
24       the position within the slot subject to the following limitations:
  - 25       – If the mobile station has registered with a class 0 IMSI, the base station shall  
26       not send the message in the assigned Forward Common Control Channel slot  
27       after sending a *General Page Message* with CLASS\_0\_DONE set to '1' in that  
28       slot.
  - 29       – If the mobile station has registered with a class 1 IMSI, the base station shall  
30       not send the message in the assigned Forward Common Control Channel slot  
31       after sending a *General Page Message* with CLASS\_1\_DONE set to '1' in that  
32       slot.
  - 33       – If the mobile station has been assigned a TMSI, the base station shall not send  
34       the message in the assigned Forward Common Control Channel slot after  
35       sending a *General Page Message* with TMSI\_DONE set to '1' in that slot.
- 36       • If the base station is able to determine that the mobile station is operating in the  
37       slotted mode and that the mobile station is waiting for a priority access channel  
38       assignment, or that the slotted timer in the mobile station is active, the base  
39       station may send the message to the mobile station in any Forward Common  
40       Control Channel slot with the position within the slot subject to the following  
41       limitation:

- 1       – If the mobile station has registered with a class 0 IMSI, the base station shall  
2       not send the message in any Forward Common Control Channel slot after  
3       sending a *General Page Message* with CLASS\_0\_DONE set to '1' in that slot.
- 4       – If the mobile station has registered with a class 1 IMSI, the base station shall  
5       not send the message in any Forward Common Control Channel slot after  
6       sending a *General Page Message* with CLASS\_1\_DONE set to '1' in that slot.
- 7       – If the mobile station has been assigned a TMSI, the base station shall not send  
8       the message in any Forward Common Control Channel slot after sending a  
9       *General Page Message* with TMSI\_DONE set to '1' in that slot.
- 10      • If the base station is not able to determine whether the mobile station is operating  
11      in the non-slotted mode, or the base station is not able to determine the mobile  
12      station's slot cycle index, the base station shall assume that the mobile station is  
13      operating in the slotted mode with a slot cycle index which is the smaller of  
14      MAX\_SLOT\_CYCLE\_INDEX and 1. The base station shall send the message at least  
15      once in an assigned Paging Channel or Forward Common Control Channel slot for  
16      the mobile station (see 3.6.2.1.3), with the position within the slot subject to the  
17      following limitations:
  - 18      – If the mobile station has registered with a class 0 IMSI, the base station shall  
19      not send the message in the assigned Paging Channel or Forward Common  
20      Control Channel slot after sending a *General Page Message* with  
21      CLASS\_0\_DONE set to '1' in that slot.
  - 22      – If the mobile station has registered with a class 1 IMSI, the base station shall  
23      not send the message in the assigned Paging Channel or Forward Common  
24      Control Channel slot after sending a *General Page Message* with  
25      CLASS\_1\_DONE set to '1' in that slot.
  - 26      – If the mobile station has been assigned a TMSI, the base station shall not send  
27      the message in the assigned Paging Channel or Forward Common Control  
28      Channel slot after sending a *General Page Message* with TMSI\_DONE set to '1'  
29      in that slot.

30      The base station should send messages directed to mobile stations operating in the slotted  
31      mode as the first messages in the slot.

32      If the base station sends a *General Page Message* with ORDERED\_TMSIS set to '1' in a  
33      slot, the base station shall order page records with PAGE\_CLASS equal to '10' in ascending  
34      order such that if a particular TMSI\_CODE value for one page record is greater than the  
35      TMSI\_CODE value for another page record, the page record with the greater TMSI\_CODE  
36      value is sent later in the slot.

### 37      3.6.2.3.2 Processing when the Universal Page Message is Used

38      The base station shall use the following rules for selecting the Forward Common Control  
39      Channel slot in which to send a message to a mobile station:

- 1       • If the base station is able to determine that the mobile station is operating in the  
2       non-slotted mode, the base station may send the message to the mobile station in  
3       any Forward Common Control Channel slot.
- 4       • If the base station is able to determine that the mobile station is capable of  
5       operating in the slotted mode and that the mobile station is waiting for a priority  
6       access channel assignment, or that the slotted timer in the mobile station is active,  
7       the base station may send the message to the mobile station in any Forward  
8       Common Control Channel slot with the position within the slot subject to the  
9       following limitation:
  - 10      – The base station shall not send the message later in the slot than a *Universal*  
11      *Page Message* which lacks a mobile station-directed message announcement  
12      and which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that  
13      mobile station.
- 14      • If the base station is able to determine that the mobile station is operating in the  
15      slotted mode and that the mobile station is not waiting for a priority access channel  
16      assignment and that the slotted timer in the mobile station is not active and the  
17      base station is able to determine the mobile station's slot cycle index (see  
18      2.6.2.1.1.3.3), the base station shall send the message at least once in an assigned  
19      Forward Common Control Channel slot for the mobile station (see 3.6.2.1.3) or in  
20      the following slot, with the position within these two slots subject to the following  
21      limitation:
  - 22      – The base station shall not send the message later in the slot than a *Universal*  
23      *Page Message* that lacks a mobile station-directed message announcement and  
24      which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that mobile  
25      station.
- 26      • If the base station is not able to determine whether the mobile station is operating  
27      in the non-slotted mode, or the base station is not able to determine the mobile  
28      station's slot cycle index, the base station shall assume that the mobile station is  
29      operating in the slotted mode with a slot cycle index which is the smaller of  
30      MAX\_SLOT\_CYCLE\_INDEX and 1. The base station shall send the message at least  
31      once in an assigned Forward Common Control Channel slot for the mobile station  
32      (see 3.6.2.1.3), or in the following slot, with the position within these two slots  
33      subject to the following limitation:
  - 34      – The base station shall not send the message later in the slot than a *Universal*  
35      *Page Message* that lacks a mobile station-directed message announcement and  
36      which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that mobile  
37      station.

38   The base station should send messages directed to both mobile stations operating in the  
39   slotted mode and mobile stations operating in the non-slotted mode later in the slot than  
40   the *Universal Page Message*.

### 1 3.6.2.4 Broadcast Messages

#### 2 3.6.2.4.1 Broadcast Messages Sent on the Paging Channel

3 The base station may transmit *Data Burst Messages* directed to broadcast addresses.  
 4 When transmitting broadcast messages that are to be received by mobile stations  
 5 operating in the slotted mode, the base station may use broadcast page records (see  
 6 3.7.2.3.2.17) in accordance with the broadcast procedures specified in 3.6.2.4.1 to  
 7 announce the presence of broadcast *Data Burst Messages* on the Paging Channel. The  
 8 base station should use the rules specified in 3.6.2.4.1.1 for selecting the Paging Channel  
 9 slot in which to send a broadcast *Data Burst Message*.

#### 10 3.6.2.4.1.1 Broadcast Procedures for Slotted Mode

11 The base station may announce the presence of broadcast *Data Burst Messages* on the  
 12 Paging Channel by paging, using a broadcast address with PAGE\_CLASS equal to '11' and  
 13 PAGE\_SUBCLASS equal to '00'.

##### 14 3.6.2.4.1.1.1 General Overview

15 The base station may transmit *Data Burst Messages* directed to broadcast addresses.  
 16 Since mobile stations operating in slotted mode do not constantly monitor a Paging  
 17 Channel, it is necessary to use special procedures to ensure that mobile stations operating  
 18 in the slotted mode are able to receive the message. The base station may either send a  
 19 broadcast message in many slots, or may send a broadcast message in a predetermined  
 20 paging slot. This single transmission of the pending broadcast message may be  
 21 announced by a preceding "broadcast page". A broadcast page is a *General Page Message*  
 22 record with the PAGE\_CLASS field set to '11'.

23 If pending transmission of the broadcast message is announced by the broadcast page,  
 24 mobile stations use the BC\_ADDR and the BURST\_TYPE fields of the broadcast page  
 25 record to determine whether or not to receive the announced broadcast message. The base  
 26 station sets the value of the BC\_ADDR according to the requirements of the standards  
 27 related to the BURST\_TYPE. There is a predetermined timing relationship between the  
 28 sending of the broadcast page and the sending of the related broadcast message. This  
 29 timing relationship allows mobile stations to determine which slot to monitor in order to  
 30 receive the broadcast message.

31 To reduce the overhead for sending broadcast pages or broadcast messages, a base station  
 32 may use periodic broadcast paging (see 3.6.2.4.1.1.2.1.2). When periodic broadcast paging  
 33 is enabled, broadcast pages or broadcast messages are sent only once during a broadcast  
 34 paging cycle. Mobile stations that are operating in the slotted mode and are configured to  
 35 receive broadcast messages monitor the paging channel during the slot in which the  
 36 broadcast pages or broadcast messages are sent. For the purpose of periodic broadcast  
 37 paging, system time is divided into broadcast paging cycles, each having a duration of (**B** +  
 38 3) Paging Channel slots, where **B** is a power of two. In each broadcast paging cycle, the  
 39 first paging slot may contain broadcast pages or broadcast messages.

## 3.6.2.4.1.1.2 Requirements for Sending Broadcast Messages

### 3.6.2.4.1.1.2.1 Broadcast Delivery Options

When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode and monitoring the Paging Channel, the base station shall use one of the two following procedures to transmit a broadcast message.

#### 3.6.2.4.1.1.2.1.1 Method 1: Multi-Slot Broadcast Message Transmission

The base station may send a broadcast message using this method without regard to whether periodic broadcast paging is enabled or disabled (see 3.6.2.4.1.1.2.3).

When using this method, the base station shall send the broadcast message in a sufficient number of paging slots such that it may be received by any mobile station that is operating in the slotted mode. For example, the base station may send the broadcast message in **M** successive paging slots where **M** is the number of slots in a maximum paging cycle as defined in 2.6.2.1.1.3.3.

#### 3.6.2.4.1.1.2.1.2 Method 2: Periodic Broadcast Paging

If the base station sends a broadcast message using this method, then the base station shall enable periodic broadcast paging (see 3.6.2.4.1.1.2.3).

To deliver a broadcast message using this method, the base station should perform the following:

- If the number and size of the broadcast messages waiting to be sent are such that the messages can be sent in a single slot, the base station should send the broadcast messages in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).
- If there is a single broadcast message waiting to be sent, the base station should send the broadcast message beginning in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).
- Otherwise, the base station should first include a broadcast page for each broadcast message to be sent, in a *General Page Message* that is sent in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3). The base station should then send the related broadcast messages in the paging slots specified in 3.6.2.4.1.1.2.4.

#### 3.6.2.4.1.1.2.2 Duplicate Broadcast Message Transmission

If the base station sends a broadcast message or a broadcast page and an associated broadcast message more than once when periodic broadcast paging is enabled (see 3.6.2.4.1.1.2.3), then all repetitions of the broadcast message or the broadcast page and the associated broadcast message should be sent within  $4 \times (\mathbf{B} + 3)$  paging slots of the paging slot in which the broadcast message or broadcast page was first sent. (**B** + 3 is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).



1 When a base station sends a broadcast message or a broadcast page when periodic  
 2 broadcast paging is enabled (see 3.6.2.4.1.1.2.3), and the base station has a second,  
 3 different broadcast message to send which contains identical BURST\_TYPE and BC\_ADDR  
 4 fields, then the base station shall wait  $4 \times (\mathbf{B} + 3)$  paging slots after the first slot of the  
 5 broadcast paging cycle containing the final sending of the first broadcast message or  
 6 broadcast page before sending the second, different broadcast message or related  
 7 broadcast page.

#### 8 3.6.2.4.1.1.2.3 Periodic Broadcast Paging

9 The base station uses the BCAST\_INDEX field of the *Extended System Parameters Message*  
 10 to specify the current state of periodic broadcast paging to all mobile stations.

11 To enable periodic broadcast paging, the base station shall set the BCAST\_INDEX field of  
 12 the *Extended System Parameters Message* to an unsigned 3-bit number in the range 1-7,  
 13 equal to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3. The value of the  
 14 BCAST\_INDEX field may exceed the value of the MAX\_SLOT\_CYCLE\_INDEX field sent in  
 15 the *System Parameters Message*.

16 To indicate that periodic broadcast paging is either disabled or is not supported by the  
 17 base station, the base station shall set the BCAST\_INDEX field to '000'.

#### 18 3.6.2.4.1.1.2.4 Broadcast Message Slot Determination

19 When a base station uses broadcast paging, it shall determine the slot in which to send  
 20 the corresponding broadcast message using the following procedures:

- 21 • The base station shall consider a broadcast page to have been sent in the paging  
 22 slot in which the *General Page Message* containing the broadcast page began.
- 23 • The reference slot is defined as the paging slot in which the broadcast page was  
 24 sent.
- 25 • Let n represent the ordinal number of the broadcast page relative to other  
 26 broadcast pages that are contained in the same *General Page Message* ( $n = 1, 2,$   
 27  $3, \dots$ ). The base station shall send the broadcast message announced by broadcast  
 28 page n in the paging slot that occurs  $n \times 3$  paging slots after the reference slot.

#### 3.6.2.4.2 Broadcast Messages Sent on the Broadcast Control Channel

The base station may transmit *Data Burst Messages* directed to broadcast addresses when NUM\_BCCH\_BCAST<sub>s</sub> does not equal '000'. When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode, the base station may use enhanced broadcast pages (see 3.7.2.3.2.17 and 3.7.2.3.2.36) in accordance with the broadcast procedures specified in 3.6.2.4.2 to announce the presence of broadcast *Data Burst Messages* on the Broadcast Control Channel. The base station should use the rules specified in 3.6.2.4.2.1 for selecting the Broadcast Control Channel slot in which to send a broadcast *Data Burst Message*.

##### 3.6.2.4.2.1 Broadcast Procedures for Slotted Mode

The base station may announce the presence of broadcast *Data Burst Messages* on the Broadcast Control Channel by sending an enhanced broadcast page.

##### 3.6.2.4.2.1.1 General Overview

The base station may transmit *Data Burst Messages* directed to broadcast addresses. Since mobile stations operating in slotted mode do not constantly monitor a Broadcast Control Channel, it is necessary to use special procedures to ensure that mobile stations operating in the slotted mode are able to receive the message. The base station may either send an enhanced broadcast page in many Forward Common Control Channel slots, directing the mobile station to the appropriate Broadcast Control Channel slot, or the base station may also send an enhanced broadcast page in a predetermined slot, called a broadcast slot, on the Forward Common Control Channel, directing the mobile station to a specified Broadcast Control Channel slot.

If pending transmission of the broadcast message is announced by the enhanced broadcast page, mobile stations use the BC\_ADDR and the BURST\_TYPE fields of the enhanced broadcast page record to determine whether or not to receive the announced broadcast message. The base station sets the value of the BC\_ADDR according to the requirements of the standards related to the BURST\_TYPE. The timing relationship between the sending of the enhanced broadcast page and the sending of the related broadcast message is specified in the enhanced broadcast page. This timing relationship allows mobile stations to determine which Broadcast Control Channel slot to monitor in order to receive the broadcast message.

To reduce the overhead for sending broadcast pages or broadcast messages, a base station may use Periodic Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.1.2). When Periodic Enhanced Broadcast Paging is enabled, enhanced broadcast pages are sent only once during a broadcast paging cycle. Mobile stations that are operating in the slotted mode and are configured to receive broadcast messages monitor the Forward Common Control Channel during the broadcast slot in which the enhanced broadcast pages are sent. For the purpose of Periodic Enhanced Broadcast Paging, system time is divided into broadcast paging cycles, each having a duration of (**B** + 7) Forward Common Control Channel slots, where **B** is a power of two. In each broadcast paging cycle, the first Forward Common Control Channel slot may contain enhanced broadcast pages.

## 1 3.6.2.4.2.1.2 Requirements for Sending Broadcast Messages

### 2 3.6.2.4.2.1.2.1 Broadcast Delivery Options

3 When transmitting broadcast messages that are to be received by mobile stations  
 4 operating in the slotted mode and monitoring the Forward Common Control  
 5 Channel/Broadcast Control Channel, the base station shall use one of the two following  
 6 procedures to transmit a broadcast message.

#### 7 3.6.2.4.2.1.2.1.1 Method 1: Multi-Slot Enhanced Broadcast Paging

8 The base station may send a broadcast message using this method without regard to  
 9 whether Periodic Enhanced Broadcast Paging is enabled or disabled (see 3.6.2.4.2.1.2.3).

10 When using this method, the base station shall send the enhanced broadcast page in a  
 11 sufficient number of Forward Common Control Channel slots such that it may be received  
 12 by any mobile station that is operating in the slotted mode. The enhanced broadcast page  
 13 then directs mobile stations to a subsequent Broadcast Control Channel slot.

14 The base station shall not send an enhanced broadcast page that directs a mobile station  
 15 to receive a broadcast message on the Primary Broadcast Control Channel.

16 The base station shall not send a broadcast message on the Forward Common Control  
 17 Channel.

#### 18 3.6.2.4.2.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging

19 If the base station sends a broadcast message using this method, then the base station  
 20 shall enable Periodic Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.3).

21 To deliver a broadcast message using this method, the base station should perform the  
 22 following:

- 23 • The base station should first include an enhanced broadcast page for each  
 24 broadcast message to be sent, in a page that is sent on the Forward Common  
 25 Control Channel in the first slot of the next broadcast paging cycle (see  
 26 2.6.2.1.1.3.3). The base station should then send the corresponding broadcast  
 27 messages in the Broadcast Control Channel slots specified in 3.6.2.4.2.1.2.4.

28 The base station shall not send an enhanced broadcast page that directs a mobile station  
 29 to receive a broadcast message on the Primary Broadcast Control Channel.

30 The base station shall not send a broadcast message on the Forward Common Control  
 31 Channel.

### 32 3.6.2.4.2.1.2.2 Duplicate Broadcast Message Transmission

33 If the base station sends an enhanced broadcast page and an associated broadcast  
 34 message more than once when Periodic Enhanced Broadcast Paging is enabled (see  
 35 3.6.2.4.2.1.2.3), then all repetitions of the enhanced broadcast page should be sent within  
 36  $4 \times (\mathbf{B} + 7)$  slots of the slot in which the enhanced broadcast page was first sent. ( $\mathbf{B} + 7$  is  
 37 the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).

1 When a base station sends an enhanced broadcast page when Periodic Enhanced  
2 Broadcast Paging is enabled (see 3.6.2.4.2.1.2.3), and the base station has a second,  
3 different broadcast message to send which contains identical BURST\_TYPE and BC\_ADDR  
4 fields, then the base station shall wait  $4 \times (\mathbf{B} + 7)$  paging slots after the first slot of the  
5 broadcast paging cycle containing the final sending of the first broadcast message or  
6 enhanced broadcast page before sending the second, different enhanced broadcast page.

#### 7 3.6.2.4.2.1.2.3 Periodic Enhanced Broadcast Paging

8 The base station uses the BCAST\_INDEX fields of the *MC-RR Parameters Message* to  
9 specify the current state of Periodic Enhanced Broadcast Paging to all mobile stations.

10 To enable Periodic Enhanced Broadcast Paging, the base station shall set the  
11 BCAST\_INDEX field to a non-zero unsigned 3-bit number equal to the broadcast slot cycle  
12 index as defined in 2.6.2.1.1.3.3.

13 To indicate that Periodic Enhanced Broadcast Paging is either disabled or is not supported  
14 by the base station, the base station shall set the BCAST\_INDEX field to '000'.

#### 15 3.6.2.4.2.1.2.4 Broadcast Message Slot Determination

16 When a base station uses broadcast message announcement, it shall determine the slot in  
17 which to send the corresponding broadcast message using the following procedures:

- 18 • The base station shall consider an enhanced broadcast page to have been sent in  
19 the Forward Common Control Channel slot in which the page message containing  
20 the enhanced broadcast page began.
- 21 • The reference slot is defined as the Forward Common Control Channel slot in  
22 which the enhanced broadcast page was sent.
- 23 • The base station shall send a first transmission of the broadcast message  
24 announced by the enhanced broadcast page in the Broadcast Control Channel slot  
25 which begins  $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$  later than the beginning of the slot in  
26 which the page message containing the enhanced broadcast page began. The base  
27 station may send a repetition of the broadcast message announced by the  
28 enhanced broadcast page in the Broadcast Control Channel slot which begins  $40$   
29  $\text{ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$  later than the Broadcast Control Channel slot in  
30 which the first transmission began.

### 3.6.2.4.3 Broadcast Messages Sent on the Forward Common Control Channel

The Forward Common Control Channel is used for transmission of broadcast messages only when there is not a secondary Broadcast Control Channel allocated, i.e., NUM\_BCCH\_BCAST equals '000'. The base station may transmit *Data Burst Messages* directed to broadcast addresses. When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode, the base station may use enhanced broadcast page records (see 3.7.2.3.2.17 and 3.7.2.3.2.36) in accordance with the broadcast procedures specified in 3.6.2.4.3 to announce the presence of broadcast *Data Burst Messages* on the Forward Common Control Channel. The base station shall send the broadcast messages on the Forward Common Control Channel where the enhanced broadcast page is sent. The base station should use the rules specified in 3.6.2.4.3.1 for selecting the Forward Common Control Channel slot in which to send a broadcast *Data Burst Message*.

#### 3.6.2.4.3.1 Broadcast Procedures for Slotted Mode

The base station may announce the presence of broadcast *Data Burst Messages* on the Forward Common Control Channel by sending an enhanced broadcast page.

##### 3.6.2.4.3.1.1 General Overview

The base station may transmit *Data Burst Messages* directed to broadcast addresses. Since mobile stations operating in slotted mode do not constantly monitor a Forward Common Control Channel, it is necessary to use special procedures to ensure that mobile stations operating in the slotted mode are able to receive the message. The base station may either send a broadcast message in many Forward Common Control Channel slots, or may send a broadcast message in a predetermined Forward Common Control slot. This single transmission of the pending broadcast message may be announced by a preceding "enhanced broadcast page".

If pending transmission of the broadcast message is announced by the enhanced broadcast page, mobile stations use the BC\_ADDR and the BURST\_TYPE fields of the enhanced broadcast page record to determine whether or not to receive the announced broadcast message. The base station sets the value of the BC\_ADDR according to the requirements of the standards related to the BURST\_TYPE. There is a predetermined timing relationship between the sending of the enhanced broadcast page and the sending of the related broadcast message. This timing relationship allows mobile stations to determine which Forward Common Control Channel slot to monitor in order to receive the broadcast message.

To reduce the overhead for sending enhanced broadcast pages or broadcast messages, a base station may use periodic enhanced broadcast paging (see 3.6.2.4.3.1.2.1.2). When periodic enhanced broadcast paging is enabled, enhanced broadcast pages or broadcast messages are sent only once during a broadcast paging cycle. Mobile stations that are operating in the slotted mode and are configured to receive broadcast messages monitor the Forward Common Control Channel during the Forward Common Control Channel slot in which the enhanced broadcast pages or broadcast messages are sent. For the purpose of periodic enhanced broadcast paging, system time is divided into broadcast paging

cycles, each having a duration of  $(\mathbf{B} + 7)$  Forward Common Control Channel slots, where  $\mathbf{B}$  is a power of two. In each broadcast paging cycle, the first Forward Common Control Channel slot may contain enhanced broadcast pages or broadcast messages.

#### 3.6.2.4.3.1.2 Requirements for Sending Broadcast Messages

##### 3.6.2.4.3.1.2.1 Broadcast Delivery Options

When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode and monitoring the Forward Common Control Channel, the base station shall use one of the two following procedures to transmit a broadcast message.

##### 3.6.2.4.3.1.2.1.1 Method 1: Multi-Slot Broadcast Message Transmission

The base station may send a broadcast message using this method without regard to whether periodic enhanced broadcast paging is enabled or disabled (see 3.6.2.4.3.1.2.3).

When using this method, the base station shall send the broadcast message in a sufficient number of Forward Common Control Channel slots such that it may be received by any mobile station that is operating in the slotted mode. For example, the base station may send the broadcast message in  $\mathbf{M}$  successive paging slots where  $\mathbf{M}$  is the number of slots in a maximum paging cycle as defined in 2.6.2.1.1.3.3.

##### 3.6.2.4.3.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging

If the base station sends a broadcast message using this method, then the base station shall enable periodic enhanced broadcast paging (see 3.6.2.4.3.1.2.3).

To deliver a broadcast message using this method, the base station should perform the following:

- If the number and size of the broadcast messages waiting to be sent are such that the messages can be sent in a single slot, the base station should send the broadcast messages in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).
- If there is a single broadcast message waiting to be sent, the base station should send the broadcast message beginning in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).
- Otherwise, the base station should first include an enhanced broadcast page for each broadcast message to be sent, in a *General Page Message* or a *Universal Page Message* that is sent in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3). The base station should then send the related broadcast messages in the Forward Common Control Channel slots specified in 3.6.2.4.3.1.2.4.

##### 3.6.2.4.3.1.2.2 Duplicate Broadcast Message Transmission

If the base station sends a broadcast message or an enhanced broadcast page and an associated broadcast message more than once when periodic enhanced broadcast paging is enabled (see 3.6.2.4.3.1.2.3), then all repetitions of the broadcast message or the

enhanced broadcast page and the associated broadcast message should be sent within  $4 \times (\mathbf{B} + 7)$  slots of the Forward Common Control Channel slot in which the broadcast message or enhanced broadcast page was first sent.  $(\mathbf{B} + 7)$  is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).

When a base station sends a broadcast message or an enhanced broadcast page when periodic enhanced broadcast paging is enabled (see 3.6.2.4.3.1.2.3), and the base station has a second, different broadcast message to send which contains identical BURST\_TYPE and BC\_ADDR fields, then the base station shall wait  $4 \times (\mathbf{B} + 7)$  Forward Common Control Channel slots after the first slot of the enhanced broadcast paging cycle containing the final sending of the first broadcast message or enhanced broadcast page before sending the second, different broadcast message or related enhanced broadcast page.

#### 3.6.2.4.3.1.2.3 Periodic Enhanced Broadcast Paging

The base station uses the BCAST\_INDEX field of the *MC-RR Parameters Message* to specify the current state of periodic enhanced broadcast paging to all mobile stations.

To enable periodic enhanced broadcast paging, the base station shall set the BCAST\_INDEX field of the *MC-RR Parameters Message* to an unsigned 3-bit number in the range 1-7, equal to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3. The value of the BCAST\_INDEX field may exceed the value of the MAX\_SLOT\_CYCLE\_INDEX field sent in the *System Parameters Message*.

To indicate that periodic enhanced broadcast paging is either disabled or is not supported by the base station, the base station shall set the BCAST\_INDEX field to '000'.

#### 3.6.2.4.3.1.2.4 Broadcast Message Slot Determination

When a base station uses enhanced broadcast paging, it shall determine the slot in which to send the corresponding broadcast message using the following procedures:

- The base station shall consider an enhanced broadcast page to have been sent in the Forward Common Control Channel slot in which the *General Page Message* or the *Universal Page Message* containing the enhanced broadcast page began.
- The reference slot is defined as the Forward Common Control Channel slot in which the enhanced broadcast page was sent.
- The base station shall send a first transmission of the broadcast message announced by the enhanced broadcast page in the Forward Common Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$  later than the beginning of the slot in which the page message containing the enhanced broadcast page began. The base station may send a repetition of the broadcast message announced by the enhanced broadcast page in the Forward Common Control Channel slot which begins  $40 \text{ ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$  later than the Forward Common Control Channel slot in which the first transmission began.

#### 3.6.2.5 Quick Paging Channel Processing

The base station may support a Quick Paging Channel. The base station may transmit up to three Quick Paging Channels on each supported CDMA Channel.

1 When a Quick Paging Channel is supported, the base station shall transmit paging  
 2 indicators to the mobile station in the assigned positions in the assigned Quick Paging  
 3 Channel slot. The base station shall set the paging indicators to “ON” if the mobile station  
 4 is operating in the slotted mode and is to receive the Paging Channel or Forward Common  
 5 Control Channel in the assigned Paging Channel or Forward Common Control Channel  
 6 slot following its assigned Quick Paging Channel slot.

7 When the base station changes CONFIG\_MSG\_SEQ, the base station should set the paging  
 8 indicators for all mobile stations to “ON” for each Quick Paging Channel slot for a time  
 9 interval T (in units of 1.28 seconds), such that

$$T = N \times 2^{\text{MAX\_SLOT\_CYCLE\_INDEX}},$$

11 where N is an integer greater than or equal to one.

12 If the base station supports configuration change indicators on the Quick Paging Channel,  
 13 when the base station changes CONFIG\_MSG\_SEQ, the base station shall set all  
 14 configuration change indicators to “ON” for each Quick Paging Channel slot for a time  
 15 interval of  $T_{31m}$  seconds. At all other times, the base station shall set all configuration  
 16 change indicators to “OFF”.

17 If the base station does not support configuration change indicators on the Quick Paging  
 18 Channel, then the base station shall set all configuration change indicators to “OFF”.

19 When the base station sends a broadcast message using Multi-Slot Broadcast Message  
 20 Transmission (see 3.6.2.4.1.1.2.1.1), the base station should set all paging indicators to  
 21 “ON” for the Quick Paging Channel slot which begins 100 ms prior to the beginning of the  
 22 Paging Channel slot in which the broadcast message begins.

23 When the base station sends an enhanced broadcast page using Multi-Slot Enhanced  
 24 Broadcast Paging (see 3.6.2.4.2.1.2.1.1), the base station should set all paging indicators  
 25 to “ON” for the Quick Paging Channel slot which begins 100 ms prior to the beginning of  
 26 the Forward Common Control Channel slot in which the message containing the enhanced  
 27 broadcast page begins.

28 When the base station sends an enhanced broadcast page using Periodic Enhanced  
 29 Broadcast Paging (see 3.6.2.4.2.1.2.1.2), the base station should set all broadcast  
 30 indicators to “ON” for the Quick Paging Channel broadcast slot which begins 100 ms prior  
 31 to the beginning of the Forward Common Control Channel slot in which the message  
 32 containing the enhanced broadcast page begins. At all other times, the base station shall  
 33 set all broadcast indicators for a Quick Paging Channel broadcast slot to “OFF”.

34 When the base station sends a broadcast page using Periodic Broadcast Paging (see  
 35 3.6.2.4.1.1.2.1.2), the base station should set all broadcast indicators to “ON” for the  
 36 Quick Paging Channel broadcast slot which begins 100 ms prior to the beginning of the  
 37 Paging Channel slot in which the message containing the broadcast page begins. At all  
 38 other times, the base station shall set all broadcast indicators for a Quick Paging Channel  
 39 broadcast slot to “OFF”.

40 The base station shall set all reserved indicators to “OFF”.



#### 1 3.6.2.5.1 Quick Paging Channel Determination

2 To determine the mobile station's assigned Quick Paging Channel, the base station shall  
3 use the hash function specified in 2.6.7.1 with the following inputs:

- 4 • IMSI\_S based on the IMSI with which the mobile station registered (see 2.3.1)
- 5 • Number of Quick Paging Channels which the base station transmits on the mobile  
6 station's assigned CDMA Channel.

#### 7 3.6.2.5.2 Quick Paging Channel Slot Determination

8 The mobile station's assigned Quick Paging Channel slots are those slots for which

$$9 \quad (\lfloor (t+5)/4 \rfloor - \text{PGSLOT}) \bmod (16 \times T) = 0,$$

10 where t is the System Time in 20ms frames, PGSLOT is selected in the range 0 to 2047 by  
11 using the hash function specified in 2.6.7.1, and T is the slot cycle length in units of 1.28  
12 seconds such that

$$13 \quad T = 2^i,$$

14 and i is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, and  
15 7.

#### 16 3.6.2.5.3 Paging Indicator Position Determination

17 To determine the mobile station's assigned paging indicators, the base station shall use  
18 the same formula as used by the mobile station (see 2.6.2.1.2.2).

#### 19 3.6.2.5.4 Configuration Change Indicator Position Determination

20 Configuration change indicators are transmitted on the first Quick Paging Channel.

21 If the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the bit  
22 positions of the first pair of configuration change indicators in a Quick Paging Channel  
23 slot shall be the last two bits in the first 40 ms half of the Quick Paging Channel slot. The  
24 bit positions of the second pair of configuration change indicators in a Quick Paging  
25 Channel slot shall be the last two bits in the Quick Paging Channel slot.

26 If the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the bit  
27 positions of the first four configuration change indicators in a Quick Paging Channel slot  
28 shall be the last four bits in the first 40 ms half of the Quick Paging Channel slot. The bit  
29 position of the second four configuration change indicators in a Quick Paging Channel slot  
30 shall be the last four bits in the Quick Paging Channel slot.

#### 31 3.6.2.5.5 Broadcast Indicator Position Determination

32 Broadcast indicators are transmitted on the first Quick Paging Channel.

33 On the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps  
34 (indicator rate is 4800 bps), the broadcast indicator positions are described as follows:

- 35 • The two Quick Paging Channel bit positions prior to the last two bits in the first 40  
36 ms half of a Quick Paging Channel broadcast slot are broadcast indicators. The

two Quick Paging Channel bit positions prior to the last two bits in a Quick Paging Channel broadcast slot are also broadcast indicators.

On the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the broadcast indicator positions are described as follows:

- The four Quick Paging Channel bit positions prior to the last four bits in the first 40 ms half of a Quick Paging Channel broadcast slot are broadcast indicators. The four Quick Paging Channel bit positions prior to the last four bits in a Quick Paging Channel broadcast slot are also broadcast indicators.

#### 3.6.2.5.6 Reserved Indicator Positions

On the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the reserved indicator positions are described as follows:

- The two Quick Paging Channel bit positions prior to the last two bits in the first 40 ms half of a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are reserved. The two Quick Paging Channel bit positions prior to the last two bits in a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are also reserved.

On the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the reserved indicator positions are described as follows:

- The four Quick Paging Channel bit positions prior to the last four bits in the first 40 ms half of a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are reserved. The four Quick Paging Channel bit positions prior to the last four bits in a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are also reserved.

On Quick Paging Channels other than the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the reserved indicator positions are described as follows:

- The last four Quick Paging Channel bit positions in the first 40 ms half of a Quick Paging Channel slot are reserved. The last four Quick Paging Channel bit positions in a Quick Paging Channel slot are also reserved.

On Quick Paging Channels other than the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the reserved indicator positions are described as follows:

- The last eight Quick Paging Channel bit positions in the first 40 ms half of a Quick Paging Channel slot are reserved. The last eight Quick Paging Channel bit positions in a Quick Paging Channel slot are also reserved.

#### 3.6.3 Access Channel and Enhanced Access Channel Processing

During *Access Channel Processing*, the base station monitors the Access Channel to receive messages which the mobile station sends while the mobile station is in the *System Access State*.

Each Access Channel is associated with a Paging Channel. Up to 32 Access Channels can be associated with a Paging Channel. The number of Access Channels associated with a particular Paging Channel is specified in the *Access Parameters Message* sent on that Paging Channel.

If the base station supports Access Channels, the base station shall continually monitor all Access Channels associated with each Paging Channel that the base station transmits.

If the base station supports Enhanced Access Channels, then during *Enhanced Access Channel Processing*, the base station monitors the Enhanced Access Channel to receive messages which the mobile station sends while the mobile station is in the *System Access State*.

Each Enhanced Access Channel is associated with a Forward Common Control Channel. Up to 32 Enhanced Access Channels can be associated with a Forward Common Control Channel. The number of Enhanced Access Channels associated with a particular Forward Common Control Channel is specified in the *Enhanced Access Parameters Message* sent on the Primary Broadcast Control Channel.

If the base station supports Enhanced Access Channel, the base station shall continually monitor all Enhanced Access Channels associated with each Forward Common Control Channel that the base station transmits.

3.6.3.1 Reserved

3.6.3.2 Reserved

3.6.3.3 Response to Page Response Message and Reconnect Message

If the base station receives a *Page Response Message* or a *Reconnect Message* with the ORIG\_IND field set to '0', the base station should send a *Channel Assignment Message* (if in response to a *Page Response Message*), an *Extended Channel Assignment Message*, or a *Release Order*. The base station may also start authentication procedures (see 2.3.12), start TMSI assignment procedures (see 2.3.15), send a *Data Burst Message*, or request status information records with the *Status Request Message*.

If the base station sends the *Extended Channel Assignment Message*, the base station may include more than one pilot to be in the Active Set.

If the base station sends a *Channel Assignment Message* or an *Extended Channel Assignment Message*, the base station shall perform the following:

- If the message directs the mobile station to a CDMA Traffic Channel, the base station shall begin *Traffic Channel Processing* (see 3.6.4) for the mobile station.
- If the reverse channel corresponding to forward channel included in this message is separated by flexible channel spacing, the base station shall extend this message using the General Extension Message and include a Reverse Channel Information Record that specifies the reverse frequency to be used by the mobile station for the traffic channel.

- Layer 3 shall send a *mobile station inactive on common channel* indication to Layer 2 (see [4]).

The base station may instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record) by setting the GRANTED\_MODE field of the *Extended Channel Assignment Message* to '11'.

#### 3.6.3.4 Response to Orders

No requirements.

#### 3.6.3.5 Response to Origination Message and Reconnect Message

If the base station receives an *Origination Message*, *Call Recovery Request Message* or a *Reconnect Message* with the ORIG\_IND field set to '1', the base station should send a *Channel Assignment Message* (if in response to an *Origination Message*), an *Extended Channel Assignment Message*, an *Intercept Order*, a *Reorder Order*, a *Release Order*, a *Retry Order*, a *PACA Message*, a *Service Redirection Message* or a *Service Status Order*. The base station may also commence authentication procedures (see 2.3.12) or TMSI assignment procedures (see 2.3.15). The base station may also request status information records with the *Status Request Message*.

If the base station sends the *Extended Channel Assignment Message*, the base station may include more than one pilot to be in the Active Set.

If the base station sends a *Channel Assignment Message* or an *Extended Channel Assignment Message*, the base station shall perform the following:

- If the message directs the mobile station to a CDMA Traffic Channel, the base station shall begin *Traffic Channel Processing* (see 3.6.4) for the mobile station.
- If the reverse channel corresponding to forward channel included in this message is separated by flexible channel spacing, the base station shall extend this message using the General Extension Message and include a Reverse Channel Information Record that specifies the reverse frequency to be used by the mobile station for the traffic channel.
- The base station shall raise a *mobile station inactive on common channel* indication for the mobile station.

If the base station sends a *Channel Assignment Message*, the base station shall not set RESPOND equal to '0' when ASSIGN\_MODE = '001', ASSIGN\_MODE = '010', or ASSIGN\_MODE = '101'. If the base station sends an *Extended Channel Assignment Message*, the base station shall not set RESPOND equal to '0' when ASSIGN\_MODE = '001' or ASSIGN\_MODE = '010'.

The base station may instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record) by setting the GRANTED\_MODE field of the *Extended Channel Assignment Message* to '11'.

If the base station receives an *Origination Message* and the GLOBAL\_EMERGENCY\_CALL

indicator is set to '1' and the service associated with this origination is a voice service, the base station shall recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits. If the base station receives an *Origination Message* and the GLOBAL\_EMERGENCY\_CALL indicator is set to '1' and the service associated with this origination is not a voice service, the base station may recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits.

#### 3.6.3.6 Response to Registration Message

If the base station receives a *Registration Message*, the base station may send a *Registration Accepted Order*, a *Registration Rejected Order*, or a *Service Redirection Message*. The base station may also start authentication procedures (see 2.3.12), may start TMSI assignment procedures (see 2.3.15), or may request status information records with the *Status Request Message*.

If the *Registration Message* specifies a power-down registration, Layer 3 shall send a *mobile station inactive on common channel* indication to Layer 2 (see [4]).

When responding to a *Registration Message* that requests extended encryption, if the base station decides to turn on extended encryption and the CMEAKEY is available at the base station, the base station shall send a *Registration Accepted Order* with encryption information. Before the CMEAKEY is available, the base station may send a *Registration Accepted Order* without any encryption information. When the CMEAKEY becomes available, if the base station decides to turn on extended encryption, the base station shall send a *Registration Accepted Order* with encryption information.

#### 3.6.3.7 Response to Data Burst Message

If the base station receives a *Data Burst Message* with BURST\_TYPE indicating Short Data Burst (see [30]), the base station may send a *Retry Order*.

#### 3.6.3.8 Reserved

#### 3.6.3.9 Reserved

#### 3.6.3.10 Service Redirection

If the base station sends a *Service Redirection Message* to the mobile station, Layer 3 shall send a *mobile station inactive on common channel* indication to Layer 2 (see [4]).

#### 3.6.3.11 Response to General Extension Message

If the base station receives a message that is extended through *General Extension Message* the base station shall store the records and process the message as specified in section 3.6.3.1-3.6.3.8.

### 3.6.4 Traffic Channel Processing

During *Traffic Channel Processing*, the base station uses the Forward and Reverse Traffic Channels to communicate with the mobile station while the mobile station is in the *Mobile Station Control on the Traffic Channel State*.

Traffic Channel processing consists of the following substates:

- *Traffic Channel Initialization Substate* - In this substate, the base station begins transmitting on the Forward Traffic Channel and receiving on the Reverse Traffic Channel.
- *Traffic Channel Substate* - In this substate, the base station exchanges Traffic Channel frames with the mobile station in accordance with the current service configuration. While in this substate, one or more Call Control instances can be activated (see 3.6.8).
- *Release Substate* - In this substate, the base station disconnects the calls and the physical channels.

#### 3.6.4.1 Special Functions and Actions

The base station performs the following special functions and actions in one or more of the Traffic Channel processing substates:

##### 3.6.4.1.1 Forward Traffic Channel Power Control

Forward Traffic Channel Power Control procedures do not apply to Forward Packet Data Channel.

When the base station enables Forward Traffic Channel power control, the mobile station reports frame error rate statistics to the base station using the *Power Measurement Report Message*.

The base station may enable Forward Traffic Channel power control using the *System Parameters Message* sent on the Paging Channel and the *Power Control Parameters Message* sent on the Forward Traffic Channel. The base station may enable Forward Traffic Channel power control using the *MC-RR Parameters Message* sent on the Primary Broadcast Control Channel and the *Power Control Parameters Message* sent on the Forward Traffic Channel. The base station may enable periodic reporting which causes the mobile station to report frame error rate statistics at specified intervals. The base station may also enable threshold reporting which causes the mobile station to report frame error rate statistics when the frame error rate reaches a specified threshold.<sup>2</sup>

The base station may use the reported frame error rate statistics to adjust the transmit power of the Forward Traffic Channel.

---

<sup>2</sup>In this section the term base station may imply multiple cells or sectors.

### 3.6.4.1.2 Service Configuration and Negotiation

During Traffic Channel operation, the mobile station and base station communicate through the exchange of Forward and Reverse Traffic Channel Configurations. The mobile station and base station use a common set of attributes for building and interpreting Traffic Channel frames. This set of attributes, referred to as a service configuration, consists of both negotiable and non-negotiable parameters.

The set of negotiable service configuration parameters consists of the following:

1. **Forward and Reverse Multiplex Options:** These control the way in which the information bits of the Forward and Reverse Traffic Channel frames, respectively, are divided into various types of traffic, such as signaling traffic, primary traffic and secondary traffic. A multiplex option together with a radio configuration specifies the frame structures and transmission rates (see [3]). The Multiplex Options which support Supplemental Code Channel transmission and Supplemental Channel transmission on the Forward and Reverse Traffic Channels are included in [3]. Invocation of Supplemental Code Channel operation on the Forward or Reverse Traffic Channels occurs by transmission of the *Supplemental Channel Request Message*, the *Supplemental Channel Assignment Message*, and the *General Handoff Direction Message*. The Multiplex Options which support Supplemental Code Channel transmission and Supplemental Channel transmission on the Forward and Reverse Traffic Channels are included in [3]. The multiplex option used for the Forward Traffic Channel can be the same as that used for the Reverse Traffic Channel, or it can be different.
2. **Forward and Reverse Traffic Channel Configurations:** These include the radio configurations and other necessary attributes for the Forward and Reverse Traffic Channels. The Traffic Channel Configuration used can be different for the Forward and Reverse Traffic Channels or it can be the same.
3. **Forward and Reverse Traffic Channel Transmission Rates:** These are the transmission rates actually used for the Forward and Reverse Traffic Channels, respectively. The transmission rates for the Forward Traffic Channel can include all of the transmission rates supported by the radio configuration associated with the Forward Traffic Channel multiplex option, or a subset of the supported rates. Similarly, the transmission rates used for the Reverse Traffic Channel can include all rates supported by the radio configuration associated with the Reverse Traffic Channel multiplex option, or a subset of the supported rates. The transmission rates used for the Forward Traffic Channel can be the same as those used for the Reverse Traffic Channel, or they can be different.
4. **Service Option Connections:** These are the services in use on the Traffic Channel. There can be multiple service option connections. It is also possible that there is no service option connection, in which case the base station uses the Forward Traffic Channel as follows:
  - Sends signaling traffic and null traffic on the Forward Fundamental Channel.

- Sends signaling traffic on the Forward Dedicated Control Channel.
- If F-CPCCH is assigned, sends power control bits on the F-CPCCH; otherwise, sends power control bits on the Forward Fundamental Channel if FPC\_PRI\_CHAN is set to '0'; sends power control bits on the Forward Dedicated Control Channel if FPC\_PRI\_CHAN is set to '1'.

Associated with each service option connection are a service option, a Forward Traffic Channel traffic type, a Reverse Traffic Channel traffic type, and a service option connection reference. The associated service option formally defines the way in which traffic bits are processed by the mobile station and base station. The associated Forward and Reverse Traffic Channel traffic types specify the types of traffic used to support the service option. A service option can require the use of a particular type of traffic, such as primary or secondary, or it can accept more than one traffic type. A service option can be one-way, in which case it can be supported on the Forward Traffic Channel only or the Reverse Traffic Channel only. Alternatively, a service option can be two-way, in which case it can be supported on the Forward and Reverse Traffic Channels simultaneously. Connected service options can also invoke operation on Supplemental Code Channels in either one or both of the Forward and Reverse Traffic Channels by negotiating a multiplex option that supports operation on Supplemental Code Channels (see [3] for Multiplex Options applicable to Supplemental Code Channels), and by using the appropriate Supplemental Code Channel related messages (i.e., the *Supplemental Channel Request Message*, the *Supplemental Channel Assignment Message*, and the *General Handoff Direction Message*). After Supplemental Code Channels have been assigned by the base station, the connected service option can transmit primary and/or secondary traffic on Supplemental Code Channels. Connected service options can also invoke operation on Supplemental Channels in either one or both of the Forward and Reverse Traffic Channels by negotiating a multiplex option that supports operation on Supplemental Channels (see [3] for Multiplex Options applicable to Supplemental Channels) and by using the appropriate Supplemental Channel related messages (i.e., the *Supplemental Channel Request Message*, the *Universal Handoff Direction Message*, the *Supplemental Channel Request Mini Message*, the *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental Channel Assignment Mini Message*, and the *Reverse Supplemental Channel Assignment Mini Message*). After Supplemental Channels have been assigned by the base station, the connected service option can transmit primary and/or secondary traffic on Supplemental Channels. The associated service option connection reference provides a means for uniquely identifying the service option connection. The reference serves to resolve ambiguity when there are multiple service option connections in use.

The non-negotiable service configuration parameters are sent from the base station to the mobile stations only, and consist of the following:



- 1       1. *Reverse Pilot Gating Rate*: This controls the way in which the reverse pilot is gated  
2       on the Reverse Pilot Channel. The base station specifies the reverse pilot gating rate  
3       to be used in the *Service Connect Message*, the *General Handoff Direction Message*,  
4       and the *Universal Handoff Direction Message*.
- 5       2. *Forward and Reverse Power Control Parameters*: These consist of forward power  
6       control operation mode, outer loop power control parameters (e.g. target frame error  
7       rate, minimum  $E_b/N_t$  setpoint, and maximum  $E_b/N_t$  setpoint) for the Forward  
8       Fundamental Channel and Forward Dedicated Control Channel, and Power Control  
9       Subchannel indicator which indicates where the mobile station is to perform the  
10      primary inner loop estimation and the base station is to multiplex the Power  
11      Control Subchannel.
- 12      3. *Logical to Physical Mapping*: This is a table of logical to physical mapping entries,  
13      consisting of service reference identifier, logical resource, physical resource,  
14      forward flag, reverse flag, and priority.
- 15      4. *Partition Table*: The base station may include this table to specify the number of  
16      bits allocated for each service in the Fundamental Channel or Dedicated Control  
17      Channel.
- 18      5. *SCH LTU Size Table*: The base station may include this table to specify the number  
19      of bits per supplemental channel LTU.
- 20      6. Information related to Variable Rate feature (the capability to support rate  
21      determination) on Forward and Reverse Supplemental Channels
- 22      7. Information related to Flexible Rate feature (the capability to support non-listed  
23      rates) on Forward and Reverse Fundamental Channel, Dedicated Control Channel,  
24      and Supplemental Channels

25      The mobile station can request a default service configuration associated with a service  
26      option at call origination, and can request new service configurations during Traffic  
27      Channel operation. A requested service configuration can differ greatly from its  
28      predecessor or it can be very similar. For example, the mobile station can request a service  
29      configuration in which all of the service option connections are different from those of the  
30      existing configuration; or the mobile station can request a service configuration in which  
31      the existing service option connections are maintained with only minor changes, such as a  
32      different set of transmission rates or a different mapping of service option connections to  
33      Forward and Reverse Traffic Channel traffic types.

34      If the mobile station requests a service configuration that is acceptable to the base station,  
35      they both begin using the new service configuration. If the mobile station requests a  
36      service configuration that is not acceptable to the base station, the base station can reject  
37      the requested service configuration or propose an alternative service configuration. If the  
38      base station proposes an alternative service configuration, the mobile station can accept or  
39      reject the base station's proposed service configuration, or propose yet another service  
40      configuration. This process, called service negotiation, ends when the mobile station and  
41      base station find a mutually acceptable service configuration, or when either the mobile  
42      station or base station rejects a service configuration proposed by the other.

It is also possible for the base station to request a default service configuration, associated with a service option, when paging the mobile station and to request new service configurations during Traffic Channel operation. The service negotiation proceeds as described above, but with the roles of the mobile station and base station reversed.

For CDMA mode operation in Band Class 0, the mobile station and base station can also use an alternative method for negotiating a service configuration known as service option negotiation. Service option negotiation is similar to service negotiation, but offers less flexibility for specifying the attributes of the service configuration. During service option negotiation, the base station or mobile station specifies only which service option is to be used. There is no facility for explicitly specifying the multiplex options, traffic types or transmission rates to be used on the Forward and Reverse Traffic Channels in conjunction with the service option. Instead, implicit service configuration attributes are assumed. In particular, the Forward and Reverse Multiplex Options and transmission rates are assumed to be the default multiplex options and transmission rates associated with the requested service option, and the traffic type for both the Forward and Reverse Traffic Channels is assumed to be primary traffic. Furthermore, a service configuration established using service option negotiation is restricted to having only a single service option connection.

At mobile station origination and termination, the type of negotiation to use, either service negotiation or service option negotiation, is indicated in the *Channel Assignment Message*. Service negotiation is always used with the *Extended Channel Assignment Message*. If a CDMA-to-CDMA hard handoff occurs during the call, the type of negotiation to use following the handoff is indicated in the *Extended Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff Direction Message*.

For CDMA mode operation in band classes other than Band Class 0, only service negotiation is to be used.

The following messages are used to support service negotiation:

1. *Service Request Message*: The mobile station can use this message to propose a service configuration, or to accept or reject a service configuration proposed in a *Service Response Message*. The base station can use this message to propose a service configuration, or to reject a service configuration proposed in a *Service Response Message*.
2. *Service Response Message*: The mobile station can use this message to accept or reject a service configuration proposed in a *Service Request Message*, or to propose an alternative service configuration. The base station can use this message to reject a service configuration proposed in a *Service Request Message*, or to propose an alternative service configuration.
3. *Service Connect Message*: The base station can use this message to accept a service configuration proposed in a *Service Request Message* or *Service Response Message*, and instruct the mobile station to begin using the service configuration. The base station may use this message to instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record) based on

the value of the SYNC\_ID that the mobile station has reported in the *Origination Message* or *Page Response Message*. If P\_REV\_IN\_USE is greater than or equal to 11, the base station can use this message to instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record) based on the value of the SYNC\_ID that the base station has included in this message.

4. *Service Connect Completion Message*: The mobile station can use this message to acknowledge the transition to a new service configuration.

5. *Service Option Control Message*: The mobile station and base station can use this message to invoke service option specific functions.

6. *Extended Channel Assignment Message*: The base station can use this message to accept or reject the initial service configuration proposed by the mobile station in an *Origination Message* or a *Page Response Message*.

The following messages are used to support service option negotiation:

1. *Service Option Request Order*: The mobile station and base station can use this message either to request a service option or suggest an alternative service option.

2. *Service Option Response Order*: The mobile station and base station can use this message to accept or reject a service option request.

3. *Service Option Control Order*: The mobile station and base station can use this message to invoke service option specific functions.

The following messages are used to support both service negotiation and service option negotiation:

1. *Origination Message*: The mobile station can use this message to propose an initial service configuration.

2. *Channel Assignment Message*: The base station can use this message to accept or reject the initial service configuration proposed by the mobile station in an *Origination Message* or a *Page Response Message*, and to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used during the call.

3. *Extended Handoff Direction Message*: The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff.

4. *General Handoff Direction Message*: The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base station can use this message to accept a service configuration proposed in a *Service Request Message* or *Service Response Message*. The base station can also use this message to instruct the mobile station to begin using the service configuration.

5. *General Page Message* or *Universal Page Message*: The base station can use a mobile-station-addressed page in a *General Page Message* or *Universal Page Message* to propose an initial service configuration.
6. *Page Response Message*: The mobile station can use this message to accept or reject the initial service configuration proposed by the base station in a mobile-station-addressed page, or to propose an alternative initial service configuration.
7. *Status Request Message*: The base station can use this message to request service capability information from the mobile station.
8. *Status Response Message*: The mobile station can use this message to return the service capability information requested by the base station in a *Status Request Message*.
9. *Extended Status Response Message*: The mobile station can use this message to return the service capability information requested by the base station in a *Status Request Message*.
10. *Universal Handoff Direction Message*: The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base station can use this message to accept a service configuration proposed in a *Service Request Message* or *Service Response Message*. The base station can also use this message to instruct the mobile station to begin using the service configuration.

#### 3.6.4.1.2.1 Use of Variables

##### 3.6.4.1.2.1.1 Maintaining the Service Request Sequence Number

The base station shall maintain a service request sequence number variable, `SERV_REQ_NUM`, for use with service negotiation. Upon beginning Traffic Channel processing, the base station shall set `SERV_REQ_NUM` to 0. Each time the base station sends a new *Service Request Message*, it shall set the `SERV_REQ_SEQ` field of the message to the current value of `SERV_REQ_NUM` and shall then set `SERV_REQ_NUM` equal to  $(\text{SERV\_REQ\_NUM} + 1) \text{ modulo } 8$ .

##### 3.6.4.1.2.1.2 Maintaining the Service Connect Sequence Number

The base station shall maintain a service connect sequence number variable, `SERV_CON_NUM`, for use with service negotiation. Upon beginning Traffic Channel processing, the base station shall set `SERV_CON_NUM` to 0. Each time the base station sends a new *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message* containing a service configuration record, it shall set the `SERV_CON_SEQ` field of the message to the current value of `SERV_CON_NUM` and shall then set `SERV_CON_NUM` equal to  $(\text{SERV\_CON\_NUM} + 1) \text{ modulo } 8$ .

#### 3.6.4.1.2.1.3 Assigning Service Option Connection References

When the base station assigns a service option connection reference for use in identifying a new service option connection during service negotiation, the base station shall use the following criteria:

1. The base station shall not assign a reference equal to '00000000'; and
2. The base station shall not assign a reference that is associated with a service option connection of the current service configuration; and
3. If there was a previous service configuration, the base station shall not assign a reference that was associated with a service option connection of the previous service configuration.

#### 3.6.4.1.2.1.4 Maintaining the Service Negotiation Indicator Variable

The base station shall maintain a service negotiation indicator variable, SERV\_NEG, to indicate which type of negotiation to use, either service negotiation or service option negotiation. The base station shall set SERV\_NEG to enabled whenever service negotiation is to be used, and shall set SERV\_NEG to disabled whenever service option negotiation is to be used. The precise rules for setting SERV\_NEG are specified in 3.6.4.2 and 3.6.6.2.2.2.

For CDMA operation in band classes other than Band Class 0, the base station shall set SERV\_NEG to enabled.

#### 3.6.4.1.2.1.5 Maintaining the Service Option Request Number

The base station shall maintain a service option request number variable, SO\_REQ, for use with service option negotiation. The base station shall set SO\_REQ to a special value, NULL, if the base station does not have an outstanding service option request. If the base station has an outstanding service option request, the base station shall set SO\_REQ to the number of the service option associated with the outstanding request.

#### 3.6.4.1.2.2 Service Subfunctions

As illustrated in Figure 3.6.4.1.2.2-1, the base station supports service configuration and negotiation by performing the following set of service subfunctions.

- *Normal Service Subfunction* - While this subfunction is active, the base station processes service configuration requests from the mobile station and sends service configuration requests to the mobile station.
- *Waiting for Service Request Message Subfunction* - While this subfunction is active, the base station waits to receive a *Service Request Message*.
- *Waiting for Service Response Message Subfunction* - While this subfunction is active, the base station waits to receive a *Service Response Message*.
- *Waiting for Service Action Time Subfunction* - While this subfunction is active, the base station waits for the action time associated with a new service configuration.

- 1       • *Waiting for Service Connect Completion Message Subfunction* - While this  
2       subfunction is active, the base station waits to receive a *Service Connect Completion*  
3       *Message*, a *Handoff Completion Message*, or an *Extended Handoff Completion*  
4       *Message*.
- 5       • *SO Negotiation Subfunction* - While this subfunction is active and the base station  
6       is operating in Band Class 0, the base station supports service option negotiation  
7       with the mobile station.

8       The *SO Negotiation Subfunction* supports service option negotiation. All of the other  
9       service subfunctions support service negotiation.

10      At any given time during Traffic Channel processing, only one of the service subfunctions  
11      is active. For example, when the base station first begins Traffic Channel processing,  
12      either the *Normal Service Subfunction* or the *SO Negotiation Subfunction* is active. Each of  
13      the other service subfunctions may become active in response to various events which  
14      occur during the Traffic Channel substates. Typically, the base station processes events  
15      pertaining to service configuration and negotiation in accordance with the requirements  
16      for the active service subfunction. However, some Traffic Channel substates do not allow  
17      for the processing of certain events pertaining to service configuration and negotiation, or  
18      specify requirements for processing such events which supersede the requirements of the  
19      active service subfunction.

20

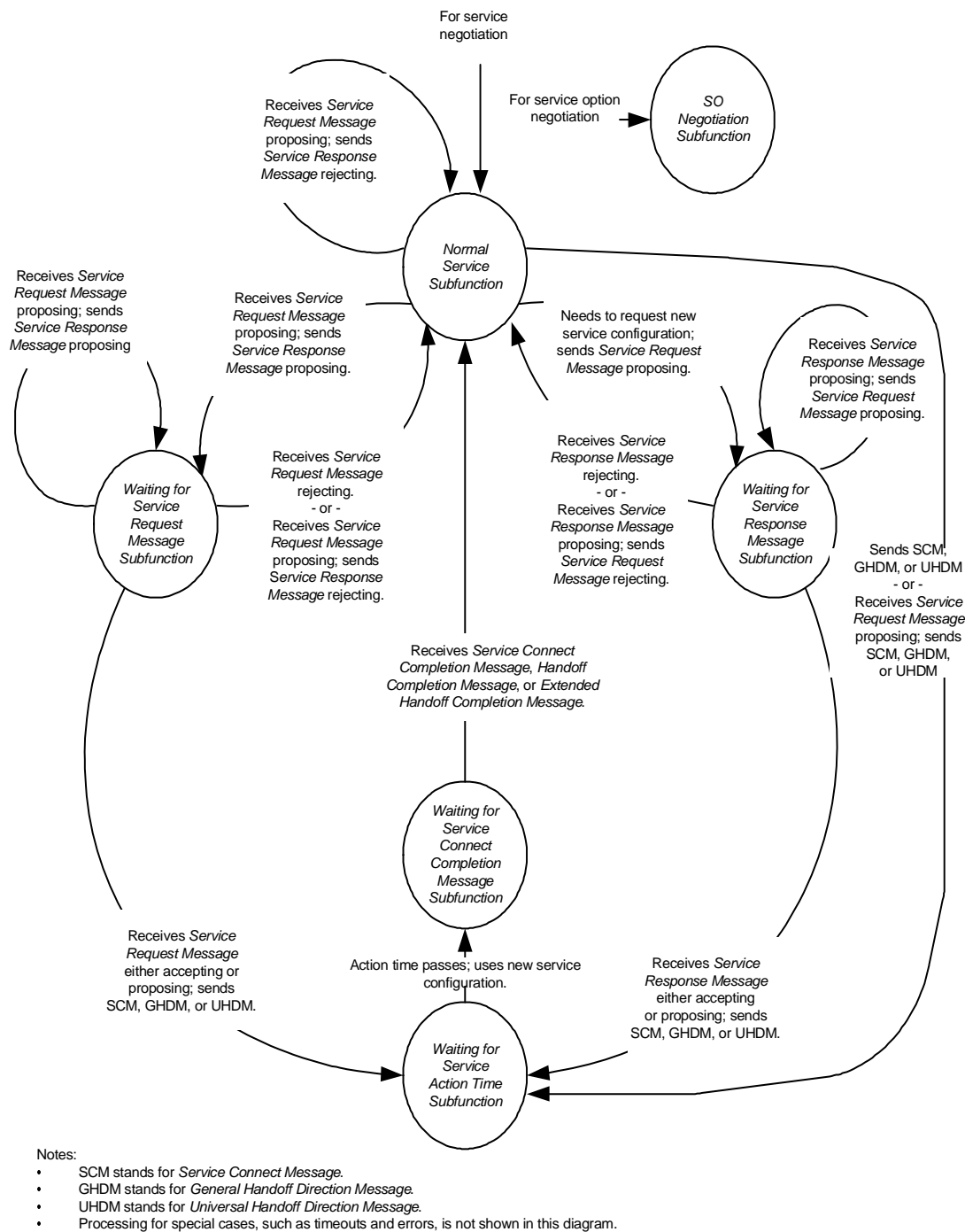


Figure 3.6.4.1.2.2-1. Base Station Service Subfunctions

#### 3.6.4.1.2.2.1 Normal Service Subfunction

While this subfunction is active, the base station processes service configuration requests from the mobile station and sends service configuration requests to the mobile station.

While the *Normal Service Subfunction* is active, the base station shall perform the following:

- The base station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The base station shall discard any Reverse Traffic Channel frame which has a format that is not supported by the base station. The base station may discard any type of Reverse Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.
- To initiate service negotiation for a new service configuration, the base station shall send a *Service Request Message* to propose the new service configuration and shall activate the *Waiting for Service Response Message Subfunction*.
- For any service option connection that is part of the current service configuration, the base station may send a *Service Option Control Message* to invoke a service option specific function in accordance with the requirements for the associated service option.
- The base station may send a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message* containing a service configuration record. If the base station sends this message, the base station shall activate the *Waiting for Service Action Time Subfunction*.
- If SERV\_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- If the base station receives one of the following service negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. *Service Connect Completion Message*
  2. *Service Option Control Message*: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the base station shall process the message in accordance with the requirements for the service option.
  3. *Service Request Message*: The base station shall process the message as follows:
    - If the purpose of the message is to propose a service configuration, the base station shall process the message as follows:



- If the base station accepts the proposed service configuration, the base station shall send a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message* containing a service configuration record and shall activate the *Waiting for Service Action Time Subfunction*.
- If the base station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the base station shall send a *Service Response Message* to reject the proposed service configuration.
- If the base station does not accept the proposed service configuration and has an alternative service configuration to propose, the base station shall perform one of the following actions:
  - Send a *Service Response Message* to propose the alternative service configuration and shall activate the *Waiting for Service Request Message Subfunction*, or
  - Send a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message* containing a service configuration record and shall activate the *Waiting for Service Action Time Subfunction*

#### 4. *Service Response Message*

- If the base station receives one of the following service option negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. *Service Option Request Order*
  2. *Service Option Response Order*
  3. *Service Option Control Order*

#### 3.6.4.1.2.2.2 *Waiting for Service Request Message Subfunction*

While this subfunction is active, the base station waits to receive a *Service Request Message*.

While the *Waiting for Service Request Message Subfunction* is active, the base station shall perform the following:

- If the base station does not receive a *Service Request Message*, the base station shall activate the *Normal Service Subfunction*.

- 1       • The base station shall process Forward and Reverse Traffic Channel frames in  
2       accordance with the current service configuration. The base station shall discard  
3       any Reverse Traffic Channel frame which has a format that is not supported by the  
4       base station. The base station may discard any type of Reverse Traffic Channel  
5       traffic that is not signaling traffic and is not part of the current service  
6       configuration.
- 7       • For any service option connection that is part of the current service configuration,  
8       the base station may send a *Service Option Control Message* to invoke a service  
9       option specific function in accordance with the requirements for the associated  
10      service option.
- 11      • If SERV\_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and  
12      3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- 13      • If the base station receives one of the following service negotiation messages, the  
14      base station shall process the message according to the specified requirements, if  
15      any:
  - 16      1. *Service Connect Completion Message*
  - 17      2. *Service Option Control Message*: If the service option connection specified by  
18      the message is part of the current service configuration, and the service option  
19      specified by the message is the same as the service option associated with the  
20      service option connection, the base station shall process the message in  
21      accordance with the requirements for the service option.
  - 22      3. *Service Request Message*: The base station shall process the message as  
23      follows:
    - 24      • If the purpose of the message is to accept a proposed service configuration,  
25      the base station shall perform one of the following actions:
      - 26      – The base station shall send a *Service Connect Message*, *General Handoff*  
27      *Direction Message*, or *Universal Handoff Direction Message* and shall  
28      activate the *Waiting for Service Action Time Subfunction*.
      - 29      – The base station shall send a *Service Request Message* to propose an  
30      alternative service configuration and shall activate the *Waiting for*  
31      *Service Response Message Subfunction*.
    - 32      • If the purpose of the message is to reject a proposed service configuration,  
33      the base station shall activate the *Normal Service Subfunction*.
    - 34      • If the purpose of the message is to propose a service configuration, the base  
35      station shall process the message as follows:
      - 36      – If the base station accepts the proposed service configuration, the base  
37      station shall send a *Service Connect Message*, a *General Handoff*  
38      *Direction Message*, or a *Universal Handoff Direction Message* containing  
39      a service configuration record and shall activate the *Waiting for Service*  
40      *Action Time Subfunction*.

- 1                   – If the base station does not accept the proposed service configuration  
2                   and does not have an alternative service configuration to propose, the  
3                   base station shall send a *Service Response Message* to reject the  
4                   proposed service configuration. The base station shall activate the  
5                   *Normal Service Subfunction*.
- 6                   – If the base station does not accept the proposed service configuration  
7                   and has an alternative service configuration to propose, the base station  
8                   shall perform one of the following actions:
  - 9                   o Send a *Service Response Message* to propose the alternative service  
10                   configuration, or
  - 11                   o Send a *Service Connect Message*, a *General Handoff Direction*  
12                   *Message*, or a *Universal Handoff Direction Message* containing a  
13                   service configuration record and shall activate the *Waiting for Service*  
14                   *Action Time Subfunction*

#### 15           4. *Service Response Message*

- 16           • If the base station receives one of the following service option negotiation messages,  
17           the base station shall process the message according to the specified requirements,  
18           if any:
  - 19           1. *Service Option Request Order*
  - 20           2. *Service Option Response Order*
  - 21           3. *Service Option Control Order*

#### 22   3.6.4.1.2.2.3 *Waiting for Service Response Message Subfunction*

23   While this subfunction is active, the base station waits to receive a *Service Response*  
24   *Message*.

25   While the *Waiting for Service Response Message Subfunction* is active, the base station  
26   shall perform the following:

- 27           • If the base station does not receive a *Service Response Message*, the base station  
28           shall activate the *Normal Service Subfunction*.
- 29           • The base station shall process Forward and Reverse Traffic Channel frames in  
30           accordance with the current service configuration. The base station shall discard  
31           any Reverse Traffic Channel frame which has a format that is not supported by the  
32           base station. The base station may discard any type of Reverse Traffic Channel  
33           traffic that is not signaling traffic and is not part of the current service  
34           configuration.
- 35           • For any service option connection that is part of the current service configuration,  
36           the base station may send a *Service Option Control Message* to invoke a service  
37           option specific function in accordance with the requirements for the associated  
38           service option.

- 1 • If SERV\_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and  
2 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- 3 • If the base station receives one of the following service negotiation messages, the  
4 base station shall process the message according to the specified requirements, if  
5 any:
  - 6 1. *Service Connect Completion Message*
  - 7 2. *Service Option Control Message*: If the service option connection specified by  
8 the message is part of the current service configuration, and the service option  
9 specified by the message is the same as the service option associated with the  
10 service option connection, the base station shall process the message in  
11 accordance with the requirements for the service option.
  - 12 3. *Service Request Message*: The base station should not process the Layer 3  
13 fields of the message.
  - 14 4. *Service Response Message*: The base station shall process the message as  
15 follows:
    - 16 • If the service request sequence number (SERV\_REQ\_SEQ) from the message  
17 does not match the sequence number of the *Service Request Message* for  
18 which the base station is expecting a response, the base station shall not  
19 process the Layer 3 fields of the message.
    - 20 • If the purpose of the message is to accept a proposed service configuration,  
21 the base station shall perform one of the following actions:
      - 22 – The base station shall send a *Service Connect Message*, a *General*  
23 *Handoff Direction Message*, or a *Universal Handoff Direction Message*  
24 containing a service configuration record and shall activate the *Waiting*  
25 *for Service Action Time Subfunction*. Or
      - 26 – The base station shall send a *Service Request Message* to propose an  
27 alternative service configuration.
    - 28 • If the purpose of the message is to reject a proposed service configuration,  
29 the base station shall activate the *Normal Service Subfunction*.
    - 30 • If the purpose of the message is to propose a service configuration, the base  
31 station shall process the message as follows:
      - 32 – If the base station accepts the proposed service configuration, the base  
33 station shall send a *Service Connect Message*, a *General Handoff*  
34 *Direction Message*, or a *Universal Handoff Direction Message* containing  
35 a service configuration record and shall activate the *Waiting for Service*  
36 *Action Time Subfunction*.

- 1                   – If the base station does not accept the proposed service configuration  
2                   and does not have an alternative service configuration to propose, the  
3                   base station shall send a *Service Request Message* to reject the proposed  
4                   service configuration. The base station shall activate the *Normal Service*  
5                   *Subfunction*.
- 6                   – If the base station does not accept the proposed service configuration  
7                   and has an alternative service configuration to propose, the base station  
8                   shall perform one of the following actions:
  - 9                   o Send a *Service Request Message* to propose the alternative service  
10                   configuration, or
  - 11                   o Send a *Service Connect Message*, a *General Handoff Direction*  
12                   *Message*, or a *Universal Handoff Direction Message* containing a  
13                   service configuration record and shall activate the *Waiting for Service*  
14                   *Action Time Subfunction*
- 15           • If the base station receives one of the following service option negotiation messages,  
16           the base station shall process the message according to the specified requirements,  
17           if any:
  - 18           1. *Service Option Request Order*
  - 19           2. *Service Option Response Order*
  - 20           3. *Service Option Control Order*

#### 21   3.6.4.1.2.2.4 Waiting for Service Action Time Subfunction

22   While this subfunction is active, the base station waits for the action time associated with  
23   a new service configuration.

24   While the *Waiting for Service Action Time Subfunction* is active, the base station shall  
25   perform the following:

- 26           • Prior to the action time associated with the *Service Connect Message*, a *General*  
27           *Handoff Direction Message*, or *Universal Handoff Direction Message* containing a  
28           service configuration record, the base station shall process Forward and Reverse  
29           Traffic Channel frames in accordance with the current service configuration. The  
30           base station shall discard any Reverse Traffic Channel frame which has a format  
31           that is not supported by the base station. The base station may discard any type of  
32           Reverse Traffic Channel traffic that is not signaling traffic and is not part of the  
33           current service configuration.

- At the action time associated with the *Service Connect Message*, *General Handoff Direction Message*, or *Universal Handoff Direction Message* containing a service configuration record, the base station shall begin to use the service configuration specified by the *Service Connect Message*, the *General Handoff Direction Message*, or the *Universal Handoff Direction Message* containing a service configuration record, as the current service configuration and shall begin to process Forward and Reverse Traffic Channel frames accordingly. The base station shall activate the *Waiting for Service Connect Completion Message Subfunction*.
- If SERV\_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- If the base station receives one of the following service negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. *Service Connect Completion Message*
  2. *Service Option Control Message*: If the service option connection specified by the message is part of the current or pending service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the base station shall process the message in accordance with the requirements for the service option.
  3. *Service Request Message*
  4. *Service Response Message*
- If the base station receives one of the following service option negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. *Service Option Request Order*
  2. *Service Option Response Order*
  3. *Service Option Control Order*

#### 3.6.4.1.2.2.5 Waiting for Service Connect Completion Message Subfunction

While this subfunction is active, the base station waits to receive a *Service Connect Completion Message*, a *Handoff Completion Message*, or an *Extended Handoff Completion Message*.

While the *Waiting for Service Connect Completion Message Subfunction* is active, the base station shall perform the following:

- If the base station has sent a *Service Connect Message* and does not receive a *Service Connect Completion Message*, or if the base station has sent a *General Handoff Direction Message* or a *Universal Handoff Direction Message* containing a Service Configuration record and does not receive a *Handoff Completion Message*, or an *Extended Handoff Completion Message*, the base station shall activate the *Normal Service Subfunction*.

- 1 • The base station shall process Forward and Reverse Traffic Channel frames in  
2 accordance with the current service configuration. The base station shall discard  
3 any Reverse Traffic Channel frame which has a format that is not supported by the  
4 base station. The base station may discard any type of Reverse Traffic Channel  
5 traffic that is not signaling traffic and is not part of the current service  
6 configuration.
- 7 • The base station shall not initiate service negotiation for a new service  
8 configuration.
- 9 • If SERV\_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and  
10 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- 11 • If the base station receives one of the following service negotiation messages, the  
12 base station shall process the message according to the specified requirements, if  
13 any:
  - 14 1. *Service Connect Completion Message, Handoff Completion Message, or Extended*  
15 *Handoff Completion Message*: The base station shall activate the *Normal*  
16 *Service Subfunction*.
  - 17 2. *Service Option Control Message*: If the service option connection specified by  
18 the message is part of the current service configuration, and the service option  
19 specified by the message is the same as the service option associated with the  
20 service option connection, the base station shall process the message in  
21 accordance with the requirements for the service option.
  - 22 3. *Service Request Message*
  - 23 4. *Service Response Message*
- 24 • If the base station receives one of the following service option negotiation messages,  
25 the base station shall process the message according to the specified requirements,  
26 if any:
  - 27 1. *Service Option Request Order*
  - 28 2. *Service Option Response Order*
  - 29 3. *Service Option Control Order*

#### 30 3.6.4.1.2.2.6 SO Negotiation Subfunction

31 While this subfunction is active, the base station supports service option negotiation with  
32 the mobile station.

33 Upon activating the *SO Negotiation Subfunction*, the base station shall set SO\_REQ to  
34 NULL. The base station shall delete from the current service configuration any service  
35 option connection which does not use primary traffic on both the Forward and Reverse  
36 Traffic Channels.

37 While the *SO Negotiation Subfunction* is active, the base station shall perform the following:

- 1       • If the current service configuration includes a service option connection, the base  
2       station shall process the received primary traffic bits in accordance with the  
3       requirements for the service option associated with the service option connection;  
4       otherwise, the base station shall discard the received primary traffic bits.
- 5       • If the current service configuration includes a service option connection, the base  
6       station shall transmit primary traffic bits in accordance with the requirements for  
7       the service option associated with the service option connection; otherwise, the  
8       base station shall transmit null traffic and power control bits on the Forward  
9       Fundamental Channel, if the Fundamental channel is present to transmit power  
10      control bits on the Forward Dedicated Control Channel, if only the Dedicated  
11      Control Channel is present.
- 12      • If the current service configuration includes a service option connection, the base  
13      station may send a *Service Option Control Order* to invoke a service option specific  
14      function in accordance with the requirements for the service option associated with  
15      the service option connection.
- 16      • To initiate service option negotiation, the base station shall set SO\_REQ to the  
17      number of the requested service option and shall send a *Service Option Request*  
18      *Order* containing the requested service option number.
- 19      • If SERV\_NEG changes from disabled to enabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and  
20      3.6.6.2.2.11), the base station shall activate the *Normal Service Subfunction*.
- 21      • The base station shall process a service option request received in an *Origination*  
22      *Message*, a *Page Response Message*, or a *Service Option Request Order* as follows:
  - 23       – If the base station accepts the requested service option, the base station shall  
24       set SO\_REQ to NULL and shall send a *Service Option Response Order* accepting  
25       the requested service option within  $T_{4b}$  seconds. The base station shall begin  
26       using the service configuration implied by the requested service option in  
27       accordance with the requirements for the requested service option. The implied  
28       service configuration shall include the default Forward and Reverse Multiplex  
29       Options and transmission radio configurations associated with the requested  
30       service option. This implied service configuration shall include one service  
31       option connection for which the service option connection reference is 1, for  
32       which the service option is the requested service option, and for which the  
33       Forward and Reverse Traffic Channel types are both primary traffic.
  - 34       – If the base station does not accept the requested service option and has an  
35       alternative service option to request, the base station shall set SO\_REQ to the  
36       alternative service option number and shall send a *Service Option Request Order*  
37       requesting the alternative service option within  $T_{4b}$  seconds.
  - 38       – If the base station does not accept the requested service option and does not  
39       have an alternative service option to request, the base station shall set SO\_REQ  
40       to NULL and shall send a *Service Option Response Order* to reject the request  
41       within  $T_{4b}$  seconds. The base station shall continue to use the current service  
42       configuration.



- 1     • If the base station receives a *Service Option Response Order*, it shall process the  
2     order as follows:
  - 3       – If the service option number specified in the order is equal to SO\_REQ, the base  
4       station shall set SO\_REQ to NULL and shall begin using the service  
5       configuration implied by the specified service option in accordance with the  
6       requirements for the service option. The implied service configuration shall  
7       include the default Forward and Reverse Multiplex Options and radio  
8       configurations associated with the requested service option. This implied  
9       service configuration shall include one service option connection for which the  
10      service option connection reference is 1, for which the service option is the  
11      requested service option, and for which the Forward and Reverse Traffic  
12      Channel types are both primary traffic.
  - 13      – If the order indicates a service option rejection, the base station shall set  
14      SO\_REQ to NULL. The base station shall continue to use the current service  
15      configuration.
  - 16      – If the order does not indicate a service option rejection and the service option  
17      specified in the order is not equal to SO\_REQ, the base station shall set  
18      SO\_REQ to NULL, should send a *Release Order* (ORDQ = '00000010'), and  
19      should enter the *Release Substate*.
- 20   • If the base station receives a *Service Option Control Order*, the base station shall  
21   process the order as follows:
  - 22      – If the current service configuration includes a service option connection, the  
23      base station shall process the received *Service Option Control Order* in  
24      accordance with the requirements for the service option associated with the  
25      service option connection.
- 26   • If the base station receives one of the following service negotiation messages, the  
27   base station shall process the message according to the specified requirements, if  
28   any:
  - 29      1. *Service Connect Completion Message*
  - 30      2. *Service Option Control Message*
  - 31      3. *Service Request Message*
  - 32      4. *Service Response Message*

#### 33   3.6.4.1.3 Ordering of Messages

34   The Layer 2 protocol does not guarantee delivery of messages in any order. If the base  
35   station requires that the mobile station receive a set of messages in a certain order, the  
36   base station shall send each message in assured mode requiring confirmation of delivery  
37   and shall wait for the confirmation of delivery of each message before transmitting the next  
38   message in the set.

#### 3.6.4.1.4 Message Action Times

A Forward Traffic Channel message without a USE\_TIME field or with a USE\_TIME field set to '0' has an implicit action time. A message that has its USE\_TIME field set to '1' has an explicit action time that is specified in the ACTION\_TIME field of the message.

A message with an explicit action time is called a pending message.

Unless otherwise specified, a message having an implicit action time shall take effect no later than the first 80 ms boundary (relative to System Time plus  $\text{FRAME\_OFFSET}_S \times 1.25$  ms) occurring at least 80 ms after the end of the frame containing the last bit of the message. A message with an explicit action time, except for a *Power Up Function Message*, shall take effect when System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$  ms (in 80 ms units) modulo 64 becomes equal to the message's ACTION\_TIME field. A *Power Up Function Message* shall take effect ACTION\_TIME\_FRAME frames after the time when System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$  ms (in 80 ms units) modulo 64 becomes equal to the message's ACTION\_TIME field. The difference in time between ACTION\_TIME and the end of the frame containing the last bit of the message shall be at least 80 ms.

The base station shall support two pending messages at any given time, not including pending *Service Option Control Orders*, *Service Option Control Messages*, or *Power Up Function Messages*. The number of pending *Service Option Control Orders* or *Service Option Control Messages* that the base station is required to support is specific to the service option (see the relevant service option descriptions). In addition, the base station shall support one pending *Power Up Function Message*.

#### 3.6.4.1.5 Long Code Transition Request Processing

If a request for voice privacy is specified in the *Origination Message* or *Page Response Message*, the base station may send a *Long Code Transition Request Order* (ORDQ = '00000001') requesting a transition to the private long code.

The base station shall process the *Long Code Transition Request Order* as follows:

- If the *Long Code Transition Request Order* requests a transition to the private long code and the base station accepts the request, the base station shall send a *Long Code Transition Request Order* (ORDQ = '00000001'). If the base station does not accept the private long code transition request, the base station shall send a *Long Code Transition Request Order* (ORDQ = '00000000').
- If the *Long Code Transition Request Order* requests a transition to the public long code and the base station accepts the request, the base station shall send a *Long Code Transition Request Order* (ORDQ = '00000000'). If the base station does not accept the public long code transition request, the base station shall send a *Long Code Transition Request Order* (ORDQ = '00000001').

The base station shall process the *Long Code Transition Response Order* as follows:

- If the *Long Code Transition Response Order* indicates that the mobile station accepts the long code transition requested in the *Long Code Transition Request Order* sent by the base station, the base station shall use the requested long code mask on both the Forward Traffic Channel and the Reverse Traffic Channel. The base station shall specify an explicit action time in the *Long Code Transition Request Order*. The base station shall begin using the requested long code mask using the explicit action time (see 3.6.4.1.4).

#### 3.6.4.1.6 Processing Resource Request Messages

The base station shall process *Resource Request Message* and *Resource Request Mini Message*, as follows:

- The base station may send one of the messages that assign appropriate resources (e.g. *Extended Supplemental Channel Assignment Message*, *Resource Allocation Message*, *Resource Allocation Mini Message*, *Universal Handoff Direction Message*, *Retry Order*, etc) to the mobile station. If the base station sends one of these messages and a Forward Packet Data Channel is not assigned, the base station shall set PILOT\_GATING\_USE\_RATE to '0' and start transmitting the Forward Power Control Subchannel with the maximum rate at the action time of the message.
- The base station may send a *Retry Order* to the mobile station.

#### 3.6.4.1.7 Response to Enhanced Origination Message

If the base station receives an *Enhanced Origination Message*, the base station should perform the following:

- If the base station does not accept this call request from the mobile station, the base station should send one of the following messages:
  - + A *Call Assignment Message* to the mobile station, with the RESPONSE\_IND field set to '1', the ACCEPT\_IND field set to '0', and the TAG field set to the value of the TAG or ADD\_TAG field of the *Enhanced Origination Message*.
  - + A *Retry Order* if the *Enhanced Origination Message* is for a packet data service option.
- If the base station accepts this call request from the mobile station, the base station should send a *Call Assignment Message*, *Service Connect Message*, or *Universal Handoff Direction Message* (with the Service Configuration information record included) to assign the call:
  - If the GLOBAL\_EMERGENCY\_CALL indicator is set to '1' and the service associated with this origination is a voice service, the base station shall recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits. If the base station receives an *Origination Message* and the GLOBAL\_EMERGENCY\_CALL indicator is set to '1' and the service associated with this origination is not a voice service, the base station may recognize this

as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits.

- If the *Enhanced Origination Message* includes a SYNC\_ID field, then based on the value of the SYNC\_ID received, the base station may instruct the mobile station to restore one or more of the service option connections from the stored service configuration, and if so, the base station shall send a *Call Assignment Message*, *Universal Handoff Direction Message*, or *Service Connect Message* to the mobile station as follows:
  - + If the base station sends a *Call Assignment Message*, the base station shall perform the following:
    - o The base station shall set the RESPONSE\_IND field to '1', the ACCEPT\_IND field to '1', and the TAG field to the value of the TAG or ADD\_TAG field of the *Enhanced Origination Message*.
    - o The base station shall set the USE\_OLD\_SERV\_CONFIG field to '1'.
  - + If the base station sends a *Service Connect Message*, the base station shall perform the following:
    - o The base station shall set the USE\_OLD\_SERV\_CONFIG field to '11'.
  - + If the mobile station is to restore all remaining service option connections from the stored service configuration, the base station shall set the SR\_ID field to '111'; if the mobile station is to restore more than one but not all remaining service option connections from the stored service configuration, the base station shall set the SR\_ID field to '000' and the SR\_ID\_RESTORE\_BITMAP field to the bitmap of service reference identifiers corresponding to the service option connections to be restored; otherwise, the base station shall set the SR\_ID field to the service reference identifier corresponding to the service option connection to be restored.
  - + At the action time corresponding to this message, the base station shall restore the indicated service option connection(s) from the stored service configuration; Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8) for each of the restored service option connections with a 'restore indication' and Layer 3 shall identify each of these Call Control instances by the value of the CON\_REF field corresponding to the restored service option connection.
- If the base station sends a *Call Assignment Message* to assign the call, the base station shall perform the following:
  - + The base station shall set the RESPONSE\_IND field to '1', the ACCEPT\_IND field to '1', and the TAG field to the value of the TAG or ADD\_TAG field of the *Enhanced Origination Message*. The base station shall set the CON\_REF\_INCL field of the message to '1' and the CON\_REF field of the message to the value of the connection reference of the service option connection corresponding to this call.

- 1           + A service option connection corresponding to this call (if not already  
2           established) shall be established by performing service negotiation; the base  
3           station should initiate service negotiation to establish the service option  
4           connection, if permitted by the current service negotiation subfunction.
  
- 5           + At the action time corresponding to this message, the Layer 3 shall  
6           instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall  
7           identify this Call Control instance by the value of the CON\_REF field  
8           included in the *Call Assignment Message*.
  
- 9           – If the base station sends a *Service Connect Message* or a *Universal Handoff*  
10          *Direction Message* (with the Service Configuration information record included),  
11          to assign the call, the base station shall perform the following:
  - 12           + The base station shall set the call control parameters corresponding to this  
13           call included in the message as follows: The base station shall set the  
14           RESPONSE\_IND field to '1', and the TAG field to the value of the TAG or  
15           ADD\_TAG field of the *Enhanced Origination Message*.
  
  - 16           + At the action time corresponding to this message, the Layer 3 shall  
17           instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall  
18           identify this Call Control instance by the value of the CON\_REF assigned to  
19           the service option connection corresponding to this call.

#### 20   3.6.4.1.8 Processing Resource Release Request Message and Resource Release Request 21   Mini Message

22   The base station may perform the following in response to receiving a *Resource Release*  
23   *Request Message* or a *Resource Release Request Mini Message* from the mobile station:

- 24          • If the mobile station requests to release a service option connection, the base  
25          station may send a *Service Connect Message*, *General Handoff Direction Message*,  
26          or a *Universal Handoff Direction Message* to release the service option connection.
  
- 27          • If the mobile station requests to commence reverse pilot gating operation, the base  
28          station may send a *Extended Release Message*, *Extended Release Mini Message*, or  
29          a *Universal Handoff Direction Message* to instruct the mobile station to commence  
30          the reverse pilot gating operation.

#### 31   3.6.4.1.9 Processing Base Station Status Request Message

32   If the requested RECORD\_TYPE equals '00000000' (Pilot Information), the base station  
33   should send a *Base Station Status Response Message* with a RECORD\_TYPE of '00000000'  
34   (Pilot Information) to the mobile station:

- 35          • For each pilot being requested by the mobile station, the base station shall include  
36          the corresponding Base Station Identification number.

- If SID and NID information is being requested by the mobile station, the base station shall include the SID and NID information corresponding to these pilots.
- If LAT and LONG information is being requested by the mobile station, the base station should include the LAT and LONG information corresponding to these pilots.

#### 3.6.4.1.10 Base Station assigned PLCM

If PLCM\_TYPE field is included in *Extended Channel Assignment Message* or *Universal Handoff Direction Message* and is set to '0001', the base station shall include PLCM\_39 field in the message and shall set it as follows:

P38 P37 are set as specified in the Table 3.6.4.1.10-1:

**Table 3.6.4.1.10-1. The Base Station Assigned Public Long Code Mask Type**

<b>P38 P37 (binary)</b>	<b>Descriptions</b>
00	Proprietary Approach
01	Latitude-Longitude Approach
10	Reserved
11	Reserved

If P38 P37 is equal to '01'; the base station shall set the fields as follows:

$P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, P_{31}, P_{30}, P_{29}, P_{28}, P_{27}, P_{26} = ((\text{BASE\_LONG} \gg 5) \times \cos|\text{BASE\_LAT}|) \bmod (2^{11})$ ,

$P_{25}, P_{24}, P_{23}, P_{22}, P_{21}, P_{20}, P_{19}, P_{18}, P_{17}, P_{16}, P_{15} = (\text{BASE\_LAT} \gg 5) \bmod (2^{11})$ ,

$P_{14}, P_{13}, \dots, P_2, P_1, P_0$  = identifiers assigned by the base station,

where:

BASE\_LONG is the longitude of the base station in units of 0.25 seconds, expressed as a two's complement signed number with positive numbers signifying East longitude, and,

BASE\_LAT is the latitude of the base station in units of 0.25 seconds, expressed as a two's complement signed number with positive numbers signifying North latitudes.

#### 3.6.4.2 Traffic Channel Initialization Substate

In this substate, the base station begins transmitting on the Forward Traffic Channel and acquires the Reverse Traffic Channel.

Upon entering the *Traffic Channel Initialization Substate*, the base station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to reset the message acknowledgment procedures as specified in [4].
- The base station shall set its Forward and Reverse Traffic Channel long code masks to the public long code mask (see [2]).
- The base station shall set its Forward and Reverse Traffic Channel frame offsets (see [2]) to the frame offset assigned to the mobile station.
- If the base station set the ASSIGN\_MODE field of the *Channel Assignment Message* to '000', the base station shall set SERV\_NEG to disabled. If the base station set the ASSIGN\_MODE field of the *Channel Assignment Message* to '100', the base station shall set SERV\_NEG to enabled. For operation in band classes other than Band Class 0, SERV\_NEG is always equal to enabled.
- If the base station uses the *Extended Channel Assignment Message*, the base station shall set the SERV\_NEG to enabled.
- The base station shall determine the initial service configuration as follows:
  - If SERV\_NEG is equal to disabled, the initial service configuration shall include Multiplex Option 1 and Radio Configuration 1 for both the Forward and Reverse Traffic Channels, and shall include no service option connections.
  - If SERV\_NEG is equal to enabled and the base station sets the GRANTED\_MODE field of the *Channel Assignment Message* or the *Extended Channel Assignment Message* to '00', the initial service configuration shall include the multiplex option and radio configuration for the Forward and Reverse Traffic Channels as specified by the DEFAULT\_CONFIG field, and shall include no service option connections.
  - If SERV\_NEG is equal to enabled and the base station sets the GRANTED\_MODE field of the *Extended Channel Assignment Message* to '01' or '10', the initial service configuration shall include the default Forward and Reverse Traffic Channel multiplex options that are derived from the radio configurations corresponding to Table 3.7.2.3.2.21-3 and shall include no service option connections.

- 1       – If SERV\_NEG is equal to enabled and the base station sets the  
2       GRANTED\_MODE field of the *Channel Assignment Message* to '01' or '10', the  
3       initial service configuration shall include the default Forward and Reverse  
4       Traffic Channel multiplex options and transmission rates corresponding to the  
5       service option requested by the mobile station in the *Origination Message*, in  
6       the case of a mobile station originated call, or the *Page Response Message*, in  
7       the case of a mobile station terminated call, and shall include no service option  
8       connections.
  - 9       – If SERV\_NEG is equal to enabled and the base station sets the  
10      GRANTED\_MODE field of the *Extended Channel Assignment Message* to '11',  
11      the base station shall begin to use the stored service configuration  
12      corresponding to the SYNC\_ID conveyed to the mobile station as the current  
13      service configuration and shall begin to process Forward and Reverse Traffic  
14      Channel frames accordingly. The set of service option connections to be  
15      restored are determined as follows:
    - 16       + If the base station sets the SR\_ID\_RESTORE field of the *Extended Channel*  
17       *Assignment Message* to '111', the base station shall restore all the service  
18       option connections from the stored service configuration.
    - 19       + If the base station sets the SR\_ID\_RESTORE field of the *Extended Channel*  
20       *Assignment Message* to '000', the base station shall restore the service  
21       option connections indicated by the SR\_ID\_RESTORE\_BITMAP field of the  
22       *Extended Channel Assignment Message* from the stored service  
23       configuration.
    - 24       + Otherwise, the base station shall restore the service option connection  
25       corresponding to the SR\_ID field of the *Extended Channel Assignment*  
26       *Message* from the stored service configuration.
  - 27      • If SERV\_NEG is equal to disabled, the base station shall activate the *SO Negotiation*  
28      *Subfunction* (see 3.6.4.1.2.2.6); otherwise, the base station shall activate the *Normal*  
29      *Service Subfunction* (see 3.6.4.1.2.2.1).
  - 30      • The base station shall set PILOT\_GATING\_USE\_RATE to '0'.
- 31 While in the *Traffic Channel Initialization Substate*, the base station shall perform the  
32 following:
- 33      • If the Forward Fundamental Channel is assigned, the base station shall transmit  
34      null Traffic Channel data on the Forward Fundamental Channel, except when  
35      transmitting signaling traffic.
  - 36      • If F-CPCCH is assigned, the base station shall transmit power control bits on the F-  
37      CPCCH; otherwise, if FPC\_PRI\_CHAN is set to '0', the base station shall transmit  
38      power control bits on the Forward Fundamental Channel. If FPC\_PRI\_CHAN is set  
39      to '1', the base station shall transmit power control bits on the Forward Dedicated  
40      Control Channel.



- 1 • If the base station acquires the Reverse Traffic Channel, Layer 3 shall send a  
2 reverse dedicated channel acquired indication to Layer 2 (see [4]). The base station  
3 shall perform the following:
  - 4 – If SERV\_NEG is equal to enabled and the base station sets the  
5 GRANTED\_MODE field of the *Extended Channel Assignment Message* to '11',  
6 the base station shall perform the following:
    - 7 + For each service option connection (with corresponding connection  
8 reference CON\_REF<sub>i</sub>) in the stored service configuration record, Layer 3  
9 shall instantiate a Call Control instance (as specified in 3.6.8) with a 'restore  
10 indication'. The base station shall identify each of these Call Control  
11 instances by the corresponding CON\_REF<sub>i</sub>. Furthermore, the base station  
12 shall also identify the Call Control instance corresponding to the first  
13 service option connection listed in this restored Service Configuration  
14 information record by the NULL identifier.
  - 15 – Otherwise, the base station shall perform the following:
    - 16 + The Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8).  
17 The Layer 3 shall assign the default identifier of NULL to this Call Control  
18 instance. The Layer 3 shall enter the *Traffic Channel Substate*.
- 19 • If the base station fails to acquire the Reverse Traffic Channel, the base station  
20 should perform one of the following:
  - 21 – retransmit the *Channel Assignment Message* or the *Extended Channel*  
22 *Assignment Message* on the Paging Channel and remain in the *Traffic Channel*  
23 *Initialization Substate*
  - 24 – retransmit the *Extended Channel Assignment Message* on the Forward Common  
25 Control Channel and remain in the *Traffic Channel Initialization Substate*, or
  - 26 – disable transmission on the Forward Traffic Channel and discontinue the  
27 *Traffic Channel Processing* for the mobile station.

#### 28 3.6.4.3 Traffic Channel Substate

29 In this substate, the base station may exchange Traffic Channel frames with the mobile  
30 station in accordance with the current service configuration.

31 Upon entering the *Traffic Channel Substate*, the base station shall perform the following:

- 32 • If SERV\_NEG is equal to enabled and the base station sets the GRANTED\_MODE  
33 field of the *Extended Channel Assignment Message* to '11', the base station should  
34 not send a *Service Connect Message* to the mobile station.
- 35 • If the call is a mobile station terminated call and the base station set  
36 BYPASS\_ALERT\_ANSWER to '0', the base station shall perform the following:

- 1       – If SERV\_NEG is equal to disabled, the base station shall process the service  
2       option request specified in the *Page Response Message* in accordance with the  
3       requirements for the active service subfunction (see 3.6.4.1.2.2).
- 4       – If SERV\_NEG is equal to enabled and the base station sets the  
5       GRANTED\_MODE field of the *Channel Assignment Message* or the *Extended*  
6       *Channel Assignment Message* to '00' or '01', the base station should initiate  
7       service negotiation to request a service configuration in accordance with the  
8       requirements for the active service subfunction (see 3.6.4.1.2.2).
- 9       – If SERV\_NEG is equal to enabled and the base station sets the  
10       GRANTED\_MODE field of the *Channel Assignment Message* or the *Extended*  
11       *Channel Assignment Message* to '10', the base station should send a *Service*  
12       *Connect Message* in accordance with the requirements for the active service  
13       subfunction (see 3.6.4.1.2.2).
- 14       • Otherwise, the base station shall perform the following:
  - 15       – If SERV\_NEG equals enabled, the call is mobile-station-originated and the base  
16       station sets the GRANTED\_MODE field of the *Channel Assignment Message* or  
17       the *Extended Channel Assignment Message* to '10', the base station should  
18       send a *Service Connect Message* in accordance with the requirements for the  
19       active service subfunction (see 3.6.4.1.2.2).
  - 20       – If SERV\_NEG equals disabled and the call is mobile-station-originated, the base  
21       station shall process the service option request specified in the *Origination*  
22       *Message* in accordance with the requirements for the active service subfunction  
23       (see 3.6.4.1.2.2).
- 24   While in the *Traffic Channel Substate*, the base station shall perform the following:
  - 25       • The base station shall transmit the power control subchannel as specified in [2].
  - 26       • The base station shall process Forward and Reverse Traffic Channel frames in  
27       accordance with the requirements for the active service subfunction (see  
28       3.6.4.1.2.2).
  - 29       • When PILOT\_GATING\_USE\_RATE is equal to '0' and the base station is to establish  
30       a Forward or Reverse Fundamental Channel or a Forward or Reverse Dedicated  
31       Control Channel, or a Forward Packet Data Channel, the base station shall send a  
32       *Universal Handoff Direction Message* to the mobile station.
  - 33       • When a Forward Packet Data Channel is not assigned, PILOT\_GATING\_USE\_RATE  
34       is equal to '1' and the base station has data to send, the base station may send a  
35       *Resource Allocation Message*, *Resource Allocation Mini Message*, *Extended*  
36       *Supplemental Channel Assignment Message*, *Forward Supplemental Channel*  
37       *Assignment Mini Message*, *Reverse Supplemental Channel Assignment Mini*  
38       *Message*, or *Universal Handoff Direction Message* and set  
39       PILOT\_GATING\_USE\_RATE to '0' to start transmitting the Forward Power Control  
40       Subchannel with the maximum rate at the action time of the message and start the  
41       exchange of user information.

- 1       • When a Forward Packet Data Channel is assigned, PILOT\_GATING\_USE\_RATE is  
2       equal to '1', and the base station has data or signaling messages to send, the base  
3       station may transition to the Active Mode. If the base station determines to  
4       transition to the Active Mode, the base station shall perform the following:
  - 5       – If a Forward Dedicated Control Channel is assigned, the base station shall  
6       perform one of the following:
    - 7       + The base station shall send a *Resource Allocation Message, Resource*  
8       *Allocation Mini Message, Extended Supplemental Channel Assignment*  
9       *Message, Forward Supplemental Channel Assignment Mini Message, Reverse*  
10       *Supplemental Channel Assignment Mini Message, or Universal Handoff*  
11       *Direction Message* and set PILOT\_GATING\_USE\_RATE to '0' at the action  
12       time of the message, or
    - 13       + The base station shall set PILOT\_GATING\_USE\_RATE to '0' (see [3]).
  - 14       – Otherwise (i.e., Forward Dedicated Control Channel is not assigned), the base  
15       station shall set PILOT\_GATING\_USE\_RATE to '0'.
- 16       • When a Forward Packet Data Channel is assigned, PILOT\_GATING\_USE\_RATE is  
17       equal to '1', and the base station has detected continuous reverse pilot channel or a  
18       valid Reverse Fundicated Channel frame is received, the base station shall set  
19       PILOT\_GATING\_USE\_RATE to '0'.
- 20       • If the base station is to release any but not all traffic channels, the base station  
21       shall send a *Universal Handoff Direction Message, Extended Release Message*, or  
22       an *Extended Release Mini Message* to the mobile station.
- 23       • If the base station is to assign R-FCH, the base station may send a *Universal*  
24       *Handoff Direction Message* or *Shared Channel Configuration Order* (ORDQ =  
25       00000000) to the mobile station. If the base station is to release R-FCH, the base  
26       station may send a *Universal Handoff Direction Message, Extended Release*  
27       *Message, Extended Release Mini Message, or Shared Channel Configuration Order*  
28       (ORDQ = 00000001) to the mobile station.
- 29       • When PILOT\_GATING\_USE\_RATE is equal to '0', the base station does not have any  
30       data to send, and the base station has determined that the mobile station does not  
31       have any data to send, then the base station may send an *Extended Release*  
32       *Message, Extended Release Mini Message or Universal Handoff Direction Message*.  
33       At the action time of the message, the base station may perform the following:
  - 34       – Set PILOT\_GATING\_USE\_RATE to '1'.
  - 35       – If the channel configuration in the message does not include a Forward Packet  
36       Data Channel, start transmitting the Forward Power Control Subchannel with  
37       the specified rate and stop the exchange of user information.
  - 38       – If the channel configuration in the message includes a Forward Packet Data  
39       Channel, stop the exchange of user information and signaling messages.

- 1       • If the base station declares a loss of Reverse Traffic Channel continuity (see 3.4),  
2       the base station should send a *Release Order* to the mobile station. If the base  
3       station sends a *Release Order*, the Layer 3 shall send a “release indication” to all  
4       Call Control instances, and shall enter the *Release Substate*.
- 5       • The base station may perform Forward Traffic Channel power control as specified in  
6       3.6.4.1.1.
- 7       • The base station may request a new service configuration by initiating service  
8       negotiation or service option negotiation in accordance with the requirements for  
9       the active service subfunction (see 3.6.4.1.2.2).
- 10      • The base station may send a *Service Option Control Message* or *Service Option*  
11      *Control Order* to invoke a service option specific function in accordance with the  
12      requirements for the active service subfunction (see 3.6.4.1.2.2).
- 13      • The base station may request a long code transition, as specified in 3.6.4.1.5, either  
14      autonomously or in response to a request for voice privacy specified in the  
15      *Origination Message* or *Page Response Message*.
- 16      • The base station may perform authentication procedures as specified in 3.3.1.
- 17      • The base station may perform TMSI assignment procedures (see 2.3.15).
- 18      • For the first call, if the call is mobile-station-originated and the PACA\_REORIG field  
19      of the *Origination Message* is equal to ‘1’, the Layer 3 shall send a “paca reorig  
20      indication” to the Call Control instance.
- 21      • The base station may control operation of the Forward or Reverse Supplemental  
22      Code Channels by including Supplemental Code Channel assignment information  
23      in the *Supplemental Channel Assignment Message*, or the *General Handoff Direction*  
24      *Message*.
- 25      • If neither a Forward Fundamental Channel, nor a Forward Dedicated Control  
26      Channel is assigned, the base station shall not assign a Forward Supplemental  
27      Channels to the mobile station.
- 28      • If a Reverse Packet Data Channel is assigned, the base station shall not assign a  
29      Reverse Supplemental Channel to the mobile station.
- 30      • The base station may control operation of the Forward or Reverse Supplemental  
31      Channels by including Supplemental Channel assignment information in the  
32      *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental*  
33      *Channel Assignment Mini Message*, or the *Reverse Supplemental Channel*  
34      *Assignment Mini Message*.
- 35      • The base station may assign a new call by sending a *Call Assignment Message*,  
36      *Service Connect Message*, or *Universal Handoff Direction Message* (with the Service  
37      Configuration information record included) to assign the call:
  - 38      – If the base station sends a *Call Assignment Message* to assign the call, the base  
39      station shall perform the following:
    - 40      + The base station shall set the RESPONSE\_IND field to ‘0’.

- 1           +   The base station shall set the CON\_REF\_INCL field of the message to '1' and  
2           the CON\_REF field of the message to the value of the connection reference  
3           of the service option connection corresponding to this call.
- 4           +   A service option connection corresponding to this call (if not already  
5           established) shall be established by performing service negotiation; the base  
6           station should initiate service negotiation to establish the service option  
7           connection, if permitted by the current service negotiation subfunction.
- 8           +   At the action time corresponding to this message, the Layer 3 shall  
9           instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall  
10          identify this Call Control instance by the value of the CON\_REF field  
11          included in the *Call Assignment Message*.
- 12          -   If the base station sends a *Service Connect Message* or *Universal Handoff*  
13          *Direction Message* (with the Service Configuration information record included)  
14          to assign the call, the base station shall perform the following:
  - 15           +   The base station shall set the call control parameters corresponding to this  
16           call included in the message as follows: The base station shall set the  
17           RESPONSE\_IND field to '0', and the BYPASS\_ALERT\_ANSWER field as  
18           required.
  - 19           +   At the action time corresponding to this message, the Layer 3 shall  
20           instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall  
21           identify this Call Control instance by the value of the CON\_REF assigned to  
22           the service option connection corresponding to this call.
- 23          •   The base station may instruct the mobile station to restore one or more of the  
24          service option connection records from the stored service configuration by sending  
25          a *Call Assignment Message* or *Service Connect Message* as follows:
  - 26           -   If the base station sends a *Call Assignment Message*, the base station shall  
27           perform the following:
    - 28           +   The base station shall set the RESPONSE\_IND field to '1', the ACCEPT\_IND  
29           field to '1', and the TAG field to the value of the TAG field of the *Enhanced*  
30           *Origination Message*.
    - 31           +   The base station shall set the USE\_OLD\_SERV\_CONFIG field to '1'.
  - 32           -   If the base station sends a *Service Connect Message*, the base station shall  
33           perform the following:
    - 34           +   The base station shall set the USE\_OLD\_SERV\_CONFIG field to '11'.

- 1       – If the mobile station is to restore all remaining service option connection  
2       records from the stored service configuration, the base station shall set the  
3       SR\_ID field to '111'; otherwise, the base station shall set the SR\_ID field to the  
4       service reference identifier corresponding to the service option connection  
5       record to be restored.
- 6       – At the action time corresponding to this message, the base station shall restore  
7       the indicated service option connection record(s) from the stored service  
8       configuration; Layer 3 shall instantiate a Call Control instance (as specified in  
9       3.6.8) for each of the restored service option connections with a 'restore  
10       indication' and Layer 3 shall identify each of these Call Control instances by the  
11       value of the CON\_REF field corresponding to the restored service option  
12       connection.
- 13      • If the Layer 3 receives a 'call release request' from a Call Control instance, the Layer  
14       3 shall perform the following:
  - 15       – If the service option connection corresponding to this call is the only one  
16       connected, the base station should send the mobile station a *Release Order* and  
17       enter the *Release Substate*.
  - 18       – If the service option connection corresponding to this call is not the only one  
19       connected, the base station should release this service option connection. At  
20       the action time of the message, the Layer 3 shall terminate this Call Control  
21       instance.
- 22      • The base station may send the following messages. Some of these messages are  
23       generated by the Call Control Instance. If the base station sends a message, the  
24       base station shall comply with the specified requirements for sending the message,  
25       if any:
  - 26       1. *Alert With Information Message*:
  - 27       2. *Reserved*
  - 28       3. *Audit Order*
  - 29       4. *Authentication Challenge Message*
  - 30       5. *Base Station Challenge Confirmation Order*
  - 31       6. *Base Station Status Response Message*
  - 32       7. *Call Assignment Message*
  - 33       8. *Candidate Frequency Search Request Message*
  - 34       9. *Candidate Frequency Search Control Message*
  - 35       10. *Continuous DTMF Tone Order*
  - 36       11. *Data Burst Message*
  - 37       12. *Extended Alert With Information Message*

- 1       13. *Extended Flash With Information Message*
- 2       14. *Extended Handoff Direction Message*
- 3       15. *Extended Neighbor List Update Message*
- 4       16. *Extended Release Message*: If the physical channels indicated in CH\_IND field
- 5             of this message includes all the physical channels currently being processed by
- 6             the mobile station, the Layer 3 shall send a “release indication” to all Call
- 7             Control instances, and shall enter the *Release Substate*.
- 8       17. *Extended Release Mini Message*: If the physical channels indicated in CH\_IND
- 9             field of this message includes all the physical channels currently being
- 10            processed by the mobile station, the Layer 3 shall send a “release indication” to
- 11            all Call Control instances, and shall enter the *Release Substate*.
- 12       18. *Extended Supplemental Channel Assignment Message*
- 13       19. *Forward Supplemental Channel Assignment Mini Message*
- 14       20. *General Handoff Direction Message*
- 15       21. *Flash With Information Message*
- 16       22. *In-Traffic System Parameters Message*<sup>3</sup>
- 17       23. *Local Control Order*
- 18       24. *Lock Until Power-Cycled Order*: The base station should send this order in
- 19             unassured mode.
- 20       25. *Long Code Transition Request Order*
- 21       26. *Maintenance Order*
- 22       27. *Maintenance Required Order*
- 23       28. *Message Encryption Mode Order*
- 24       29. *Mobile Assisted Burst Operation Parameters Message*
- 25       30. *Mobile Station Registered Message*
- 26       31. *Neighbor List Update Message*: The base station shall not send this message if
- 27             P\_REV\_IN\_USE is greater than or equal to eight.
- 28       32. *Parameter Update Order* (see 2.3.12.1.3).
- 29       33. *Periodic Pilot Measurement Request Order*
- 30       34. *Pilot Measurement Request Order*

---

<sup>3</sup> If the base station determines that the current P\_REV\_IN\_USE is less than or equal to three, the base station does not send an *In-Traffic System Parameters Message* to change the P\_REV\_IN\_USE to greater than or equal to nine.

- 1        35. *Power Control Message*
- 2        36. *Power Control Parameters Message*
- 3        37. *Power Up Function Message*
- 4        38. *Power Up Function Completion Message*
- 5        39. *Resource Allocation Message*
- 6        40. *Resource Allocation Mini Message*
- 7        41. *Release Order*: The Layer 3 shall send a “release indication” to all Call Control
- 8                instances, and shall enter the *Release Substate*.
- 9        42. *Retrieve Parameters Message*
- 10       43. *Retry Order*
- 11       44. *Reverse Supplemental Channel Assignment Mini Message*
- 12       45. *Security Mode Command Message*
- 13       46. *Send Burst DTMF Message*
- 14       47. *Service Connect Message*: The base station shall send the message in
- 15                accordance with the requirements for the active service subfunction (see
- 16                3.6.4.1.2.2).
- 17       48. *Service Option Control Message*: The base station shall send the message in
- 18                accordance with the requirements for the active service subfunction (see
- 19                3.6.4.1.2.2).
- 20       49. *Service Option Control Order*
- 21       50. *Service Option Request Order*
- 22       51. *Service Option Response Order*
- 23       52. *Service Redirection Message*: The Layer 3 shall send a “release indication” to all
- 24                Call Control instances, and shall enter the *Release Substate*.
- 25       53. *Service Request Message*: The base station shall send the message in
- 26                accordance with the requirements for the active service subfunction (see
- 27                3.6.4.1.2.2).
- 28       54. *Service Response Message*: The base station shall send the message in
- 29                accordance with the requirements for the active service subfunction (see
- 30                3.6.4.1.2.2).
- 31       55. *Set Parameters Message*
- 32       56. *SSD Update Message*
- 33       57. *Status Request Message*
- 34       58. *Status Request Order*: The base station shall not send this message if
- 35                P\_REV\_IN\_USE is greater than or equal to eight.
- 36       59. *Supplemental Channel Assignment Message*



1       60. *TMSI Assignment Message*

2       61. *Universal Handoff Direction Message*

3       62. *User Zone Reject Message*

4       63. *User Zone Update Message*

5       64. *Radio Configuration Parameters Message*

6       65. *Handoff Supplementary Information Solicit Message*

7       66. *General Extension Message* : The base station may send this message in order  
8       to extend the above messages with additional records.

9       • If the base station receives one of the following messages from the mobile station,  
10      the base station shall process the message according to the specified requirements,  
11      if any:

12      1. *Base Station Challenge Order*: The base station shall process the message as  
13      described in 2.3.12.1.5.

14      2. *Base Station Status Request Message*: The base station shall process the  
15      message as described in 3.6.4.1.9

16      3. *Call Cancel Message*

17      4. *Candidate Frequency Search Report Message*: The base station shall process the  
18      message as described in 3.6.6.2.2.6.

19      5. *Candidate Frequency Search Response Message*: The base station shall process  
20      the message as described in 3.6.6.2.2.4.

21      6. *CDMA Off Time Report Message*

22      7. *Connect Order*: If the CON\_REF\_INCL field is not included in this message or if  
23      the CON\_REF\_INCL field equals '0', the Layer 3 shall deliver this message to the  
24      Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver  
25      this message to the Call Control instance identified by CON\_REF.

26      8. *Continuous DTMF Tone Order*: If the CON\_REF\_INCL field is not included in this  
27      message or if the CON\_REF\_INCL field equals '0', the Layer 3 shall deliver this  
28      message to the Call Control instance identified by NULL; otherwise, the Layer 3  
29      shall deliver this message to the Call Control instance identified by CON\_REF.

30      9. *Data Burst Message*: The base station may respond with a *Retry Order*.

31      10. *Enhanced Origination Message*: The base station shall process the message as  
32      described in 3.6.4.1.7.

33      11. *Extended Flash With Information Message*: If CON\_REF\_INCL equals '0', the  
34      Layer 3 shall deliver this message to the Call Control instance identified by  
35      NULL; otherwise, the Layer 3 shall deliver this message to the Call Control  
36      instance identified by CON\_REF.

37      12. *Extended Handoff Completion Message*: The base station shall process the  
38      message as described in 3.6.6.2.2.7.

- 1       13. *Extended Pilot Strength Measurement Message*: The base station shall process  
2       the message as described in 3.6.6.2.2.1.
- 3       14. *Extended Release Response Message*.
- 4       15. *Extended Release Response Mini Message*.
- 5       16. *Flash With Information Message*: The Layer 3 shall deliver this message to the  
6       Call Control instance identified by NULL.
- 7       17. *Handoff Completion Message*: The base station shall process the message as  
8       described in 3.6.6.2.2.7.
- 9       18. *Local Control Response Order*
- 10      19. *Long Code Transition Request Order*: The base station shall process the  
11      message as described in 3.6.4.1.5.
- 12      20. *Long Code Transition Response Order*
- 13      21. *Mobile Station Reject Order*: If the CON\_REF\_INCL field is included in this  
14      message, Layer 3 shall perform the following: if the CON\_REF\_INCL field equals  
15      '0', Layer 3 shall send a 'messages rejected indication' to the Call Control  
16      instance identified by NULL; otherwise, Layer 3 shall send a 'messages rejected  
17      indication' to the Call Control instance identified by CON\_REF.
- 18      22. *Origination Continuation Message*: The Layer 3 shall deliver this message to the  
19      Call Control instance identified by NULL.
- 20      23. *Outer Loop Report Message*
- 21      24. *Parameters Response Message*
- 22      25. *Parameter Update Confirmation Order*
- 23      26. *Periodic Pilot Strength Measurement Message*
- 24      27. *Pilot Strength Measurement Message*: The base station shall process the  
25      message as described in 3.6.6.2.2.1.
- 26      28. *Pilot Strength Measurement Mini Message*
- 27      29. *Power Measurement Report Message*: The base station may process the  
28      message as described in 3.6.4.1.1.
- 29      30. *Release Order*: The base station shall send the mobile station a *Release Order*  
30      within T2b seconds, and the Layer 3 shall send a "release indication" to all Call  
31      Control instances, and enter the *Release Substate*; otherwise, the Layer 3 shall  
32      send a "send alert with info message indication" to all Call Control instances.
- 33      31. *Resource Release Request Message*: The base station shall process the message  
34      as described in 3.6.4.1.8.
- 35      32. *Resource Release Request Mini Message*: The base station shall process the  
36      message as described in 3.6.4.1.8.

- 1        33. *Resource Request Message*: The base station shall process the message as  
2        described in 3.6.4.1.6.
- 3        34. *Resource Request Mini Message*: The base station shall process the message as  
4        described in 3.6.4.1.6.
- 5        35. *Reserved*.
- 6        36. *Reserved*.
- 7        37. *Reserved*.
- 8        38. *Send Burst DTMF Message*: If the CON\_REF\_INCL field is not included in this  
9        message or if the CON\_REF\_INCL field equals '0', the Layer 3 shall deliver this  
10       message to the Call Control instance identified by NULL; otherwise, the Layer 3  
11       shall deliver this message to the Call Control instance identified by CON\_REF.
- 12       39. *Service Connect Completion Message*: The base station shall process the  
13       message in accordance with the requirements for the active service subfunction  
14       (see 3.6.4.1.2.2).
- 15       40. *Service Option Control Message*: The base station shall process the message in  
16       accordance with the requirements for the active service subfunction (see  
17       3.6.4.1.2.2).
- 18       41. *Service Option Control Order*: The base station shall process the message in  
19       accordance with the requirements for the active service subfunction (see  
20       3.6.4.1.2.2).
- 21       42. *Service Option Request Order*: The base station shall process the message in  
22       accordance with the requirements for the active service subfunction (see  
23       3.6.4.1.2.2).
- 24       43. *Service Option Response Order*: The base station shall process the message in  
25       accordance with the requirements for the active service subfunction (see  
26       3.6.4.1.2.2).
- 27       44. *Service Request Message*: The base station shall process the message in  
28       accordance with the requirements for the active service subfunction (see  
29       3.6.4.1.2.2).
- 30       45. *Service Response Message*: The base station shall process the message in  
31       accordance with the requirements for the active service subfunction (see  
32       3.6.4.1.2.2).
- 33       46. *SSD Update Confirmation Order*
- 34       47. *SSD Update Rejection Order*
- 35       48. *Status Response Message*
- 36       49. *Status Message*
- 37       50. *Supplemental Channel Request Message*: The base station may respond with a  
38       *Supplemental Channel Assignment Message*, an *Extended Supplemental*  
39       *Channel Assignment Message*, or a *Retry Order*.

1        51. *Supplemental Channel Request Mini Message*: The base station may respond  
 2        with a *Forward Supplemental Channel Assignment Mini Message* or a *Reverse*  
 3        *Supplemental Channel Assignment Mini Message*, or both. The base station may  
 4        also respond with a *Retry Order*.

5        52. *TMSI Assignment Completion Message*

6        53. *User Zone Update Request Message*: The base station shall process this  
 7        message as specified in 3.6.7.2.

8        54. *Handoff Supplementary Information Notification Message*: The base station shall  
 9        process this message as specified in 3.6.6.2.2.16.

10       55. *General Extension Message*: The base station shall store the records and  
 11       process the message included in the *General Extension Message*.

#### 12    3.6.4.4 Release Substate

13    In this substate, the base station disconnects all calls and physical channels.

14    While in the *Release Substate*, the base station shall perform the following:

- 15       • The base station shall transmit the power control subchannel as specified in [2].
- 16       • The base station shall transmit on the Forward Traffic Channel for at least  $T_{3b}$   
 17       seconds. The base station shall transmit null traffic and power control bits on the  
 18       Forward Fundamental Channel, except when transmitting signaling traffic, if the  
 19       Fundamental Channel is present or transmit power control bits on the Forward  
 20       Dedicated Control Channel, if only the dedicated Control Channel is present. After  
 21        $T_{3b}$  seconds, the base station should stop transmitting on the Forward Traffic  
 22       Channel.
- 23       • When a Forward Packet Data Channel and a Forward Common Power Control  
 24       Channel subchannel are assigned to this mobile station, the base station shall  
 25       transmit on the Forward Common Power Control Channel subchannel for at least  
 26        $T_{3b}$  seconds. After  $T_{3b}$  seconds, the base station should stop transmitting on the  
 27       Forward Common Power Control Channel subchannel. If no response is received to  
 28       the Layer 3 message sent to the mobile station to release the call, the base station  
 29       should wait  $T_{5b}$  before assigning this Forward Common Power Control Channel  
 30       subchannel to another mobile station.
- 31       • The base station shall process Reverse Traffic Channel signaling traffic and may  
 32       discard other types of Reverse Traffic Channel traffic.
- 33       • The base station may perform TMSI assignment procedures (see 2.3.15).
- 34       • The base station may perform Forward Traffic Channel power control as specified in  
 35       3.6.4.1.1.
- 36       • The base station may send a *Service Option Control Message* to invoke a service  
 37       option specific function in accordance with the requirements for the active service  
 38       subfunction (see 3.6.4.1.2.2).

- 1 • The base station may send the following messages. Some of these messages are
- 2 generated by the Call Control Instance. If the base station sends a message, the
- 3 base station shall comply with the specified requirements for sending the message,
- 4 if any.
- 5 1. *Alert With Information Message*
- 6 2. *Audit Order*
- 7 3. *Candidate Frequency Search Request Message*
- 8 4. *Candidate Frequency Search Control Message*
- 9 5. *Data Burst Message*
- 10 6. *Extended Alert With Information Message*
- 11 7. *Extended Handoff Direction Message*
- 12 8. *Extended Neighbor List Update Message*
- 13 9. *Extended Release Message*
- 14 10. *Extended Supplemental Channel Assignment Message*
- 15 11. *Forward Supplemental Channel Assignment Mini Message*
- 16 12. *General Handoff Direction Message*
- 17 13. *In-Traffic System Parameters Message*<sup>4</sup>
- 18 14. *Local Control Order*
- 19 15. *Lock Until Power-Cycled Order*: The base station should send this order in
- 20 unassured mode.
- 21 16. *Maintenance Order*
- 22 17. *Maintenance Required Order*
- 23 18. *Mobile Assisted Burst Operation Parameters Message*
- 24 19. *Mobile Station Registered Message*
- 25 20. *Neighbor List Update Message*: The base station shall not send this message if
- 26 P\_REV\_IN\_USE is greater than or equal to eight.
- 27 21. *Parameter Update Order* (see 2.3.12.1.3 or 3.7.4).
- 28 22. *Power Control Message*
- 29 23. *Power Control Parameters Message*

---

<sup>4</sup> If the base station determines that the current P\_REV\_IN\_USE is less than or equal to three, the base station does not send an *In-Traffic System Parameters Message* to change the P\_REV\_IN\_USE to greater than or equal to nine.

- 1        24. *Power Up Function Message*
- 2        25. *Power Up Function Completion Message*
- 3        26. *Release Order*
- 4        27. *Resource Allocation Message*
- 5        28. *Resource Allocation Mini Message*
- 6        29. *Resource Release Request Message*
- 7        30. *Resource Release Request Mini Message*
- 8        31. *Resource Request Message*
- 9        32. *Resource Request Mini Message*
- 10       33. *Retrieve Parameters Message*
- 11       34. *Reverse Supplemental Channel Assignment Mini Message*
- 12       35. *Service Option Control Message*: The base station shall send the message in  
13       accordance with the requirements for the active service subfunction (see  
14       3.6.4.1.2.2).
- 15       36. *Service Option Control Order*
- 16       37. *Status Request Message*
- 17       38. *Status Request Order*: The base station shall not send this message if  
18       P\_REV\_IN\_USE is greater than or equal to eight.
- 19       39. *Supplemental Channel Assignment Message*
- 20       40. *TMSI Assignment Message*
- 21       41. *Universal Handoff Direction Message*
- 22       42. *User Zone Reject Message*
- 23       43. *User Zone Update Message*
- 24       44. *General Extension Message* : The base station may send this message in order  
25       to extend the above messages with additional records.
- 26       • If the base station receives one of the following messages from the mobile station,  
27       the base station shall process the message according to the specified requirements,  
28       if any:
  - 29       1. *Base Station Challenge Order*: The base station shall process the message as  
30       described in 2.3.12.1.5.
  - 31       2. *Call Cancel Message*
  - 32       3. *Candidate Frequency Search Report Message*: The base station shall process  
33       the message as described in 3.6.6.2.2.6.
  - 34       4. *Candidate Frequency Search Response Message*: The base station shall process  
35       the message as described in 3.6.6.2.2.4.

- 1        5. *Connect Order*: If the CON\_REF\_INCL field is not included in this message or if  
2        the CON\_REF\_INCL field equals '0', the Layer 3 shall deliver this message to the  
3        Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver  
4        this message to the Call Control instance identified by CON\_REF.
- 5        6. *Continuous DTMF Tone Order*: If the CON\_REF\_INCL field is not included in  
6        this message or if the CON\_REF\_INCL field equals '0', the Layer 3 shall deliver  
7        this message to the Call Control instance identified by NULL; otherwise, the  
8        Layer 3 shall deliver this message to the Call Control instance identified by  
9        CON\_REF.
- 10       7. *Data Burst Message*
- 11       8. *Enhanced Origination Message*
- 12       9. *Extended Flash With Information Message*: If CON\_REF\_INCL equals '0', the  
13       Layer 3 shall deliver this message to the Call Control instance identified by  
14       NULL; otherwise, the Layer 3 shall deliver this message to the Call Control  
15       instance identified by CON\_REF.
- 16       10. *Extended Handoff Completion Message*: The base station shall process the  
17       message as described in 3.6.6.2.2.7.
- 18       11. *Extended Pilot Strength Measurement Message*: The base station shall process  
19       the message as described in 3.6.6.2.2.1.
- 20       12. *Extended Release Response Message*:
- 21       13. *Flash With Information Message*: The Layer 3 shall deliver this message to the  
22       Call Control instance identified by NULL.
- 23       14. *Handoff Completion Message*: The base station shall process the message as  
24       described in 3.6.6.2.2.7.
- 25       15. *Local Control Response Order*
- 26       16. *Long Code Transition Request Order*
- 27       17. *Long Code Transition Response Order*
- 28       18. *Mobile Station Reject Order*: If the CON\_REF\_INCL field is included in this  
29       message, Layer 3 shall perform the following: if the CON\_REF\_INCL field equals  
30       '0', Layer 3 shall send a 'messages rejected indication' to the Call Control  
31       instance identified by NULL; otherwise, Layer 3 shall send a 'messages rejected  
32       indication' to the Call Control instance identified by CON\_REF.
- 33       19. *Origination Continuation Message*: The Layer 3 shall deliver this message to  
34       the Call Control instance identified by NULL.
- 35       20. *Parameter Update Confirmation Order*
- 36       21. *Parameters Response Message*
- 37       22. *Periodic Pilot Strength Measurement Message*

- 1       23. *Pilot Strength Measurement Message*: The base station shall process the
- 2       message as described in 3.6.6.2.2.1.
- 3       24. *Power Measurement Report Message*
- 4       25. *Release Order*
- 5       26. *Reserved*
- 6       27. *Reserved*
- 7       28. *Reserved*
- 8       29. *Send Burst DTMF Message*: If the CON\_REF\_INCL field is not included in this
- 9       message or if the CON\_REF\_INCL field equals '0', the Layer 3 shall deliver this
- 10      message to the Call Control instance identified by NULL; otherwise, the Layer 3
- 11      shall deliver this message to the Call Control instance identified by CON\_REF.
- 12      30. *Service Connect Completion Message*
- 13      31. *Service Option Control Message*: The base station shall process the message in
- 14      accordance with the requirements for the active service subfunction (see
- 15      3.6.4.1.2.2).
- 16      32. *Service Option Control Order*
- 17      33. *Service Option Request Order*
- 18      34. *Service Option Response Order*
- 19      35. *Service Request Message*
- 20      36. *Service Response Message*:
- 21      37. *SSD Update Confirmation Order*
- 22      38. *SSD Update Rejection Order*
- 23      39. *Status Response Message*
- 24      40. *Status Message*
- 25      41. *TMSI Assignment Completion Message*
- 26      42. *User Zone Update Request Message*: The base station shall process this
- 27      message as specified in 3.6.7.2.
- 28      43. *General Extension Message*: The base station shall store the records and
- 29      process the message included in the *General Extension Message*.

### 30   3.6.5 Registration

31   Registration is the process by which a mobile station notifies the base station of its  
32   location, status, identification, slot cycle, and other characteristics. The base station can  
33   make use of location information to efficiently page the mobile station when establishing a  
34   mobile station terminated call. Registration also provides the mobile station's  
35   SLOT\_CYCLE\_INDEX parameter so that the base station can determine which Paging  
36   Channel or Forward Common Control Channel slots a mobile station operating in the



1 slotted mode is monitoring. Registration also provides the protocol revision number so  
2 that the base station knows the capabilities of the mobile station.

3 The CDMA system supports eleven different forms of registration:

- 4 1. Power-up registration. The mobile station registers when it powers on.
- 5 2. Power-down registration. The mobile station registers when it powers off if  
6 previously registered in the current serving system.
- 7 3. Timer-based registration. The mobile station registers when a timer expires.
- 8 4. Distance-based registration. The mobile station registers when the distance  
9 between the current base station and the base station in which it last registered  
10 exceeds a threshold.
- 11 5. Zone-based registration. The mobile station registers when it enters a new zone.
- 12 6. Parameter-change registration. The mobile station registers when certain of its  
13 stored parameters change or when it enters a new system.
- 14 7. Ordered registration. The mobile station registers when the base station requests  
15 it.
- 16 8. Implicit registration. When a mobile station successfully sends an *Origination*  
17 *Message*, *Reconnect Message*, *Call Recovery Request Message*, or *Page Response*  
18 *Message*, the base station can infer the mobile station's location. This is  
19 considered an implicit registration.
- 20 9. Traffic Channel registration. Whenever the base station has registration  
21 information for a mobile station that has been assigned to a Traffic Channel, the  
22 base station can notify the mobile station that it is registered.
- 23 10. User Zone Registration. The mobile station registers when it selects an active User  
24 Zone (see 2.6.9.1.2).
- 25 11. Encryption/Message Integrity re-sync required registration. The mobile station  
26 registers when extended encryption is turned on and the mobile station  
27 determines that it can not decrypt any messages from the base station (see  
28 2.3.12.4.1.3) or the mobile station registers when message integrity is supported  
29 and the mobile station determines that it can not validate the MACI of any  
30 messages from the base station.

31 The first five forms of registration, User Zone Registration, and Encryption/Message  
32 Integrity re-sync required registration, as a group, are called autonomous registration and  
33 are conditioned, in part, by roaming status and by indicators contained in the *System*  
34 *Parameters Message* and *ANSI-41 System Parameters Message* (see 2.6.5.3). The base  
35 station may initiate ordered registration through the *Registration Request Order*.

36 The base station can obtain registration information by sending the *Status Request*  
37 *Message* to the mobile station on the Paging Channel, the Forward Common Control  
38 Channel, or the Forward Traffic Channel. If the base station is operating with the mobile  
39 station in Band Class 0, the base station can also obtain registration information by  
40 sending the *Status Request Order* to the mobile station on the Forward Traffic Channel.

The base station may notify the mobile station that it is registered through the *Mobile Station Registered Message*.

### 3.6.5.1 Registration on the Common Channels

The base station shall specify the forms of registration that are enabled, the corresponding registration parameters, and the roaming status conditions for which registration is enabled in the *System Parameters Message* and *ANSI-41 System Parameters Message*. If any of the autonomous registration forms are enabled, the base station should also enable parameter-change registration.

The base station should process an *Origination Message*, *Reconnect Message*, *Call Recovery Request Message*, or *Page Response Message* sent on the r-csch as an implicit registration of the mobile station sending the message. The base station can obtain complete registration information about the mobile station at any time by sending a *Registration Request Order* to the mobile station.

### 3.6.5.2 Registration on the Traffic Channels

The base station can obtain registration information from a mobile station on the Traffic Channel by means of the *Status Request Message* or the *Status Request Order*. When the base station has registration information for a mobile station, the base station may send a *Mobile Station Registered Message* to the mobile station, specifying the base station's registration system, zone, and location information.

## 3.6.6 Handoff Procedures

### 3.6.6.1 Overview

#### 3.6.6.1.1 Types of Handoff

The base station supports the following three handoff procedures:

- *Soft Handoff*: A handoff in which a new base station commences communications with the mobile station without interrupting the communications with the old base station. The base station<sup>5</sup> can direct the mobile station to perform a soft handoff only when all Forward Traffic Channels assigned to the mobile station have identical band classes, frequency assignments and frame offsets. Soft handoff provides diversity of Forward Traffic Channels and Reverse Traffic Channel paths on the boundaries between base stations.
- *CDMA-to-CDMA Hard Handoff*: A handoff in which the base station directs the mobile station to transition between disjoint sets of base stations, different band classes, different frequency assignments, or different frame offsets.

---

<sup>5</sup>In this section the term base station may imply multiple cells or sectors.

1 Base station support of CDMA-to-CDMA hard handoff between different band classes is  
2 optional.

3 Section 2.6.6 describes the mobile station requirements during handoff.

#### 4 3.6.6.1.2 Active Set

5 The Active Set contains the pilots (see 2.6.6.1.2) associated with the Forward Traffic  
6 Channels assigned to the mobile station. Initially the base station informs the mobile  
7 station of the contents of the Active Set using the *Channel Assignment Message* or the  
8 *Extended Channel Assignment Message*; subsequent changes to the contents of the Active  
9 Set are provided using the *Extended Handoff Direction Message*, *General Handoff Direction*  
10 *Message*, or *Universal Handoff Direction Message*.

#### 11 3.6.6.2 Requirements

##### 12 3.6.6.2.1 Overhead Information

13 The base station sends the following messages governing the pilot search procedures  
14 performed by the mobile station:

- 15 • *System Parameters Message*
- 16 • *In-Traffic System Parameters Message*
- 17 • *Neighbor List Message*
- 18 • *Extended Neighbor List Message*
- 19 • *Neighbor List Update Message*
- 20 • *Extended Neighbor List Update Message*
- 21 • *General Neighbor List Message*
- 22 • *General Handoff Direction Message*
- 23 • *Extended Handoff Direction Message*
- 24 • *Candidate Frequency Search Request Message*
- 25 • *Candidate Frequency Search Control Message*
- 26 • *Universal Handoff Direction Message*
- 27 • *Universal Neighbor List Message*
- 28 • *MC-RR Parameters Message*

##### 29 3.6.6.2.1.1 System Parameters

30 The base station sends handoff related parameters on the Paging Channel in the *System*  
31 *Parameters Message* and the *Extended System Parameters Message*, and on the Primary  
32 Broadcast Control Channel in the *MC-RR Parameters Message*.

33 The base station may revise handoff related parameters for a mobile station operating on  
34 the Traffic Channel by sending the *In-Traffic System Parameters Message*.

The base station may modify the values of the parameters SRCH\_WIN\_A, T\_ADD, T\_DROP, T\_COMP, and T\_TDROF through the *Extended Handoff Direction Message*, the *General Handoff Direction Message*, or the *Universal Handoff Direction Message*. In addition, the base station may also modify the values of the parameters SRCH\_WIN\_N, SRCH\_WIN\_R, SOFT\_SLOPE, ADD\_INTERCEPT, DROP\_INTERCEPT, and T\_TDROF\_RANGE through the *General Handoff Direction Message* or the *Universal Handoff Direction Message*.

#### 3.6.6.2.1.2 Neighbor List

The base station sends a Neighbor List on the Paging Channel in the *Neighbor List Message*, the *Extended Neighbor List Message*, or the *General Neighbor List Message*. The base station should list the pilots in the *Neighbor List Message* in descending priority order (see 2.6.6.2.6.3).

The base station may revise the Neighbor List for a mobile station operating on the Traffic Channel by sending a *Neighbor List Update Message* or an *Extended Neighbor List Update Message*.

The base station shall not include a pilot that is a member of the mobile station's Active Set in a *Neighbor List Update Message* or an *Extended Neighbor List Update Message*. The base station shall not specify more than  $N_{8m}$  pilots in the *Neighbor List Message*, *Extended Neighbor List Message*, *General Neighbor List Message*, or in the *Extended Neighbor List Update Message*. The base station shall not specify more than 20 pilots in the *Neighbor List Update Message*. The base station should list the pilots in the *Neighbor List Update Message* in descending priority order (see 2.6.6.2.6.3).

#### 3.6.6.2.1.3 Candidate Frequency Neighbor List

The base station sends a Candidate Frequency Neighbor List and inter-frequency handoff related parameters in the *Candidate Frequency Search Request Message*. The base station shall not specify more than  $N_{8m}$  pilots in the *Candidate Frequency Search Request Message*.

#### 3.6.6.2.1.4 Candidate Frequency Search List

The base station designates a subset of the Candidate Frequency Neighbor List included in the *Candidate Frequency Search Request Message* as the Candidate Frequency Search List. For each pilot belonging to the Candidate Frequency Search List, the base station shall set the corresponding SEARCH\_SET field of the *Candidate Frequency Search Request Message* to '1'.

#### 3.6.6.2.2 Call Processing During Handoff

When a mobile station performs a handoff from a base station with a P\_REV lower than the mobile station's MOB\_P\_REV to a base station with a P\_REV greater than the P\_REV of the previous base station, the base station should send the service configuration to the mobile station.

#### 1 3.6.6.2.2.1 Processing the Pilot Strength Measurement Message

2 The base station should use the pilot strength measurements in the *Pilot Strength*  
3 *Measurement Message* or the *Extended Pilot Strength Measurement Message* to determine a  
4 new Active Set.

5 The base station may also use the PN phase measurements in the *Pilot Strength*  
6 *Measurement Message* or the *Extended Pilot Strength Measurement Message* to estimate  
7 the propagation delay to the mobile station. This estimate can be used to reduce Reverse  
8 Traffic Channel acquisition time.

9 If the base station receives a *Pilot Strength Measurement Message* or *Extended Pilot*  
10 *Strength Measurement Message* that includes any pilots for which supplementary  
11 information is needed for handoff, then the base station may send a *Handoff*  
12 *Supplementary Information Solicit Message* to the mobile station<sup>6</sup>.

13 The base station may respond to a *Pilot Strength Measurement Message* or an *Extended*  
14 *Pilot Strength Measurement Message* received from the mobile station by sending the  
15 *Extended Handoff Direction Message*, the *General Handoff Direction Message*, or the  
16 *Universal Handoff Direction Message*.

#### 17 3.6.6.2.2.2 Processing the Extended Handoff Direction Message

18 The base station shall maintain a handoff message sequence number. If the base station  
19 specifies that the mobile station is to use service negotiation, the base station shall set the  
20 SERV\_NEG variable (see 3.6.4.1.2.1.4) to be enabled at the action time of the message.  
21 The sequence number shall be initialized to zero prior to the transmission of the first  
22 *Extended Handoff Direction Message*, *General Handoff Direction Message* (see 3.6.6.2.2.10),  
23 or the *Universal Handoff Direction Message* to the mobile station. The base station shall  
24 increment the sequence number modulo 4 each time the base station modifies the pilot list  
25 (including the order in which pilots are specified within the list) or the code channels  
26 (including a change in the ordering such that the first code channel occurrence for any  
27 pilot is changed) sent to the mobile station in an *Extended Handoff Direction Message*, a  
28 *General Handoff Direction Message*, or a *Universal Handoff Direction Message*.

29 Following a hard handoff, the base station should set the handoff message sequence  
30 number to the value of the LAST\_HDM\_SEQ field of the *Handoff Completion Message* or  
31 *Extended Handoff Completion Message* and should use the pilot order contained in the  
32 *Handoff Completion Message* or *Extended Handoff Completion Message* to interpret the  
33 contents of subsequent *Power Measurement Report Messages*.

34 The base station shall set the contents of an *Extended Handoff Direction Message*  
35 according to the following rules:

---

<sup>6</sup> After receiving a PSMM, PSMMM or EPSMM Message, base station waits for an implementation specific duration for the arrival of *Handoff Supplementary Information Notification Message* before transmitting the *Handoff Supplementary Information Solicit Message*.

- 1       • An *Extended Handoff Direction Message* shall list no more than  $N_{6m}$  pilots in the  
2       new Active Set.
- 3       • An *Extended Handoff Direction Message* shall identify the identical power control  
4       subchannels (i.e., those carrying identical power control bits).
- 5       • An *Extended Handoff Direction Message* may change the code channel associated  
6       with an Active Set pilot that remains in the new Active Set.
- 7       • The base station specifies the long code mask to be used on the new Forward  
8       Traffic Channel by using the PRIVATE\_LCM field of the *Extended Handoff Direction*  
9       *Message*. The base station may change the long code mask to be used on the new  
10      Forward Traffic Channel via the PRIVATE\_LCM field of the *Extended Handoff*  
11      *Direction Message* only for CDMA-to-CDMA hard handoffs. If a change of long code  
12      mask is specified and the base station does not specify an explicit action time in  
13      the *Extended Handoff Direction Message*, the base station shall begin using the  
14      new long code mask on the first 80 ms boundary (relative to System Time)  
15      occurring at least 80 ms after the end of the frame containing the last bit of the  
16      message.
- 17      • For CDMA-to-CDMA handoffs, the base station may require the mobile station to  
18      perform a reset of the acknowledgment procedures by using the RESET\_L2 field of  
19      the *Extended Handoff Direction Message*. If the base station requires the mobile  
20      station to reset the acknowledgment procedures, Layer 3 shall send an indication  
21      to Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment  
22      procedures shall be reset immediately after the action time of the *Extended Handoff*  
23      *Direction Message*.
- 24      • For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by  
25      setting the FRAME\_OFFSET field to a new value. If the base station specifies a new  
26      frame offset and does not specify an explicit action time, the base station shall  
27      change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms  
28      boundary (relative to System Time) after the end of transmission of the *Extended*  
29      *Handoff Direction Message*, unless the end of transmission of the message  
30      coincides with an 80 ms boundary, in which case the change in frame offsets shall  
31      occur 80 ms after the end of transmission.
- 32      • For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base  
33      station may alter the nominal transmit power offset after handoff by setting the  
34      NOM\_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA  
35      hard handoffs to band classes other than Band Class 0 and Band Class 3, the base  
36      station may alter the nominal transmit power offset after handoff by setting both  
37      the NOM\_PWR and NOM\_PWR\_EXT fields to the new nominal transmit power offset.

- 1       • The base station may specify a different band class by setting the BAND\_CLASS  
2       and CDMA\_FREQ fields to the band class and CDMA frequency assignment  
3       respectively. The base station shall not specify a band class not supported by the  
4       mobile station. If the reverse channel corresponding to forward channel included in  
5       this message is separated by flexible channel spacing, the base station shall extend  
6       this message using the General Extension Message and include a Reverse Channel  
7       Information Record that specifies the reverse frequency to be used by the mobile  
8       station after handoff.
- 9       • If the base station sends the *Extended Handoff Direction Message* in assured mode,  
10      the base station should set the action time of the message such that there is  
11      sufficient time for the mobile station to transmit a message containing the  
12      acknowledgment prior to the action time.
- 13      • For CDMA-to-CDMA hard handoffs, the base station may specify whether the  
14      mobile station is to use service negotiation or service option negotiation by setting  
15      the SERV\_NEG\_TYPE field of the *Extended Handoff Direction Message*. If the base  
16      station specifies that the mobile station is to use service negotiation, the base  
17      station shall set the SERV\_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action  
18      time of message. If the base station specifies that the mobile station is to use  
19      service option negotiation, the base station shall set SERV\_NEG to disabled at the  
20      action time of the message.

#### 21   3.6.6.2.2.3 Processing the Candidate Frequency Search Request Message

22   The base station may send a *Candidate Frequency Search Request Message* to direct the  
23   mobile station to perform a single or periodic search on the Candidate Frequency.

24   The base station may request the mobile station to perform an aligned search of the  
25   Candidate Frequency Search Set (see 2.6.6.2.8.3). If the base station requests the mobile  
26   station to perform an aligned search, the base station shall specify an explicit action time  
27   for the *Candidate Frequency Search Request Message*.

28   The base station shall maintain a search message sequence number. The sequence  
29   number shall be initialized to zero prior to the transmission of the first *Candidate*  
30   *Frequency Search Request Message* to the mobile station. Each time the base station  
31   sends a new *Candidate Frequency Search Request Message* to the mobile station, it shall  
32   set the CFSRM\_SEQ field to the current value of the sequence number, and increment the  
33   sequence number modulo 4.

#### 34   3.6.6.2.2.4 Processing the Candidate Frequency Search Response Message

35   The base station should use the mobile station's search capabilities as reported in the  
36   *Candidate Frequency Search Response Message* to determine an appropriate period for the  
37   mobile station's periodic search on the Candidate Frequency.

#### 3.6.6.2.2.5 Processing the Candidate Frequency Search Control Message

The base station may send a *Candidate Frequency Search Control Message* to direct the mobile station to perform a single search, or to start or stop a periodic search on the Candidate Frequency.

The base station may request the mobile station to perform an aligned search of the Candidate Frequency Search Set (see 2.6.6.2.8.3). If the base station requests the mobile station to perform an aligned search, the base station shall specify an explicit action time for the *Candidate Frequency Search Control Message*.

Each time the base station sends a new *Candidate Frequency Search Control Message* to the mobile station, it shall set the CFSCM\_SEQ field to the current value of the sequence number, and increment the sequence number modulo 4.

#### 3.6.6.2.2.6 Processing the Candidate Frequency Search Report Message

The base station should use the value of the LAST\_SRCH\_MSG field and of the LAST\_SRCH\_MSG\_SEQ field of the *Candidate Frequency Search Report Message* to interpret the contents of the message.

If the SEARCH\_MODE field of the *Candidate Frequency Search Report Message* is equal to '0000', the base station should use the pilot strength measurements in the message to determine whether to direct the mobile station to perform a CDMA-to-CDMA inter-frequency handoff, and to determine the new Active Set.

#### 3.6.6.2.2.7 Transmitting During Handoff

The base station shall continue transmission to the mobile station on the Fundamental Channel or the Dedicated Control Channel of a Forward Traffic Channel removed from the Active Set until it receives the *Handoff Completion Message* or *Extended Handoff Completion Message* from the mobile station or determines that the call has been released.

The base station should discontinue transmission to the mobile station on the Fundamental Channel or the Dedicated Control Channel of a Forward Traffic Channel removed from the Active Set after it receives the *Handoff Completion Message* or *Extended Handoff Completion Message*.

For Forward Multiplex Options 3 through 16, the base station should discontinue transmission of Forward Supplemental Code Channels removed from the Code Channel List according to the following rules:

- If a *General Handoff Direction Message* is used to remove one or more Forward Supplemental Code Channels, the base station should discontinue transmission on those code channels no later than the action time of the *General Handoff Direction Message*.
- If a *Supplemental Channel Assignment Message* is used to remove one or more Forward Supplemental Code Channels, the base station should discontinue transmission on those Forward Supplemental Code Channels no later than the implicit action time of the *Supplemental Channel Assignment Message*.



#### 3.6.6.2.2.8 Ordering Pilot Measurements From the Mobile Station

The base station may direct the mobile station to send a *Pilot Strength Measurement Message* by sending a *Pilot Measurement Request Order*.

The base station may send a *Periodic Pilot Measurement Request Order* to direct the mobile station to send pilot strength measurements one time or periodically. In response to the order, the mobile station reports the pilot strength measurements using the *Periodic Pilot Strength Measurement Message*.

#### 3.6.6.2.2.9 Processing the Supplemental Channel Assignment Message

The base station may use this message to specify Supplemental Code Channel assignment parameters for the mobile station's Forward Traffic Channel, Reverse Traffic Channel, or both. This information includes the parameters that control the timing of the Supplemental Code Channel assignment (e.g., starting time and duration), and parameters that control the number of Supplemental Code Channels which will be used during the assignment (e.g., the number of Reverse Supplemental Code Channels on which the mobile station may transmit and the set of Walsh codes on which the mobile station receives Forward Supplemental Code Channels for each pilot in the mobile station's Active Set). The *Supplemental Channel Assignment Message* shall be used only with Multiplex Options 3 through 16.

The base station shall set the content of a *Supplemental Channel Assignment Message* according to the following rules:

- The base station may set USE\_RETRY\_DELAY to '1' and RETRY\_DELAY to a delay in 320 ms units starting at the next 80 ms system time boundary during which the mobile station is to refrain from sending subsequent *Supplemental Channel Request Messages*. The base station may set RETRY\_DELAY to '1111111' to indicate that the mobile station is to refrain from transmitting *Supplemental Channel Request Messages* indefinitely. Otherwise, the base station shall set USE\_RETRY\_DELAY to '0' and omit RETRY\_DELAY in which case the mobile station is to reset any previously set RETRY\_DELAY indication.
- The base station shall set REV\_DTX\_DURATION to the maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmission on a Reverse Supplemental Code Channel before resuming transmission on the Reverse Supplemental Code Channel within the reverse assignment duration. The base station shall set this field to '0000' if the mobile station is to stop using a Reverse Supplemental Code Channel once it has stopped transmitting on that Reverse Supplemental Code Channel. The base station shall set this field to '1111' if the mobile station is allowed to resume transmission on a Reverse Supplemental Code Channel at any time within the reverse assignment duration.
- A *Supplemental Channel Assignment Message* may specify Reverse Supplemental Code Channel assignments. If Reverse Supplemental Code Channel assignment information is included, the base station shall set REV\_INCLUDED to '1' and include the appropriate Reverse Supplemental Code Channel assignment information. Otherwise, the base station shall set REV\_INCLUDED to '0'.

- 1     • The base station shall indicate the implicit, explicit, or linked start time for a  
2       Reverse Supplemental Code Channel assignment as follows:
  - 3       – The base station may set EXPL\_REV\_START\_TIME to '1' and set  
4           REV\_START\_TIME to the System Time, in units of 80 ms (modulo 64), at which  
5           the mobile station is to start transmitting on the Reverse Supplemental Code  
6           Channels.
  - 7       – The base station may set USE\_REV\_HDM\_SEQ to '1' and set  
8           REV\_LINKED\_HDM\_SEQ to the sequence number of the *General Handoff*  
9           *Direction Message* (HDM\_SEQ) with which this message is linked to indicate  
10          that the mobile station is to start processing the Reverse Supplemental Code  
11          Channels at the action time of the linked *General Handoff Direction Message*.
  - 12       – The base station may set EXPL\_REV\_START\_TIME to '0' and  
13           USE\_REV\_HDM\_SEQ to '0' to indicate that the mobile station is to start  
14           processing Reverse Supplemental Code Channels at the implicit action time of  
15           this message.
  - 16       – The base station shall not set both EXPL\_REV\_START\_TIME and  
17           USE\_REV\_HDM\_SEQ to '1'.
- 18     • The base station may set USE\_REV\_DURATION to '1' and REV\_DURATION to the  
19       time interval, in units of 80 ms, after the implicit, explicit, or linked action time for  
20       the message (as specified in 2.6.6.2.5.1), during which the mobile station is to  
21       transmit on the specified Reverse Supplemental Code Channels. The base station  
22       may set USE\_REV\_DURATION to '0' to indicate an infinite duration for the  
23       assignment of Reverse Supplemental Code Channels. If NUM\_REV\_CODES is '000',  
24       then the base station shall set USE\_REV\_DURATION to '0'.
- 25     • If Reverse Supplemental Code Channel assignment information is included, the  
26       base station shall set NUM\_REV\_CODES to the number of Reverse Supplemental  
27       Code Channels to be used in this Reverse Supplemental Code Channel assignment.  
28       The base station shall not set NUM\_REV\_CODES to be greater than the number of  
29       codes supported by the currently negotiated multiplex option.
- 30     • The base station may set USE\_T\_ADD\_ABORT, the Reverse Supplemental Code  
31       Channel assignment T\_ADD abort indicator, to '1' to indicate that the mobile  
32       station is to abort Reverse Supplemental Code Channel assignments implicitly  
33       when a T\_ADD trigger occurs. Otherwise, the base station shall set  
34       USE\_T\_ADD\_ABORT to '0'. If NUM\_REV\_CODES is set to '000', the base station  
35       shall set USE\_T\_ADD\_ABORT to '0'.
- 36     • If the base station is sending this message in response to a *Supplemental Channel*  
37       *Request Message* which includes a *Supplemental Channel Request Message*  
38       sequence number and the mobile station is to clear the IGNORE\_SCAM field, the  
39       base station shall set USE\_SCRM\_SEQ\_NUM to '1' and set SCRM\_SEQ\_NUM to the  
40       sequence number corresponding to the SCRM\_SEQ\_NUM field in a *Supplemental*  
41       *Channel Request Message* to which the mobile station is to match this message.  
42       Otherwise, the base station shall set USE\_SCRM\_SEQ\_NUM to '0' and omit  
43       SCRM\_SEQ\_NUM.

- 1 • A *Supplemental Channel Assignment Message* may specify Forward Supplemental  
2 Code Channel assignments. If Forward Supplemental Code Channel assignment  
3 information is included, the base station shall set FOR\_INCLUDED to '1' and  
4 include the appropriate Forward Supplemental Code Channel assignment  
5 information. Otherwise, the base station shall set FOR\_INCLUDED to '0'.
- 6 • The base station shall set FOR\_SUP\_CONFIG to '00' if the mobile station is to stop  
7 processing the forward supplemental code after the action time of the *Supplemental*  
8 *Channel Assignment Message*. The base station should not transmit to the mobile  
9 station on the Forward Supplemental Code Channels after the message takes effect.
- 10 • The base station shall set FOR\_SUP\_CONFIG to '01' if the mobile station is to start  
11 processing the Forward Supplemental Code Channels in the Code Channel List at  
12 the implicit, explicit, or linked action time for the message as specified in  
13 2.6.6.2.5.1.
- 14 • The base station shall set FOR\_SUP\_CONFIG to '10' if the Forward Supplemental  
15 Code Channels associated with the pilots in the Active set are specified in the  
16 *Supplemental Channel Assignment Message* and is to stop processing Forward  
17 Supplemental Code Channels at the implicit action time of the message. The base  
18 station should not transmit to the mobile station on the Forward Supplemental  
19 Code Channels after the message takes effect.
- 20 • The base station shall set FOR\_SUP\_CONFIG to '11' if the Forward Supplemental  
21 Code Channels associated with the pilots in the Active set are specified in the  
22 *Supplemental Channel Assignment Message* and the mobile station is to start  
23 processing the Forward Supplemental Code Channels at the implicit, explicit, or  
24 linked action time for the message as specified in 2.6.6.2.5.1.
- 25 • The base station shall set FOR\_DURATION to the time interval, in units of 80 ms,  
26 after the implicit, explicit, or linked action time for the message (as specified in  
27 2.6.6.2.5.1), during which the mobile station is to process the specified Forward  
28 Supplemental Code Channels. The base station may set USE\_FOR\_DURATION to  
29 '0' to indicate an infinite duration for the allocation of Forward Supplemental Code  
30 Channels. The base station should not transmit to the mobile station on the  
31 Forward Supplemental Code Channels outside the time interval specified by  
32 FOR\_DURATION.
- 33 • The base station may set EXPL\_FOR\_START\_TIME to '1' and set FOR\_START\_TIME  
34 to the System Time, in units of 80 ms (modulo 64), at which the mobile station is to  
35 start processing the Forward Supplemental Code Channels.
- 36 • The base station may set USE\_FOR\_HDM\_SEQ to '1' and set  
37 FOR\_LINKED\_HDM\_SEQ to the sequence number of the *General Handoff Direction*  
38 *Message* (HDM\_SEQ) with which this message is linked to indicate that the mobile  
39 station is to start processing the Forward Supplemental Code Channels at the  
40 action time of the linked *General Handoff Direction Message*.
- 41 • The base station shall not set both USE\_FOR\_HDM\_SEQ and  
42 EXPL\_FOR\_START\_TIME within a *Supplemental Channel Assignment Message* to  
43 '1'.

- The number of Supplemental Code Channels assigned by *Supplemental Channel Assignment Message* shall not exceed the maximum number of Supplemental Code Channels for the negotiated Forward Multiplex Option.
- The base station may set EXPL\_FOR\_START\_TIME to '0' and USE\_FOR\_HDM\_SEQ to '0' to indicate that the mobile station is to start processing Forward Supplemental Code Channels at the implicit action time of this message.

#### 3.6.6.2.2.10 Processing the General Handoff Direction Message

The base station shall maintain a handoff message sequence number. The sequence number shall be initialized to zero prior to the transmission of the first *Extended Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff Direction Message* (see 3.6.6.2.2.11) to the mobile station (see 2.6.6.2.2.2). The base station shall increment the sequence number modulo 4 each time the base station modifies the pilot list (including the order in which pilots are specified within the list) or the code channels (including a change in the ordering such that the first code channel occurrence for any pilot is changed) sent to the mobile station in an *Extended Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff Direction Message*.

Following a hard handoff, the base station should set the handoff message sequence number to the value of the LAST\_HDM\_SEQ field of the *Handoff Completion Message* or *Extended Handoff Completion Message* and should use the pilot order contained in the *Handoff Completion Message* or *Extended Handoff Completion Message* to interpret the contents of subsequent *Power Measurement Report Messages*.

The base station shall set the contents of a *General Handoff Direction Message* according to the following rules:

- A *General Handoff Direction Message* shall list no more than  $N_{6m}$  pilots in the new Active Set.
- The base station may include a Service Configuration Information Record in the *General Handoff Direction Message* to accept a service configuration proposed in a *Service Request Message* or *Service Response Message*, and instruct the mobile station to begin using the service configuration.
- A *General Handoff Direction Message* shall identify the identical power control subchannels (i.e., those carrying identical power control bits).
- A *General Handoff Direction Message* shall identify the transmit power level of the power control subchannels to the transmit power level of 20 ms frames at a 9600 bps or 14400 bps rate on their respective associated channels (Forward Fundamental Channel or Forward Dedicated Control Channel).

- 1 • For CDMA-to-CDMA handoffs, the base station may specify Power Control  
2 Subchannel Gain action time (PC\_ACTION\_TIME]. If PC\_ACTION\_TIME is included  
3 in this message, the base station shall apply the new FPC\_SUBCHAN\_GAIN at the  
4 time specified by PC\_ACTION\_TIME. If the PC\_ACTION\_TIME is not included in  
5 this message but the explicit action time is included, the base station shall apply  
6 the new FPC\_SUBCHAN\_GAIN at the action time of the *General Handoff Direction*  
7 *Message*. If the implicit action time is used, the base station should gradually  
8 apply any change in FPC\_SUBCHAN\_GAIN.
- 9 • A *General Handoff Direction Message* may change the code channel associated with  
10 an Active Set pilot that remains in the new Active Set.
- 11 • The base station specifies the long code mask to be used on the new Forward  
12 Traffic Channel by using the PRIVATE\_LCM field of the *General Handoff Direction*  
13 *Message*. The base station may change the long code mask to be used on the new  
14 Forward Traffic Channel via the PRIVATE\_LCM field of the *General Handoff*  
15 *Direction Message* only for CDMA-to-CDMA hard handoffs. If a change of long code  
16 mask is specified and the base station does not specify an explicit action time in  
17 the *General Handoff Direction Message*, the base station shall begin using the new  
18 long code mask on the first 80 ms boundary (relative to System Time) occurring at  
19 least 80 ms after the end of the frame containing the last bit of the message.
- 20 • For CDMA-to-CDMA handoffs, the base station may require the mobile station to  
21 perform a reset of the acknowledgment procedures by using the RESET\_L2 field of  
22 the *General Handoff Direction Message*. If the base station requires the mobile  
23 station to reset the acknowledgment procedures, Layer 3 shall send an indication  
24 to Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment  
25 procedures of the base station that the mobile station is to handoff to shall be reset  
26 immediately after the action time of the *General Handoff Direction Message*.
- 27 • For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by  
28 setting the FRAME\_OFFSET field to a new value. If the base station specifies a new  
29 frame offset and does not specify an explicit action time, the base station shall  
30 change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms  
31 boundary (relative to System Time) after the end of transmission of the *General*  
32 *Handoff Direction Message*, unless the end of transmission of the message  
33 coincides with an 80 ms boundary, in which case the change in frame offsets shall  
34 occur 80 ms after the end of transmission.
- 35 • For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base  
36 station may alter the nominal transmit power offset after handoff by setting the  
37 NOM\_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA  
38 hard handoffs to band classes other than Band Class 0 and Band Class 3, the base  
39 station may alter the nominal transmit power offset after handoff by setting both  
40 the NOM\_PWR and NOM\_PWR\_EXT fields to the new nominal transmit power offset.

- 1       • The base station may specify a different band class by setting the BAND\_CLASS  
2       and CDMA\_FREQ fields to the band class and CDMA frequency assignment  
3       respectively. The base station shall not specify a band class not supported by the  
4       mobile station. If the reverse channel corresponding to forward channel included in  
5       this message is separated by flexible channel spacing, the base station shall extend  
6       this message using the General Extension Message and include a Reverse Channel  
7       Information Record that specifies the reverse frequency to be used by the mobile  
8       station after handoff.
- 9       • If the base station sends the *General Handoff Direction Message* in assured mode,  
10      the base station should set the action time of the message such that there is  
11      sufficient time for the mobile station to transmit a message containing the  
12      acknowledgment prior to the action time.
- 13      • For CDMA-to-CDMA hard handoffs, the base station may specify whether the  
14      mobile station is to use service negotiation or service option negotiation by setting  
15      the SERV\_NEG\_TYPE field of the *General Handoff Direction Message*. If the base  
16      station specifies that the mobile station is to use service negotiation, the base  
17      station shall set the SERV\_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action  
18      time of message. If the base station specifies that the mobile station is to use  
19      service option negotiation, the base station shall set SERV\_NEG to disabled at the  
20      action time of the message.
- 21      • The base station may specify whether the mobile station is to restore its  
22      configuration to what it was before the handoff attempt, if it fails in the handoff  
23      attempt using criteria specified in the *Candidate Frequency Search Request*  
24      *Message*, by using the RETURN\_IF\_HANDOFF\_FAIL field of the *General Handoff*  
25      *Direction Message*. The base station may specify whether the mobile station is to  
26      periodically search a CDMA Candidate Frequency for useable pilots, using criteria  
27      specified in the *Candidate Frequency Search Request Message*, by using the  
28      PERIODIC\_SEARCH field of the *General Handoff Direction Message*.
- 29      • The base station may include Forward Supplemental Code Channel assignment  
30      information in the *General Handoff Direction Message* if the Forward Multiplex  
31      Option for the currently connected service option is 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,  
32      13, 14, 15, or 16. If Forward Supplemental Code Channel assignment information  
33      is included, the base station shall include FOR\_INCLUDED, set FOR\_INCLUDED to  
34      '1', and include the appropriate Forward Supplemental Code Channel assignment  
35      information.
- 36      • The number of Forward Supplemental Code Channels assigned by the *General*  
37      *Handoff Direction Message* shall not exceed the maximum number of Forward  
38      Supplemental Code Channels for the negotiated Forward Multiplex Option.
- 39      • The base station shall set FOR\_SUP\_CONFIG to '00' if the mobile station is to stop  
40      processing the Forward Supplemental Code Channel after the action time of  
41      *General Handoff Direction Message*. The base station should not transmit to the  
42      mobile station on the Forward Supplemental Code Channels after the message  
43      takes effect.

- 1     • The base station shall set FOR\_SUP\_CONFIG to '01' if the mobile station is to start  
2     processing the Forward Supplemental Code Channels in the Code Channel List at  
3     the action time of the message.
- 4     • The base station shall set FOR\_SUP\_CONFIG to '10' if the Forward Supplemental  
5     Code Channels associated with the pilots in the Active set are specified in the  
6     *General Handoff Direction Message* and the mobile station is to stop processing  
7     Forward Supplemental Code Channels at the implicit action time of the message.  
8     The base station should not transmit to the mobile station on the Forward  
9     Supplemental Code Channels after the message takes effect.
- 10    • The base station shall set FOR\_SUP\_CONFIG to '11' if the Forward Supplemental  
11    Code Channels associated with the pilots in the Active set are specified in the  
12    *General Handoff Direction Message* and the mobile station is to start processing the  
13    Forward Supplemental Code Channels at the action time of the message.
- 14    • The base station shall set FOR\_DURATION to the time interval after the action time  
15    of the message, in units of 80 ms, during which the mobile station is to process the  
16    specified Forward Supplemental Code Channels. The base station may set  
17    USE\_FOR\_DURATION to '0' to indicate an infinite duration for the allocation of  
18    Forward Supplemental Code Channels. The base station should not transmit to  
19    the mobile station on the Forward Supplemental Code Channels outside the time  
20    interval specified by FOR\_DURATION.
- 21    • If FOR\_INCLUDED is included in the message, the base station shall include  
22    EXPL\_CODE\_CHAN for each pilot included in the message. If EXPL\_CODE\_CHAN  
23    is included and set to '1' for a pilot, the code channels associated with the pilot in  
24    the *General Handoff Direction Message* shall be ordered such that the first code  
25    channel occurrence is associated with the Forward Fundamental Channel and the  
26    successive occurrences are associated with Forward Supplemental Code Channels.  
27    If EXPL\_CODE\_CHAN is included and is set to '0', for each pilot in the new Active  
28    Set, the base station shall include BASE\_CODE\_CHAN and set it to the base code  
29    channel index in the range of 1 to (63 - NUM\_FOR\_SUP + 1), inclusive, that the  
30    mobile station is to use as the first Forward Supplemental Code Channel  
31    associated with this pilot. The mobile station is to use NUM\_FOR\_SUP adjacent  
32    code channels beginning with index BASE\_CODE\_CHAN (i.e., BASE\_CODE\_CHAN  
33    through BASE\_CODE\_CHAN + NUM\_FOR\_SUP - 1) for the Forward Supplemental  
34    Code Channels associated with this pilot.
- 35    • The base station may include Reverse Supplemental Code Channel assignment  
36    information in the *General Handoff Direction Message* if the Reverse Multiplex  
37    Option is 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, or 16. If Reverse Supplemental  
38    Code Channel assignment information is included, the base station shall include  
39    REV\_INCLUDED, set REV\_INCLUDED to '1', and include the appropriate Reverse  
40    Supplemental Code Channel assignment information in the additional fields.

- 1       • If Reverse Supplemental Code Channel assignment information is included, the  
2       base station shall set NUM\_REV\_CODES to the number of Reverse Supplemental  
3       Code Channels to be used by the mobile station. The base station shall not set  
4       NUM\_REV\_CODES to be greater than the number of codes supported by the  
5       currently negotiated multiplex option.
- 6       • The base station may set USE\_T\_ADD\_ABORT, the Reverse Supplemental Code  
7       Channel assignment T\_ADD abort indicator, to '1' to indicate that the mobile  
8       station is to abort Reverse Supplemental Code Channel assignments implicitly  
9       when a T\_ADD trigger occurs. Otherwise, the base station shall set  
10      USE\_T\_ADD\_ABORT to '0'. If NUM\_REV\_CODES is set to '000', the base station  
11      shall set USE\_T\_ADD\_ABORT to '0'.
- 12      • The base station shall set REV\_DTX\_DURATION to the maximum duration of time  
13      in units of 20 ms that the mobile station is allowed to stop transmission on a  
14      Reverse Supplemental Code Channel before resuming transmission on the Reverse  
15      Supplemental Code Channel. The base station shall set this field to '0000' if the  
16      mobile station is to stop using a Reverse Supplemental Code Channel once it has  
17      stopped transmitting on that Reverse Supplemental Code Channel. The base  
18      station shall set this field to '1111' if the mobile station is allowed to resume  
19      transmission on a Reverse Supplemental Code Channel at any time within the  
20      reverse assignment duration.
- 21      • The base station may set CLEAR\_RETRY\_DELAY to '1' to indicate that the mobile  
22      station is to cancel any previously stored retry delay. Otherwise, the base station  
23      shall set CLEAR\_RETRY\_DELAY to '0' to indicate that the mobile station is to  
24      continue to honor any previously stored retry delay (see 2.6.6.2.5.1).
- 25      • The base station may indicate a duration for the Reverse Supplemental Code  
26      Channel assignment (in 80 ms superframes) by setting USE\_REV\_DURATION to '1'  
27      and indicating the desired duration in the REV\_DURATION field. If  
28      USE\_REV\_DURATION is set to '0', a duration of infinity is indicated, and the base  
29      station shall set the REV\_DURATION to '00000000'. If NUM\_REV\_CODES is '000',  
30      then the base station shall set USE\_REV\_DURATION to '0' and shall set  
31      REV\_DURATION to '00000000'.
- 32      • The base station may set USE\_REV\_DURATION to '1' and REV\_DURATION to the  
33      time interval after the action time of the message, in units of 80 ms, during which  
34      the mobile station may transmit on the assigned Reverse Supplemental Code  
35      Channels. The base station may set USE\_REV\_DURATION to '0' to indicate an  
36      infinite duration for the allocation of Forward Supplemental Code Channels.
- 37      • The base station may specify a closed loop power control step size by setting  
38      USE\_PWR\_CNTL\_STEP to '1' and indicating the desired power control step size in  
39      the PWR\_CNTL\_STEP field (see 2.1.2.3.2). Otherwise, the base station shall set  
40      USE\_PWR\_CNTL\_STEP to '0'. The base station shall not specify a power control  
41      step size not supported by the mobile station.



### 3.6.6.2.2.11 Processing the Universal Handoff Direction Message

The base station shall maintain a handoff message sequence number. The sequence number shall be initialized to zero prior to the transmission of the first *Extended Handoff Direction Message* (see 3.6.6.2.2.2), *General Handoff Direction Message* (see 3.6.6.2.2.10), or *Universal Handoff Direction Message* to the mobile station. The base station shall increment the sequence number modulo 4 each time the base station modifies the pilot list (including the order in which pilots are specified within the list) or the code channels (including a change in the ordering such that the first code channel occurrence for any pilot is changed) sent to the mobile station in an *Extended Handoff Direction Message*, a *General Handoff Direction Message*, or an *Universal Direction Message*.

Following a hard handoff, the base station should set the handoff message sequence number to the value of the LAST\_HDM\_SEQ field of the *Handoff Completion Message* or *Extended Handoff Completion Message* and should use the pilot order contained in the *Handoff Completion Message* or *Extended Handoff Completion Message* to interpret the contents of subsequent *Power Measurement Report Messages*.

The base station shall set the contents of a *Universal Handoff Direction Message* according to the following rules:

- A *Universal Handoff Direction Message* shall list no more than  $N_{6m}$  pilots in the new Active Set.
- The base station may include a Service Configuration Information Record in the *Universal Handoff Direction Message* to accept a service configuration proposed in a *Service Request Message* or *Service Response Message*, and instruct the mobile station to begin using the service configuration.
- A *Universal Handoff Direction Message* shall identify the identical power control subchannels (i.e., those carrying identical power control bits).
- A *Universal Handoff Direction Message* shall identify the transmit power level of the power control subchannels to the transmit power level of 20 ms frames at a 9600 bps or 14400 bps rate on their respective associated channels (Forward Fundamental Channel or Forward Dedicated Control Channel).
- For CDMA-to-CDMA handoffs, the base station may specify Power Control Subchannel Gain action time (PC\_ACTION\_TIME]. If PC\_ACTION\_TIME is included in this message, the base station shall apply the new FPC\_SUBCHAN\_GAIN at the time specified by PC\_ACTION\_TIME. If the PC\_ACTION\_TIME is not included in this message but the explicit action time is included, the base station shall apply the new FPC\_SUBCHAN\_GAIN at the action time of the *Universal Handoff Direction Message*. If the implicit action time is used, the base station should gradually apply any change in FPC\_SUBCHAN\_GAIN.
- A *Universal Handoff Direction Message* may change the code channel associated with an Active Set pilot that remains in the new Active Set.
- A *Universal Handoff Direction Message* may delete the code channel associated with an Active Set pilot that remains in the new Active Set.

- 1 • A *Universal Handoff Direction Message* may add the code channel associated with  
2 an Active Set pilot that remains in the new Active Set.
- 3 • The base station specifies the long code mask to be used on the new Forward  
4 Traffic Channel by using the PRIVATE\_LCM and PLCM\_TYPE fields of the *Universal*  
5 *Handoff Direction Message*. The base station may change the contents of the  
6 PRIVATE\_LCM field only for CDMA-to-CDMA hard handoffs. If a change of long  
7 code mask is specified and the base station does not specify an explicit action time  
8 in the *Universal Handoff Direction Message*, the base station shall begin using the  
9 new long code mask on the first 80 ms boundary (relative to System Time)  
10 occurring at least 80 ms after the end of the frame containing the last bit of the  
11 message.
- 12 • For CDMA-to-CDMA handoffs, the base station may require the mobile station to  
13 perform a reset of the acknowledgment procedures by using the RESET\_L2 field of  
14 the *Universal Handoff Direction Message*. If the base station requires the mobile  
15 station to reset the acknowledgment procedures, Layer 3 shall send an indication  
16 to Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment  
17 procedures of the base station that the mobile station is to handoff to shall be reset  
18 immediately after the action time of the *General Handoff Direction Message*.
- 19 • For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by  
20 setting the FRAME\_OFFSET field to a new value. If the base station specifies a new  
21 frame offset and does not specify an explicit action time, the base station shall  
22 change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms  
23 boundary (relative to System Time) after the end of transmission of the *Universal*  
24 *Handoff Direction Message*, unless the end of transmission of the message  
25 coincides with an 80 ms boundary, in which case the change in frame offsets shall  
26 occur 80 ms after the end of transmission.
- 27 • For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base  
28 station may alter the nominal transmit power offset after handoff by setting the  
29 NOM\_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA  
30 hard handoffs to band classes other than Band Class 0 and Band Class 3, the base  
31 station may alter the nominal transmit power offset after handoff by setting both  
32 the NOM\_PWR and NOM\_PWR\_EXT fields to the new nominal transmit power offset.
- 33 • The base station may specify a different band class by setting the BAND\_CLASS  
34 and CDMA\_FREQ fields to the band class and CDMA frequency assignment  
35 respectively. The base station shall not specify a band class not supported by the  
36 mobile station. If the reverse channel corresponding to forward channel included in  
37 this message is separated by flexible channel spacing, the base station shall extend  
38 this message using the General Extension Message and include a Reverse Channel  
39 Information Record that specifies the reverse frequency to be used by the mobile  
40 station after handoff<sup>7</sup>.

---

<sup>7</sup> Similarly, *MEID Universal Handoff Direction Message* may be extended through General Extension  
(footnote continued on next page)

- 1 • If the base station sends the *Universal Handoff Direction Message* in assured mode,  
2 the base station should set the action time of the message such that there is  
3 sufficient time for the mobile station to transmit a message containing the  
4 acknowledgment prior to the action time.
- 5 • For CDMA-to-CDMA handoffs, the base station may specify whether the mobile  
6 station is to use service negotiation or service option negotiation by setting the  
7 SERV\_NEG\_TYPE field of the *Universal Handoff Direction Message*. If the base  
8 station specifies that the mobile station is to use service negotiation, the base  
9 station shall set the SERV\_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action  
10 time of message. If the base station specifies that the mobile station is to use  
11 service option negotiation, the base station shall set SERV\_NEG to disabled at the  
12 action time of the message.
- 13 • The base station may specify whether the mobile station is to restore its  
14 configuration to what it was before the handoff attempt, if it fails in the handoff  
15 attempt using criteria specified in the *Candidate Frequency Search Request*  
16 *Message*, by using the RETURN\_IF\_HANDOFF\_FAIL field of the *Universal Handoff*  
17 *Direction Message*. The base station may specify whether the mobile station is to  
18 periodically search a CDMA Candidate Frequency for useable pilots, using criteria  
19 specified in the *Candidate Frequency Search Request Message*, by using the  
20 PERIODIC\_SEARCH field of the *Universal Handoff Direction Message*.
- 21 • The base station specifies Active Set for the Fundamental Channel only, the  
22 Dedicated Control Channel only, or both. The Active Set of the Dedicated Control  
23 Channel shall be the same as the Active Set of the Fundamental Channel when  
24 both the Fundamental Channel and Dedicated Control Channel are assigned.
- 25 • The base station may specify the Active Set of the Supplemental Channels. The  
26 Active Set of the Supplemental Channels shall be a subset of the Active Set of the  
27 Fundamental Channel or the Dedicated Control Channel.
- 28 • If a Reverse Packet Data Channel assignment is not included, a *Universal Handoff*  
29 *Direction Message* may specify a Reverse Supplemental Channel assignment. If  
30 Reverse Supplemental Channel assignment information is included, this message  
31 contains information that specifies the start time, duration, and the data transfer  
32 rate associated with this Reverse Supplemental Channel assignment.
- 33 • If a Reverse Packet Data Channel assignment is included, a *Universal Handoff*  
34 *Direction Message* shall not specify a Reverse Supplemental Channel assignment.
- 35 • A *Universal Handoff Direction Message* may specify a Forward Supplemental  
36 Channel assignment. If Forward Supplemental Channel assignment information is  
37 included, this message contains the start time, duration, and SCCL\_INDEX  
38 associated with this Forward Supplemental Channel assignment.

---

Message.

- 1 • A *Universal Handoff Direction Message* may update the mapping between a  
2 particular SCCL\_INDEX and a set of fields that specifies the data transfer rate, QOF  
3 index, Forward Supplemental Channel Walsh code for each PILOT\_PN, and the  
4 active set for the Forward Supplemental Channel associated with FOR\_SCH\_ID.
- 5 • A *Universal Handoff Direction Message* may update REV\_WALSH\_ID field which  
6 specifies the Reverse Supplemental Walsh cover.
- 7 • The base station may set CLEAR\_RETRY\_DELAY to '1' to indicate that the mobile  
8 station is to cancel any previously stored retry delay. Otherwise, the base station  
9 shall set CLEAR\_RETRY\_DELAY to '0' to indicate that the mobile station is to  
10 continue to honor any previously stored retry delay (see 2.6.6.2.5.1).

#### 11 3.6.6.2.2.12 Processing of Extended Supplemental Channel Assignment Message

12 If the Reverse Packet Data Channel is not assigned, the base station may use this message  
13 to carry Forward Supplemental Channel assignment information or Reverse Supplemental  
14 Channel assignment information.

15 If the Reverse Packet Data Channel is assigned, the base station may use this message to  
16 carry Forward Supplemental Channel assignment information, and the base station shall  
17 not use this message to carry Reverse Supplemental Channel assignment information.

18 If Forward Supplemental Channel assignment information is included, this message  
19 contains the start time, duration, and SCCL\_INDEX associated with this Forward  
20 Supplemental Channel assignment. If Reverse Supplemental Channel assignment  
21 information is included, this message contains information that specifies the start time,  
22 duration, and the number of information bits per frame (or set of number of bits per frame  
23 if RSCH\_VAR\_TABLE\_IDS[REV\_SCH\_ID<sub>r</sub>] is not equal to '000') associated with this Reverse  
24 Supplemental Channel assignment.

25 This message may specify the mapping between a particular SCCL\_INDEX and a set of  
26 fields that specifies the number of information bits per frame (or set of number of bits per  
27 frame if FSCH\_VAR\_TABLE\_IDS[FOR\_SCH\_ID<sub>r</sub>] is not equal to '000'), QOF index, Forward  
28 Supplemental Channel Walsh code for each PILOT\_PN, and the active set for the Forward  
29 Supplemental Channel associated with FOR\_SCH\_ID.

30 This message may also include REV\_WALSH\_ID field which specifies the Reverse  
31 Supplemental Walsh cover.

32 The base station shall set the contents of an *Extended Supplemental Channel Assignment*  
33 *Message* according to the following rules:

- 34 • An *Extended Supplemental Channel Assignment Message* may specify a Reverse  
35 Supplemental Channel assignment. The base station shall set NUM\_REV\_SCH to  
36 the number of Reverse Supplemental Channels to be assigned. If the Reverse  
37 Packet Data Channel is assigned, the base station shall set NUM\_REV\_SCH to 0.
- 38 • An *Extended Supplemental Channel Assignment Message* may specify a Forward  
39 Supplemental Channel assignment. The base station shall set NUM\_FOR\_SCH to  
40 the number of Forward Supplemental Channels to be assigned.

- 1       • The base station shall set the START\_TIME\_UNIT field to indicate the unit of the

2       FOR\_SCH\_START\_TIME included in this message, the *Forward Supplemental*

3       *Channel Assignment Mini Messages* and the *Universal Handoff Direction Message*

4       and REV\_SCH\_START\_TIME included in this message, the *Reverse Supplemental*

5       *Channel Assignment Mini Messages* and the *Universal Handoff Direction Message*.

6       The base station shall set this field to one less than the number of 20 ms intervals

7       that is to be used by the mobile station for calculating the start time included in

8       Forward Supplemental Channel assignments or Reverse Supplemental Channel

9       assignments.
- 10      • An *Extended Supplemental Channel Assignment Message* may specify Forward

11      Supplemental Channel configuration information. The base station shall set

12      NUM\_FOR\_SCH\_CFG to the number of Forward Supplemental Channel to be

13      configured.
- 14      • The base station shall set the NUM\_REC field to the number of instances of the

15      following record minus one included in this message. The base station shall set

16      the fields within each record as follows:

  - 17          – The base station shall set the SCCL\_INDEX field to the index of the

18          Supplemental Channel Code Information Record in the Supplemental Channel

19          Code List Table.
  - 20          – The base station shall set the FOR\_SCH\_NUM\_BITS\_IDX field to the Forward

21          Supplemental Channel number of information bits index associated with

22          SCCL\_INDEX.
  - 23          – The base station shall set the NUM\_SUP\_SHO field to the number of Forward

24          Supplemental Channels minus one, corresponding to the FOR\_SCH\_ID and the

25          SCCL\_INDEX, for which the frames are to be soft-combined by the mobile

26          station. The base station shall set the fields within each record as follows:

    - 27              + The base station shall set the PILOT\_PN field to the pilot PN sequence offset

28              for this pilot in units of 64 PN chips.
    - 29              + The base station shall set the QOF\_MASK\_ID\_SCH field to the ID of the

30              Quasi Orthogonal Function mask ID corresponding to the Forward

31              Supplemental Channel Code index.
    - 32              + The base station shall set the CODE\_CHAN\_SCH field to the code channel

33              on the Supplemental Channel corresponding to the PILOT\_PN.
- 34      • REV\_SCH\_DTX\_DURATION: The base station shall set REV\_SCH\_DTX\_DURATION

35      to the maximum duration of time in units of 20 ms that the mobile station is

36      allowed to stop transmission on a Reverse Supplemental Channel before resuming

37      transmission on the Reverse Supplemental Channel within the reverse assignment

38      duration. The base station shall set this field to '0000' if the mobile station is to

39      stop using a Reverse Supplemental Channel once it has stopped transmitting on

40      that Reverse Supplemental Channel. The base station shall set this field to '1111' if

41      the mobile station is allowed to resume transmission on a Reverse Supplemental

42      Channel at any time within the reverse assignment duration.

- 1       • The base station may set USE\_T\_ADD\_ABORT, the Reverse Supplemental Channel  
2       assignment T\_ADD abort indicator, to '1' to indicate that the mobile station is to  
3       abort Reverse Supplemental Channel assignments when a T\_ADD trigger occurs.  
4       Otherwise, the base station shall set USE\_T\_ADD\_ABORT to '0'.
- 5       • If the base station is sending this message in response to a *Supplemental Channel*  
6       *Request Message* which includes a *Supplemental Channel Request Message*  
7       sequence number and the mobile station is to clear the IGNORE\_ESCAM field, the  
8       base station shall set USE\_SCRM\_SEQ\_NUM to '1' and set SCRM\_SEQ\_NUM to the  
9       sequence number corresponding to the SCRM\_SEQ\_NUM field in a *Supplemental*  
10      *Channel Request Message* to which the mobile station is to match this message.  
11      Otherwise, the base station shall set USE\_SCRM\_SEQ\_NUM to '0' and omit  
12      SCRM\_SEQ\_NUM.
- 13      • If Forward Supplemental Channel burst assignment is included, the base station  
14      may include additional Forward Supplemental Channel configuration information  
15      including radio configuration, multiplex option, coding type, frame length, and  
16      maximum supplemental channel rate; if so, the base station shall set  
17      FOR\_SCH\_CC\_INCL to '1'.
- 18      • If Reverse Supplemental Channel burst assignment is included, the base station  
19      may include additional Reverse Supplemental Channel configuration information  
20      including radio configuration, multiplex option, coding type, frame length, and  
21      maximum supplemental channel rate; if so, the base station shall set  
22      REV\_SCH\_CC\_INCL to '1'.

#### 23   3.6.6.2.2.13 Processing of Forward Supplemental Channel Assignment Mini Message

24   The base station may use this message to specify Forward Supplemental Channel  
25   assignment parameters for the mobile station's Forward Supplemental Channel. This  
26   information includes the FOR\_SCH\_ID, duration, start time, and the index to the  
27   previously specified Forward Supplemental Channel Code List, which determines number  
28   of information bits per frame (or set of number of bits per frame if  
29   FSCH\_VAR\_TABLE\_ID<sub>s</sub>[FOR\_SCH\_ID<sub>r</sub>] is not equal to '000'), code channel index, and the  
30   identifier of the Quasi Orthogonal Function corresponding to the assignment.

31   The base station shall set the content of a *Forward Supplemental Channel Assignment Mini*  
32   *Message* according to the following rules:

- 33      • The base station shall set the FOR\_SCH\_ID to Forward Supplemental Channel  
34      identifier of the burst assignment that this message carries.

- 1 • The base station shall set the FOR\_SCH\_DURATION field to '0000' to indicate that  
2 the mobile station should stop processing the Forward Supplemental Channel  
3 starting at the explicit start time of the message specified by  
4 FOR\_SCH\_START\_TIME. The base station shall set the FOR\_SCH\_DURATION field  
5 to '1111' to indicate that the mobile station should process the Forward  
6 Supplemental Channel, starting at the explicit start time of the message specified  
7 by FOR\_SCH\_START\_TIME, until a subsequent *Forward Supplemental Channel*  
8 *Assignment Mini Message* or an *Extended Supplemental Channel Assignment*  
9 *Message* with the same FOR\_SCH\_ID field is received. The base station shall set  
10 the FOR\_SCH\_DURATION field to the duration in units of 20 ms (see Table  
11 3.7.3.3.2.37-3), starting at the explicit start time of the message specified by  
12 FOR\_SCH\_START\_TIME, during which the mobile station is to process the Forward  
13 Supplemental Channel.
- 14 • The base station shall set the FOR\_SCH\_START\_TIME field to the System Time, in  
15 units of time specified by START\_TIME\_UNIT, (modulo 32) at which the mobile  
16 station is to start processing the Forward Supplemental Channel specified in this  
17 message. The explicit start time for processing Forward Supplemental Channels is  
18 the time for which:

$$\lfloor t / (\text{START\_TIME\_UNIT} + 1) \rfloor - \text{FOR\_SCH\_START\_TIME} \bmod 32 = 0,$$

20 where t is the System Time in units of 20 ms.

- 21 • The base station shall set the SCCL\_INDEX field to the index of the record in the  
22 Forward Supplemental Channel Code list corresponding to the FOR\_SCH\_ID.
- 23 • If the PILOT\_GATING\_USE\_RATE to equal to '1', the base station shall set  
24 PILOT\_GATING\_USE\_RATE to '0' and start transmitting the Forward Power Control  
25 Subchannel with the maximum rate at the action time of the message.

#### 26 3.6.6.2.2.14 Processing of Reverse Supplemental Channel Assignment Mini Message

27 If the Reverse Packet Data Channel is assigned, the base station shall not send this  
28 message.

29 If the Reverse Packet Data Channel is not assigned, the base station may use this message  
30 to specify Reverse Supplemental Channel assignment parameters for the mobile station  
31 Reverse Supplemental Channel. This information includes the reverse supplemental  
32 channel identifier (REV\_SCH\_ID), the duration of transmission on the Reverse  
33 Supplemental Channel, the start time for the burst assignment, and the number of  
34 information bits per frame that the mobile station may transmit.

35 The base station shall set the content of the *Reverse Supplemental Channel Assignment*  
36 *Mini Message* according to the following rules:

- 1 • The base station shall set the REV\_SCH\_DURATION field to '0000' to indicate that  
2 the mobile station should stop transmitting on the Reverse Supplemental Channel  
3 specified by REV\_SCH\_ID at the start time specified by REV\_SCH\_START\_TIME.  
4 The base station shall set this field to '1111' to indicate that the mobile station may  
5 transmit on the Reverse Supplemental Channel specified by REV\_SCH\_ID, starting  
6 at the start time specified by REV\_SCH\_START\_TIME. The base station shall set  
7 the REV\_SCH\_DURATION field to the allocated duration (see Table 3.7.3.3.2.37-3),  
8 starting at the start time specified by REV\_SCH\_START\_TIME, during which the  
9 mobile station may transmit on the Reverse Supplemental Channel specified by  
10 REV\_SCH\_ID.
- 11 • The base station shall set the REV\_SCH\_START\_TIME field to the System Time, in  
12 units of time specified by START\_TIME\_UNIT, (modulo 32) at which the mobile  
13 station may start transmitting on the Reverse Supplemental Channel specified in  
14 this message. The explicit start time for transmitting on the Reverse Supplemental  
15 Channel is the time for which:

$$\lfloor t / (\text{START\_TIME\_UNIT} + 1) \rfloor - \text{REV\_SCH\_START\_TIME} \bmod 32 = 0,$$

17 where t is the System Time in units of 20 ms.

- 18 • The base station shall set the REV\_SCH\_BITS\_IDX (see Table 3.7.3.3.2.37-2) to  
19 indicate the Reverse Supplemental Channel number of information bits per frame  
20 index.
- 21 • If the PILOT\_GATING\_USE\_RATE to equal to '1', the base station shall set  
22 PILOT\_GATING\_USE\_RATE to '0' and start transmitting the Forward Power Control  
23 Subchannel with the maximum rate at the action time of the message.

#### 24 3.6.6.2.2.15 Processing of the Mobile Assisted Burst Operation Parameters Message

25 The base station may use this message to specify the operating parameters in the mobile  
26 station for Mobile Assisted Burst Operation procedures.

- 27 • A *Mobile Assisted Burst Operation Parameters Message* may specify pilot strength  
28 order change reporting information. If order change reporting information is  
29 included, the base station shall set ORDER\_FLAG to '1' and include the appropriate  
30 order change reporting fields. Otherwise, the base station shall set ORDER\_FLAG  
31 to '0'. If ORDER\_FLAG is set to '1', the base station shall perform the following  
32 procedures:
  - 33 – The base station shall set PS\_MIN\_DELTA to one less than the minimum pilot  
34 strength measurement difference between any two pilots in the Active Set (in  
35 units of 0.5 dB) that must be measured in order for the mobile station to send a  
36 *Pilot Strength Measurement Mini Message*.



- 1       – The base station shall set ORDER\_INTERVAL to the minimum interval (in 20  
2       ms units) during which the indicated pilot strength measurement difference  
3       (greater than or equal to PS\_MIN\_DELTA + 1, in units of 0.5 dB) must be  
4       measured by the mobile station in order for the mobile station to send a *Pilot*  
5       *Strength Measurement Mini Message*.
- 6       • A *Mobile Assisted Burst Operation Parameters Message* may specify periodic pilot  
7       strength reporting. If periodic reporting information is included, the base station  
8       shall set PERIODIC\_FLAG to '1' and include the appropriate periodic reporting  
9       fields. Otherwise, the base station shall set PERIODIC\_FLAG to '0'. If  
10      PERIODIC\_FLAG is set to '1', the base station shall perform the following  
11      procedures:
  - 12      – The base station shall set NUM\_PILOTS to the number of pilots for which the  
13      mobile station is to send *Pilot Strength Measurement Mini Messages*.
  - 14      – The base station shall set PERIODIC\_INTERVAL to the interval (in 20 ms units)  
15      between *Pilot Strength Measurement Mini Messages*.
  - 16      • A *Mobile Assisted Burst Operation Parameters Message* may specify threshold based  
17      pilot strength reporting. If threshold based reporting information is included, the  
18      base station shall set THRESHOLD\_FLAG to '1' and include the appropriate  
19      threshold based reporting fields. Otherwise, the base station shall set  
20      THRESHOLD\_FLAG to '0'. If THRESHOLD\_FLAG is set to '1', the base station shall  
21      perform the following procedures:
    - 22      – The base station shall set PS\_FLOOR\_HIGH to the high water mark for lower  
23      limit threshold for which the mobile station is to send *Pilot Strength*  
24      *Measurement Mini Messages*.
    - 25      – The base station shall set PS\_FLOOR\_LOW to the low water mark for lower limit  
26      threshold for which the mobile station is to send *Pilot Strength Measurement*  
27      *Mini Messages*.
    - 28      – The base station shall set PS\_CEILING\_HIGH to the high water mark for upper  
29      limit threshold for which the mobile station is to send *Pilot Strength*  
30      *Measurement Mini Messages*.
    - 31      – The base station shall set PS\_CEILING\_LOW to the low water mark for upper  
32      limit threshold for which the mobile station is to send *Pilot Strength*  
33      *Measurement Mini Messages*.
    - 34      – The base station shall set THRESHOLD\_INTERVAL to the interval (in 20 ms  
35      units) between *Pilot Strength Measurement Mini Messages*.

#### 3.6.6.2.2.16 Processing of the Handoff Supplementary Information Notification Message

If the message contains any records with HO\_SUP\_REC\_TYPE field set to '000', then the base station should use the AP\_ID, IOS\_MSC\_ID and IOS\_CELL\_ID corresponding to the

1 PN for this mobile<sup>8</sup>.

### 2 3.6.6.2.3 Active Set Maintenance

3 The base station shall maintain an Active Set for each mobile station under its control as  
4 follows:

- 5 • When the base station sends the *Channel Assignment Message*, it shall initialize  
6 the Active Set to contain only the pilot associated with the assigned Forward Traffic  
7 Channel.
- 8 • When the base station sends the *Extended Channel Assignment Message*, it shall  
9 initialize the Active Set to contain all pilots included in the message.
- 10 • When the base station sends an *Extended Handoff Direction Message*, *General*  
11 *Handoff Direction Message*, or *Universal Handoff Direction Message*, it shall add to  
12 the Active Set, before the action time of the message, all pilots included in the  
13 message, if they are not already in the Active Set.
- 14 • The base station shall delete the pilots that were not included in the most recent  
15 *Extended Handoff Direction Message*, *General Handoff Direction Message*, or  
16 *Universal Handoff Direction Message*, from the Active Set upon receipt of the  
17 *Handoff Completion Message* or *Extended Handoff Completion Message*.

### 18 3.6.6.2.4 Soft Handoff

19 The base station should use soft handoff when directing a mobile station from one Forward  
20 Traffic Channel to another Forward Traffic Channel having the same frequency  
21 assignment.

#### 22 3.6.6.2.4.1 Receiving During Soft Handoff

23 Each base station in the Active Set shall demodulate the Reverse Traffic Channel. The  
24 base station should provide diversity combining of the demodulated signals obtained by  
25 each base station in the Active Set.

#### 26 3.6.6.2.4.2 Transmitting During Soft Handoff

27 The base station shall begin transmitting identical modulation symbols on all Forward  
28 Traffic Channels specified in an *Extended Handoff Direction Message* or *General Handoff*  
29 *Direction Message*, or *Universal Handoff Direction Message* (with the possible exception of  
30 the power control subchannel) by the action time of the message.

31 The base station shall transmit identical power control bits on all identical power control  
32 subchannels that were identified as such in the last *Extended Handoff Direction Message*,  
33 or *General Handoff Direction Message*, or *Universal Handoff Direction Message*.

---

<sup>8</sup> The base station may use these for handoff related signaling as specified in [48].

1 The base station shall use the same long code mask on all Forward Traffic Channels whose  
2 associated pilots are in the Active Set.

### 3 3.6.6.2.4.3 Call Rescue Soft Handoff

4 The base station shall support the call rescue feature.

5 The call rescue feature can be enabled or disabled by the base station. If the call rescue  
6 feature is enabled and the base station detects that a mobile station having MOB\_P\_REV  
7 greater than seven has disabled its transmitters, then the base station shall initiate call  
8 rescue procedures.

9 A base station that is configured with a Rescue Channel shall allocate a Walsh Code for  
10 the Rescue Channel. If the base station is designated as a rescue cell candidate, then the  
11 base station shall monitor the Reverse Traffic Channel in order to acquire a mobile station  
12 attempting call rescue soft handoff. If the base station acquires the mobile station, then it  
13 should begin immediately transmitting to the mobile station using the Rescue Channel  
14 Walsh Code.

### 15 3.6.6.2.5 Reserved

## 16 3.6.7 CDMA Tiered Services

### 17 3.6.7.1 Overview

#### 18 3.6.7.1.1 Definition

19 The base station may support Tiered Services to provide individual users or groups of  
20 users with custom services and special features based upon their location. The base  
21 station may also support Tiered Services to provide private network support. Important to  
22 the operation of CDMA Tiered Services is the concept of User Zones. It is via User Zones  
23 by which the base station offers custom services based upon the mobile station location.

24 User Zones are associated with a set of features and services, plus a geographic area in  
25 which the User Zone features/services are made available to the customers that have  
26 subscribed to that User Zone. The boundary of the User Zone Geographic area may be  
27 established based on the coverage area of a public or private base station, or it may be  
28 established independent of RF topology.

29 User Zones may be supported by the public system on the same frequency as the serving  
30 base station, or they may be supported on a private system operating on a different  
31 frequency.

#### 32 3.6.7.1.2 Types of User Zones

33 User Zones may be of two basic types:

- *Broadcast User Zones:* Broadcast User Zones are identified to the mobile station using the Paging Channel or the Primary Broadcast Control Channel. In this case, the base station broadcasts messages on the Paging Channel or the Primary Broadcast Control Channel identifying the User Zones that fall within the coverage area of the particular cell/sector. A mobile station, as part of its monitoring of the Paging Channel or the Primary Broadcast Control Channel, will identify the presence of a particular User Zone.
- *Mobile Specific User Zones:* Mobile Specific User Zones are not broadcast by the base station. A mobile station may use other overhead message parameters and compare them with internally stored User Zone parameters to identify the presence of a particular User Zone. These parameters may include: SID, NID, BASE\_ID, BASE\_LAT, and BASE\_LONG.

### 3.6.7.2 Requirements

If the base station supports CDMA Tiered Services, the base station sends the following messages to assist the mobile station in identifying the presence of User Zones and to validate the User Zone requested by a mobile station:

- *User Zone Identification Message*
- *Private Neighbor List Message*
- *User Zone Reject Message*
- *User Zone Update Message*

#### 3.6.7.2.1 User Zone Identification Message

The base station identifies Broadcast User Zones supported by the base station by sending the *User Zone Identification Message* on the Paging Channel or the Primary Broadcast Control Channel. The base station should list the UZID of each Broadcast User Zone supported by the base station.

#### 3.6.7.2.2 Private Neighbor List Message

The base station sends a Private Neighbor List and identifies the User Zones supported by its private neighbor base stations by sending the *Private Neighbor List Message* on the Paging Channel or the Primary Broadcast Control Channel. The *Private Neighbor List Message* shall list no more than  $N_{gm}$  private neighbors.

#### 3.6.7.2.3 User Zone Update Message and User Zone Reject Message on f-dsch

For a mobile station operating in the *Traffic Channel Substate* or *Release Substate* of the *Mobile Station Control on the Traffic Channel State*, the base station may update the User Zone associated with the mobile station by sending a *User Zone Update Message*. The base station may also send a *User Zone Reject Message* to reject the User Zone requested by the mobile station in the *Origination Message*, *Page Response Message*, or *User Zone Update Request Message*. The base station may include the ASSIGN\_UZID field in the *User Zone Reject Message* to assign a User Zone to the mobile station to replace the

1 rejected User Zone.

#### 2 3.6.7.2.4 User Zone Reject Message on f-csch

3 The base station may send the *User Zone Reject Message* on the Paging Channel or the  
 4 Forward Common Control Channel to reject the User Zone requested by the mobile station  
 5 in the *Registration Message*, *Origination Message*, or *Page Response Message*. The base  
 6 station may include the ASSIGN\_UZID field in the *User Zone Reject Message* record to  
 7 assign a User Zone to the mobile station to replace the rejected User Zone.

#### 8 3.6.8 Call Control Processing

9 The Call Control consists of the following states:

- 10 • *Waiting for Order Substate* - In this substate, the Call Control instance sends the  
 11 *Alert With Information Message* or the *Extended Alert With Information Message* to  
 12 the mobile station.
- 13 • *Waiting for Answer Substate* - In this substate, the Call Control instance waits for  
 14 the *Connect Order* from the mobile station.
- 15 • *Conversation Substate* - In this substate, the parties involved in this call exchanges  
 16 Traffic Channel frames in accordance with the current service configuration.
- 17 • *Call Release Substate* - In this substate, the Call Control instance waits for the call  
 18 to be disconnected.

19 The following messages are processed by the Call Control:

- 20 • *Alert With Information Message*
- 21 • *Extended Alert with Information Message*:
- 22 • *Flash With Information Message*
- 23 • *Extended Flash With Information Message*
- 24 • *Send Burst DTMF Message*
- 25 • *Origination Continuation Message*

26 The following orders are processed by the Call Control:

- 27 • *Continuous DTMF Tone Order*
- 28 • *Maintenance Order*
- 29 • *Connect Order*

30 Upon instantiation, the Call Control instance shall perform the following:

- If the call is a mobile station terminated call and the base station set *BYPASS\_ALERT\_ANSWER* to '1', the Call Control instance shall enter the *Conversation Substate* (see 3.6.8.2). If the call is a mobile station terminated call and the base station set *BYPASS\_ALERT\_ANSWER* to '0', the Call Control instance shall enter the *Waiting for Order Substate* (see 3.6.8.1.1).
- If the call is a mobile-station-originated call, the Call Control instance shall enter the *Conversation Substate* (see 3.6.8.2).

### 3.6.8.1 Alerting

#### 3.6.8.1.1 Waiting for Order Substate

In this substate, the Call Control instance sends an *Alert With Information Message* or an *Extended Alert With Information Message* to the mobile station.

While in the *Waiting for Order Substate*, the Call Control instance shall perform the following:

- If the Call Control instance receives a "release indication" from the Layer 3, the Call Control instance shall enter the *Call Release Substate*.
- If the Call Control instance receives a "send alert with info message indication" from the Layer 3, the Call Control instance shall send an *Alert with Information Message* or an *Extended Alert With Information Message* to the mobile station within T2b seconds, and enter the *Waiting for Answer Substate*.
- The Call Control instance may send the following messages:
  1. *Alert With Information Message*: The Call Control instance shall enter the *Waiting for Answer Substate*.
  2. *Extended Alert With Information Message*: The Call Control instance shall enter the *Waiting for Answer Substate*.
  3. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Answer Substate*.

#### 3.6.8.1.2 Waiting for Answer Substate

In this substate, the Call Control instance waits for a *Connect Order* from the mobile station.

While in the *Waiting for Answer Substate*, the Call Control instance shall perform the following:

- If the Call Control instance receives a "release indication" from the Layer 3, the Call Control instance shall enter the *Call Release Substate*.

- 1 • If the Call Control instance receives a “send alert with info message indication”  
2 from the Layer 3, the Call Control instance shall send an *Alert with Information*  
3 *Message* or an *Extended Alert with Information Message* to the mobile station,  
4 within T2b seconds, and enter the *Waiting for Answer Substate*.
- 5 • The Call Control instance may send the following messages:
  - 6 1. *Alert With Information Message*
  - 7 2. *Extended Alert With Information Message*
  - 8 3. *Maintenance Order*
- 9 • If the Call Control instance receives one of the following messages from the Layer 3,  
10 the Call Control instance shall process the message according to the specified  
11 requirements, if any:
  - 12 1. *Connect Order*: The Call Control instance shall enter the *Conversation Substate*.
  - 13 2. *Flash With Information Message*: If the message contains a Keypad Facility  
14 record with feature codes indicating User Selective Call Forwarding with a pre-  
15 registered number, a stored number, or voice mail, the Call Control instance  
16 may send a ‘call release request’ to the Layer 3. If this message contains the  
17 Global Emergency Call information record and the call associated with this Call  
18 Control instance is a voice call, the base station shall recognize this as an  
19 emergency call and should process the message using an implementation-  
20 dependent procedure which may include ignoring the dialed digits. If this  
21 message contains the Global Emergency Call information record and the call  
22 associated with this Call Control instance is not a voice call, the base station  
23 may recognize this as an emergency call and should process the message using  
24 an implementation-dependent procedure which may include ignoring the dialed  
25 digits.
  - 26 3. *Extended Flash With Information Message*: If the message contains a Keypad  
27 Facility record with feature codes indicating User Selective Call Forwarding with  
28 a pre-registered number, a stored number, or voice mail, the Call Control  
29 instance may send a ‘call release request’ to the Layer 3. If this message  
30 contains the Global Emergency Call information record and the call associated  
31 with this Call Control instance is a voice call, the base station shall recognize  
32 this as an emergency call and should process the message using an  
33 implementation-dependent procedure which may include ignoring the dialed  
34 digits. If this message contains the Global Emergency Call information record  
35 and the call associated with this Call Control instance is not a voice call, the  
36 base station may recognize this as an emergency call and should process the  
37 message using an implementation-dependent procedure which may include  
38 ignoring the dialed digits.

#### 4. *Origination Continuation Message*

##### 3.6.8.2 Conversation Substate

While in the *Conversation Substate*, the Call Control instance shall perform the following:

- If the Call Control instance receives a “release indication” from the Layer 3, the Call Control instance shall enter the *Call Release Substate*.
- If the Call Control instance receives a “paca reorig indication” from the Layer 3, the Call Control instance should send either an *Alert With Information Message/Extended Alert With Information Message* which contains a signal information record with the SIGNAL\_TYPE field set to ‘01’ or ‘10’, or an *Alert With Information Message/Extended Alert With Information Message* which does not contain a signal information record.
- If the Call Control instance receives a “send alert with info message indication” from Layer 3, the Call Control instance shall send an *Alert with Information Message* or an *Extended Alert With Information Message* to the mobile station within T2b seconds, and enter the *Waiting for Answer Substate*.
- The Call Control instance may send the following messages:
  1. *Alert With Information Message*: If the message contains a signal information record with the SIGNAL\_TYPE field set to ‘01’ or ‘10’, or if the message does not contain a signal information record, the Call Control instance shall enter the *Waiting for Answer Substate*.
  2. *Extended Alert With Information Message*: If the message contains a signal information record with the SIGNAL\_TYPE field set to ‘01’ or ‘10’, or if the message does not contain a signal information record, the Call Control instance shall enter the *Waiting for Answer Substate*.
  3. *Continuous DTMF Tone Order*
  4. *Flash With Information Message*
  5. *Extended Flash With Information Message*
  6. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Answer Substate*.
  7. *Send Burst DTMF Message*
- If the Call Control instance receives one of the following messages from Layer 3, the Call Control instance shall process the message according to the specified requirements, if any:



1           1. *Continuous DTMF Tone Order*

2           2. *Flash With Information Message*: If this message contains the Global Emergency  
3           Call information record and the call associated with this Call Control instance  
4           is a voice call, the base station shall recognize this as an emergency call and  
5           should process the message using an implementation-dependent procedure  
6           which may include ignoring the dialed digits. If this message contains the  
7           Global Emergency Call information record and the call associated with this Call  
8           Control instance is not a voice call, the base station may recognize this as an  
9           emergency call and should process the message using an implementation-  
10          dependent procedure which may include ignoring the dialed digits.

11          3. *Extended Flash With Information Message*: If this message contains the Global  
12          Emergency Call information record and the call associated with this Call  
13          Control instance is a voice call, the base station shall recognize this as an  
14          emergency call and should process the message using an implementation-  
15          dependent procedure which may include ignoring the dialed digits. If this  
16          message contains the Global Emergency Call information record and the call  
17          associated with this Call Control instance is not a voice call, the base station  
18          may recognize this as an emergency call and should process the message using  
19          an implementation-dependent procedure which may include ignoring the dialed  
20          digits.

21          4. *Origination Continuation Message*

22          5. *Send Burst DTMF Message*

23    3.6.8.3 Call Release Substate

- 24          • The Call Control instance may send the following messages:

25          1. *Alert With Information Message*: If the message contains a signal information  
26          record with the SIGNAL\_TYPE field set to '01' or '10', or if the message does not  
27          contain a signal information record, the base station shall enter the *Waiting for*  
28          *Answer Substate*.

29          2. *Extended Alert With Information Message*: If the message contains a signal  
30          information record with the SIGNAL\_TYPE field set to '01' or '10', or if the  
31          message does not contain a signal information record, the base station shall  
32          enter the *Waiting for Answer Substate*.

33          3. *Maintenance Order*: The Call Control instance shall enter the *Waiting for*  
34          *Answer Substate*.

- 35          • If the Call Control instance receives one of the following messages from Layer 3, the  
36          Call Control instance shall process the message according to the specified  
37          requirements, if any:

1           1. *Connect Order*

2           2. *Continuous DTMF Tone Order*

3           3. *Flash With Information Message*: If this message contains the Global Emergency  
4           Call information record and the call associated with this Call Control instance  
5           is a voice call, the base station shall recognize this as an emergency call and  
6           should process the message using an implementation-dependent procedure  
7           which may include ignoring the dialed digits. If this message contains the  
8           Global Emergency Call information record and the call associated with this Call  
9           Control instance is not a voice call, the base station may recognize this as an  
10          emergency call and should process the message using an implementation-  
11          dependent procedure which may include ignoring the dialed digits.

12          4. *Extended Flash With Information Message*: If this message contains the Global  
13          Emergency Call information record and the call associated with this Call  
14          Control instance is a voice call, the base station shall recognize this as an  
15          emergency call and should process the message using an implementation-  
16          dependent procedure which may include ignoring the dialed digits. If this  
17          message contains the Global Emergency Call information record and the call  
18          associated with this Call Control instance is not a voice call, the base station  
19          may recognize this as an emergency call and should process the message using  
20          an implementation-dependent procedure which may include ignoring the dialed  
21          digits.

22          5. *Origination Continuation Message*

23          6. *Send Burst DTMF Message*

24   3.6.9 MEID procedures when communicating with MOB\_P\_REV 6, 7, 8, 9, 10 Mobile  
25   Stations

26   The base station shall conform to the requirements in [47] when communicating with a  
27   MOB\_P\_REV 6, 7, 8, 9, or 10 mobile station equipped with an MEID.

1    **3.7 PDU Formats for Messages**

2    The following sections specify the requirements on the PDU formats transmitted on the f-  
3    csch, and the f-dsch.

4    In any multi-bit field in the following messages, the most significant bit (MSB) shall be  
5    transmitted first.

6    3.7.1 Reserved

7    3.7.2 f-csch

8    The f-csch is used to send control information to mobile stations that have not been  
9    assigned to a Traffic Channel.

10   3.7.2.1 Reserved

11   3.7.2.2 Reserved

12

## 1 3.7.2.3 PDU Formats for Messages on the f-csch

2 The messages sent on the f-csch are summarized in Table 3.7.2.3-1.

3

4 **Table 3.7.2.3-1. f-csch Messages**

<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>Primary BCCH</b>	<b>F-CCCH</b>	<b>PCH</b>	<b>P_REV_IN_USE<sup>9</sup></b>
<i>System Parameters Message</i>	SPM	3.7.2.3.2.1	N	N	Y	All
<i>Access Parameters Message</i>	APM	3.7.2.3.2.2	N	N	Y	All
<i>Neighbor List Message (Band Class 0 only)</i>	NLM	3.7.2.3.2.3	N	N	Y	All
<i>CDMA Channel List Message</i>	CCLM	3.7.2.3.2.4	N	N	Y	All
<i>Order Message</i>	ORDM	3.7.2.3.2.7	N	Y	Y	All
<i>Channel Assignment Message</i>	CAM	3.7.2.3.2.8	N	N	Y	< 8
<i>Data Burst Message<sup>10</sup></i>	DBM	3.7.2.3.2.9	N	Y	Y	All
<i>Authentication Challenge Message</i>	AUCM	3.7.2.3.2.10	N	Y	Y	All
<i>SSD Update Message</i>	SSDUM	3.7.2.3.2.11	N	Y	Y	All
<i>Feature Notification Message</i>	FNM	3.7.2.3.2.12	N	Y	Y	All
<i>Extended System Parameters Message</i>	ESPM	3.7.2.3.2.13	N	N	Y	All
<i>Extended Neighbor List Message (band classes other than Band Class 0)</i>	ENLM	3.7.2.3.2.14	N	N	Y	1, ≥ 3
<i>Status Request Message</i>	STRQM	3.7.2.3.2.15	N	Y	Y	1, ≥ 3
<i>Service Redirection Message</i>	SRDM	3.7.2.3.2.16	N	Y	Y	All
<i>General Page Message</i>	GPM	3.7.2.3.2.17	N	Y	Y	All

5

---

<sup>9</sup> P\_REV\_IN\_USE in this context means P\_REV for overhead messages (see 2.6.2.2). P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.

<sup>10</sup> When the *Data Burst Message* is used as a broadcast message, it can be sent on a Broadcast Control Channel other than the Primary Broadcast Control Channel, or on the Forward Common Control Channel when a secondary Broadcast Control Channel is not allocated, i.e., NUM\_BCCH\_BCAST<sub>S</sub> equals 0 (see 2.6.2.1.1.3).

1

**Table 3.7.2.3-1. f-csch Messages**

<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>Primary BCCH</b>	<b>F-CCCH</b>	<b>PCH</b>	<b>P_REV_IN_USE</b>
<i>Global Service Redirection Message</i>	GSRDM	3.7.2.3.2.18	N	N	Y	All
<i>TMSI Assignment Message</i>	TASM	3.7.2.3.2.19	N	Y	Y	1, $\geq 4$
<i>PACA Message</i>	PACAM	3.7.2.3.2.20	N	Y	Y	$\geq 4$
<i>Extended Channel Assignment Message</i>	ECAM	3.7.2.3.2.21	N	Y	Y	$\geq 4$
<i>General Neighbor List Message</i>	GNLM	3.7.2.3.2.22	N	N	Y	$\geq 4$
<i>User Zone Identification Message</i>	UZIM	3.7.2.3.2.23	Y	N	Y	$\geq 6$
<i>Private Neighbor List Message</i>	PNLM	3.7.2.3.2.24	Y	N	Y	$\geq 6$
<i>Sync Channel Message</i>	SCHM	3.7.2.3.2.26	N	N	N	All
<i>Extended Global Service Redirection Message</i>	EGSRDM	3.7.2.3.2.27	Y	N	Y	$\geq 6$
<i>Extended CDMA Channel List Message</i>	ECCLM	3.7.2.3.2.28	Y	N	Y	$\geq 6$
<i>User Zone Reject Message</i>	UZRM	3.7.2.3.2.29	N	Y	Y	$\geq 6$
<i>ANSI-41 System Parameters Message</i>	A41SPM	3.7.2.3.2.30	Y	N	N	$\geq 7$
<i>MC-RR Parameters Message</i>	MCRRPM	3.7.2.3.2.31	Y	N	N	$\geq 7$
<i>ANSI-41 RAND Message</i>	A41RANDM	3.7.2.3.2.32	Y	N	N	$\geq 7$
<i>Enhanced Access Parameters Message</i>	EAPM	3.7.2.3.2.33	Y	N	N	$\geq 7$
<i>Universal Neighbor List Message</i>	UNLM	3.7.2.3.2.34	Y	N	N	$\geq 7$
<i>Security Mode Command Message</i>	SMCM	3.7.2.3.2.35	N	Y	Y	$\geq 7$
<i>Universal Page Message</i>	UPM	3.7.2.3.2.36	N	Y	N	$\geq 7$
<i>Authentication Request Message</i>	AUREQM	3.7.2.3.2.37	N	Y	Y	$\geq 10$
<i>BCMC Service Parameters Message</i>	BSPM	3.7.2.3.2.38	Y	N	Y	$\geq 11$

<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>Primary BCCH</b>	<b>F-CCCH</b>	<b>PCH</b>	<b>P_REV_IN_USE</b>
<i>MEID Extended Channel Assignment Message</i>	MECAM	See [47]	N	Y	Y	≥ 6 but < 9
<i>Alternative Technologies Information Message</i>	ATIM	3.7.2.3.2.45	Y	N	Y	≥ 6
<i>Access Point Identification Message</i>	APIDM	3.7.2.3.2.39	Y	N	Y	≥12
<i>Access Point Identification Text Message</i>	APIDTM	3.7.2.3.2.40	Y	N	Y	≥12
<i>Access Point Pilot Information Message</i>	APPIM	3.7.2.3.2.41	Y	N	Y	≥12
<i>General Overhead Information Message</i>	GOIM	3.7.2.3.2.42	Y	N	Y	≥ 12
<i>Flex Duplex CDMA Channel List Message</i>	FDCCLM	3.7.2.3.2.43	Y	N	Y	≥ 12
<i>General Extension Message</i>	GEM	3.7.2.3.2.44	N	Y	Y	≥ 12

1  
2

1    3.7.2.3.1 Reserved

2    3.7.2.3.2 Message Body Contents

3    The following sections specify the contents of message body for each message that may be  
4    sent on the f-csch.

5

## 1 3.7.2.3.2.1 System Parameters Message

## 2 MSG\_TAG: SPM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
SID	15
NID	16
REG_ZONE	12
TOTAL_ZONES	3
ZONE_TIMER	3
MULT_SIDS	1
MULT_NIDS	1
BASE_ID	16
BASE_CLASS	4
PAGE_CHAN	3
MAX_SLOT_CYCLE_INDEX	3
HOME_REG	1
FOR_SID_REG	1
FOR_NID_REG	1
POWER_UP_REG	1
POWER_DOWN_REG	1
PARAMETER_REG	1
REG_PRD	7
BASE_LAT	22
BASE_LONG	23
REG_DIST	11
SRCH_WIN_A	4

(continues on next page)



<b>Field</b>	<b>Length (bits)</b>
SRCH_WIN_N	4
SRCH_WIN_R	4
NGHBR_MAX_AGE	4
PWR_REP_THRESH	5
PWR_REP_FRAMES	4
PWR_THRESH_ENABLE	1
PWR_PERIOD_ENABLE	1
PWR_REP_DELAY	5
RESCAN	1
T_ADD	6
T_DROP	6
T_COMP	4
T_TDROP	4
EXT_SYS_PARAMETER	1
EXT_NGHR_LST	1
GEN_NGHR_LST	1
GLOBAL_REDIRECT	1
PRI_NGHR_LST	1
USER_ZONE_ID	1
EXT_GLOBAL_REDIRECT	1
EXT_CHAN_LST	1
T_TDROP_RANGE_INCL	1
T_TDROP_RANGE	0 or 4
NEG_SLOT_CYCLE_INDEX_SUP	1
CRRM_MSG_IND	1
NUM_OPT_MSG_BITS	4
AP_PILOT_INFO	0 or 1
AP_IDT	0 or 1
AP_ID_TEXT	0 or 1
GEN_OVHD_INF_IND	0 or 1
FD_CHAN_LST_IND	0 or 1
ATIM_IND	0 or 1

RESERVED	0 or (NUM_OPT_MSG_BITS - 6)
APPIM_PERIOD_INDEX	0 or 3
GEN_OVHD_CYCLE_INDEX	0 or 3
ATIM_CYCLE_INDEX	0 or 3
ADD_LOC_INFO_INCL	1
LOC_UNC_H	0 or 4
HEIGHT	0 or 14
LOC_UNC_V	0 or 4

1			
2	PILOT_PN	-	Pilot PN sequence offset index.
3			The base station shall set this field to the pilot PN sequence
4			offset for this base station, in units of 64 PN chips.
5	CONFIG_MSG_SEQ	-	Configuration message sequence number.
6			The base station shall set this field to CONFIG_SEQ
7			(see 3.6.2.2).
8	SID	-	System identification.
9			The base station shall set this field to the system
10			identification number for this system (see 2.6.5.2).
11	NID	-	Network identification.
12			This field serves as a sub-identifier of a system as defined by
13			the owner of the SID.
14			The base station shall set this field to the network
15			identification number for this network (see 2.6.5.2).
16	REG_ZONE	-	Registration zone.
17			The base station shall set this field to its registration zone
18			number (see 2.6.5.1.5).
19	TOTAL_ZONES	-	Number of registration zones to be retained.
20			The base station shall set this field to the number of
21			registration zones the mobile station is to retain for purposes
22			of zone-based registration (see 2.6.5.1.5).
23			If zone-based registration is to be disabled, the base station
24			shall set this field to '000'.
25	ZONE_TIMER	-	Zone timer length.
26			The base station shall set this field to the ZONE_TIMER value
27			shown in Table 3.7.2.3.2.1-1 corresponding to the length of
28			the zone registration timer to be used by mobile stations.
29			

1

**Table 3.7.2.3.2.1-1. Value of Zone Timer**

<b>ZONE_TIMER Value (binary)</b>	<b>Timer Length (Minutes)</b>
000	1
001	2
010	5
011	10
100	20
101	30
110	45
111	60

2

3

**MULT\_SIDS** - Multiple SID storage indicator.

4

5

6

If mobile stations may store entries of SID\_NID\_LIST containing different SIDs, the base station shall set this field to '1'; otherwise the base station shall set this field to '0'.

7

**MULT\_NIDS** - Multiple NID storage indicator.

8

9

10

11

If mobile stations may store multiple entries of SID\_NID\_LIST having the same SID (with different NIDs), the base station shall set this field to '1'; otherwise the base station shall set this field to '0'.

12

**BASE\_ID** - Base station identification.

13

14

The base station shall set this field to its identification number.

15

**BASE\_CLASS** - Base station class.

16

The base station shall set this field as follows:

17

18

19

For Band Class 1 and 4, the base station shall set this field to '0001'; otherwise, the base station shall set this field to '0000'.

20

**PAGE\_CHAN** - Number of Paging Channels.

21

22

23

The base station shall set this field to the number of Paging Channels on this CDMA Channel. The base station shall not set this field to '000'.

24

**MAX\_SLOT\_CYCLE\_INDEX** - Maximum slot cycle index.

25

26

27

The base station shall set this field to the SLOT\_CYCLE\_INDEX value corresponding to the maximum slot cycle length permitted (see 2.6.2.1.1).

1	HOME_REG	-	Home registration indicator.
2			If mobile stations that are not roaming (see 2.6.5.3) and have
3			MOB_TERM_HOME equal to '1' are to be enabled for
4			autonomous registrations, the base station shall set this field
5			to '1'. If such mobile stations are not to be enabled for
6			autonomous registration, the base station shall set this field
7			to '0'.
8	FOR_SID_REG	-	SID roamer registration indicator.
9			If mobile stations that are foreign SID roamers (see 2.6.5.3)
10			and have MOB_TERM_FOR_SID equal to '1' are to be enabled
11			for autonomous registration, the base station shall set this
12			field to '1'. If such mobile stations are not to be enabled for
13			autonomous registration, the base station shall set this field
14			to '0'.
15	FOR_NID_REG	-	NID roamer registration indicator.
16			If mobile stations that are foreign NID roamers (see 2.6.5.3)
17			and have MOB_TERM_FOR_NID equal to '1' are to be enabled
18			for autonomous registration, the base station shall set this
19			field to '1'. If such mobile stations are not to be enabled for
20			autonomous registration, the base station shall set this field
21			to '0'.
22	POWER_UP_REG	-	Power-up registration indicator.
23			If mobile stations enabled for autonomous registration are to
24			register immediately after powering on and receiving the
25			system overhead messages, the base station shall set this
26			field to '1'; otherwise, the base station shall set this field to
27			'0'.
28	POWER_DOWN_REG	-	Power-down registration indicator.
29			If mobile stations enabled for autonomous registration are to
30			register immediately before powering down, the base station
31			shall set this field to '1'; otherwise, the base station shall set
32			this field to '0'.
33	PARAMETER_REG	-	Parameter-change registration indicator.
34			If mobile stations are to register on parameter change events
35			as specified in 2.6.5.1.6, the base station shall set this field to
36			'1'. If not, the base station shall set this field to '0'.
37	REG_PRD	-	Registration period.
38			If mobile stations are not to perform timer-based registration,
39			the base station shall set this field to '0000000'. If mobile
40			stations are to perform timer-based registration, the base
41			station shall set this field to the value in the range 29 to 85
42			inclusive, such that the desired timer value is
43			$\lfloor 2\text{REG\_PRD}/4 \rfloor \times 0.08$ seconds.

1	BASE_LAT	-	Base station latitude.
2			The base station shall set this field to its latitude in units of
3			0.25 second, expressed as a two's complement signed
4			number with positive numbers signifying North latitudes.
5			The base station shall set this field to a value in the range -
6			1296000 to 1296000 inclusive (corresponding to a range of -
7			90° to +90°).
8			The base station shall set this field to all zeros if its latitude is
9			not known.
10	BASE_LONG	-	Base station longitude.
11			The base station shall set this field to its longitude in units of
12			0.25 second, expressed as a two's complement signed
13			number with positive numbers signifying East longitude. The
14			base station shall set this field to a value in the range -
15			2592000 to 2592000 inclusive (corresponding to a range of -
16			180° to +180°).
17			The base station shall set this field to all zeros if its longitude
18			is not known.
19	REG_DIST	-	Registration distance.
20			If mobile stations are to perform distance-based registration,
21			the base station shall set this field to the non-zero "distance"
22			beyond which the mobile station is to re-register (see
23			2.6.5.1.4). If mobile stations are not to perform distance-
24			based registration, the base station shall set this field to 0.
25	SRCH_WIN_A	-	Search window size for the Active Set and Candidate Set.
26			The base station shall set this field to the value shown in
27			Table 2.6.6.2.1-1 corresponding to the search window size to
28			be used by mobile stations for the Active Set and Candidate
29			Set.
30	SRCH_WIN_N	-	Search window size for the Neighbor Set.
31			The base station shall set this field to the value shown in
32			Table 2.6.6.2.1-1 corresponding to the search window size to
33			be used by mobile stations for the Neighbor Set.
34	SRCH_WIN_R	-	Search window size for the Remaining Set.
35			The base station shall set this field to the value shown in
36			Table 2.6.6.2.1-1 corresponding to the search window size to
37			be used by mobile stations for the Remaining Set.
38	NGHBR_MAX_AGE	-	Neighbor Set maximum AGE.
39			The base station shall set this field to the maximum AGE
40			value beyond which mobile stations are to drop members
41			from the Neighbor Set (see 2.6.6.2.6.3).
42	PWR_REP_THRESH	-	Power control reporting threshold.

1			The base station shall set this field to the number of bad
2			frames (see [2]) to be received in a measurement period on the
3			channel which carries the Power Control Subchannel before
4			mobile stations are to generate a <i>Power Measurement Report</i>
5			<i>Message</i> (see 2.6.4.1.1). If the base station sets
6			PWR_THRESH_ENABLE to '1', it shall not set this field to
7			'00000'.
8	PWR_REP_FRAMES	-	Power control reporting frame count.
9			The base station shall set this field to the value such that the
10			number given by
11			$\lfloor 2^{(PWR\_REP\_FRAMES/2)} \times 5 \rfloor \text{ frames}$
12			is the number of frames over which mobile stations are to
13			count frame errors.
14	PWR_THRESH_ENABLE	-	Threshold report mode indicator.
15			If mobile stations are to generate threshold <i>Power</i>
16			<i>Measurement Report Messages</i> , the base station shall set this
17			field to '1'. If mobile stations are not to generate threshold
18			<i>Power Measurement Report Messages</i> , the base station shall
19			set this field to '0'.
20	PWR_PERIOD_ENABLE	-	Periodic report mode indicator.
21			If mobile stations are to generate periodic <i>Power Measurement</i>
22			<i>Report Messages</i> , the base station shall set this field to '1'. If
23			mobile stations are not to generate periodic <i>Power</i>
24			<i>Measurement Report Messages</i> , the base station shall set this
25			field to '0'.
26	PWR_REP_DELAY	-	Power report delay.
27			The period that mobile stations wait following a <i>Power</i>
28			<i>Measurement Report Message</i> before restarting frame
29			counting for power control purposes.
30			The base station shall set this field to the power report delay
31			value, in units of 4 frames (see 2.6.4.1.1).
32	RESCAN	-	Rescan indicator.
33			If mobile stations are to re-initialize and re-acquire the
34			system upon receiving this message, the base station shall
35			set this field to '1'; otherwise, the base station shall set this
36			field to '0'.
37	T_ADD	-	Pilot detection threshold.
38			This value is used by the mobile station to trigger the transfer
39			of a pilot from the Neighbor Set or Remaining Set to the
40			Candidate Set (see 2.6.6.2.6) and to trigger the sending of the
41			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
42			<i>Strength Measurement Message</i> initiating the handoff process
43			(see 2.6.6.2.5.2).

1		The base station shall set this field to the pilot detection
2		threshold, expressed as an unsigned binary number equal to
3		$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
4	T_DROP	- Pilot drop threshold.
5		This value is used by mobile stations to start a handoff drop
6		timer for pilots in the Active Set and the Candidate Set (see
7		2.6.6.2.3).
8		The base station shall set this field to the pilot drop
9		threshold, expressed as an unsigned binary number equal to
10		$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
11	T_COMP	- Active Set versus Candidate Set comparison threshold.
12		Mobile stations transmit a <i>Pilot Strength Measurement</i>
13		<i>Message</i> or an <i>Extended Pilot Strength Measurement Message</i>
14		when the strength of a pilot in the Candidate Set exceeds that
15		of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
16		The base station shall set this field to the threshold
17		Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB.
18	T_TDROP	- Drop timer value.
19		Timer value after which an action is taken by mobile stations
20		for a pilot that is a member of the Active Set or Candidate Set,
21		and whose strength has not become greater than T_DROP. If
22		the pilot is a member of the Active Set, a <i>Pilot Strength</i>
23		<i>Measurement Message</i> or an <i>Extended Pilot Strength</i>
24		<i>Measurement Message</i> is issued. If the pilot is a member of
25		the Candidate Set, it will be moved to the Neighbor Set.
26		The base station shall set this field to the T_TDROP value
27		shown in Table 2.6.6.2.3-1 corresponding to the drop timer
28		value to be used by mobile stations.
29	EXT_SYS_PARAMETER	- <i>Extended System Parameters Message</i> indicator.
30		The base station shall set this field to '1'.
31	EXT_NGHR_LST	- <i>Extended Neighbor List Message</i> indicator.
32		The base station sets this field to '1' when it sends the
33		<i>Extended Neighbor List Message</i> on the Paging Channel;
34		otherwise the base station sets this field to '0'.
35		If the base station is operating in Band Class 1, Band Class
36		3, or Band Class 4 with MIN_P_REV less than seven, it shall
37		set this field to '1'. If the base station is operating in Band
38		Class 0, it shall set this field to '0'.
39	GEN_NGHR_LST	- <i>General Neighbor List Message</i> indicator.
40		If the base station is sending the <i>General Neighbor List</i>
41		<i>Message</i> on the Paging Channel, it shall set this field to '1';
42		otherwise, it shall set this field to '0'.

1			If the base station is operating in Band Class 1, Band Class
2			3, or Band Class 4 with MIN_P_REV greater than or equal to
3			seven, and if EXT_NGHBR_LST is set to '0', the base station
4			shall set this field to '1'.
5			If the base station is operating in Band Class 0 with
6			MIN_P_REV greater than or equal to seven and if the <i>Neighbor</i>
7			<i>List Message</i> is not sent, the base station shall set this field
8			to '1'.
9			If the base station is operating in a band class other than
10			Band Class 1, Band Class 3, or Band Class 4, and if
11			EXT_NGHBR_LST is set to '0', the base station shall set this
12			field to '1'.
13	GLOBAL_REDIRECT	-	<i>Global Service Redirection Message</i> indicator.
14			If the base station is sending the <i>Global Service Redirection</i>
15			<i>Message</i> on the Paging Channel, it shall set this field to '1';
16			otherwise, it shall set this field to '0'.
17	PRI_NGHBR_LST	-	<i>Private Neighbor List Message</i> indicator.
18			If the base station is sending the <i>Private Neighbor List</i>
19			<i>Message</i> on the Paging Channel, it shall set this field to '1';
20			otherwise, it shall set this field to '0'.
21	USER_ZONE_ID	-	<i>User Zone Identification Message</i> indicator.
22			If the base station is sending the <i>User Zone Identification</i>
23			<i>Message</i> on the Paging Channel, it shall set this field to '1';
24			otherwise, it shall set this field to '0'.
25	EXT_GLOBAL_REDIRECT	-	Extended <i>Global Service Redirection Message</i> indicator.
26			If the base station is sending the <i>Extended Global Service</i>
27			<i>Redirection Message</i> on the Paging Channel, it shall set this
28			field to '1'; otherwise, the base station shall set this field to
29			'0'.
30	EXT_CHAN_LST	-	Extended CDMA Channel List Message indicator.
31			The base station shall set this field to '1', if the <i>Extended</i>
32			<i>Channel List Message</i> is sent on the Paging Channel,
33			otherwise, it shall set this field to '0'.
34	T_TDROP_RANGE_INCL	-	Drop timer range value included indicator.
35			The base station shall set this field to '1' if the
36			T_TDROP_RANGE field is included in this message;
37			otherwise, the base station shall set this field to '0'.
38	T_TDROP_RANGE	-	Drop timer range value.
39			Timer range value to use in association with the T_TDROP
40			parameter when determining the drop timer expiration.
41			If T_TDROP_RANGE_INCL is set to '0', the base station shall
42			omit this field; otherwise, the base station shall set this field
43			to the T_TDROP_RANGE value shown in Table 2.6.6.2.3-2
44			corresponding to the timer expiration range value to be used
45			by the mobile station.



1	NEG_SLOT_CYCLE_INDEX_SUP	-	Negative slot cycle index supported indicator.
2			The base station shall set this field to '1' if it supports
3			negative values of the preferred slot cycle index
4			(SLOT_CYCLE_INDEX <sub>p</sub> ); otherwise, the base station shall set
5			this field to '0'.
6	CRRM_MSG_IND	-	<i>Call Recovery Request Message</i> supported indicator.
7			The base station shall set this field to '0' if the mobile station
8			is not allowed to send a <i>Call Recovery Request Message</i> ;
9			otherwise, the base station shall set this field to '1'.
10	NUM_OPT_MSG_BITS	-	Number of optional overhead messages transmission
11			information bits.
12			The base station shall set this field to the number of optional
13			overhead messages for which transmission information is
14			included in this message.
15	AP_PILOT_INFO	-	<i>Access Point Pilot Information Message</i> indicator.
16			If NUM_OPT_MSG_BITS is equal to or greater than 1, the
17			base station shall include the field AP_PILOT_INFO and shall
18			set this field as shown below; otherwise, the base station
19			shall omit this field.
20			If the base station is sending the <i>Access Point Pilot</i>
21			<i>Information Message</i> on the Paging Channel, it shall set this
22			field to '1'; otherwise, the base station shall set this field to
23			'0'.
24	AP_IDT	-	<i>Access Point Identification Message</i> indicator.
25			If NUM_OPT_MSG_BITS is equal to or greater than 2, the
26			base station shall include the field AP_IDT and shall set this
27			field as shown below; otherwise, the base station shall omit
28			this field.
29			If the base station is sending the <i>Access Point Identification</i>
30			<i>Message</i> on the Paging Channel, it shall set this field to '1';
31			otherwise, the base station shall set this field to '0'.
32	AP_ID_TEXT	-	<i>Access Point Identification Text Message</i> indicator.
33			If NUM_OPT_MSG_BITS is equal to or greater than 3, the
34			base station shall include the field AP_ID_TEXT and shall set
35			this field as shown below; otherwise, the base station shall
36			omit this field.
37			If the base station is sending the <i>Access Point Identification</i>
38			<i>Text Message</i> on the Paging Channel, it shall set this field to
39			'1'; otherwise, the base station shall set this field to '0'.
40	GEN_OVHD_INF_IND	-	<i>General Overhead Information Message</i> indicator.
41			If NUM_OPT_MSG_BITS is equal to or greater than 4, the
42			base station shall include the field GEN_OVHD_INF_IND and
43			shall set this field as shown below; otherwise, the base
44			station shall omit this field.

1			If the base station is sending the <i>General Overhead Information Message</i> on the Paging Channel, it shall set this field to '1'; otherwise, the base station shall set this field to '0'.
2			
3			
4			
5	FD_CHAN_LST_IND	-	<i>Flex Duplex CDMA Channel List Message</i> indicator.
6			If NUM_OPT_MSG is equal to or greater than 5, the base station shall include the field FD_CHAN_LST_IND and shall set this field as shown below; otherwise, the base station shall omit this field.
7			
8			
9			
10			If the base station is sending the <i>Flex Duplex CDMA Channel List Message</i> on the Paging Channel, it shall set this field to '1'; otherwise, the base station shall set this field to '0'.
11			
12			
13	ATIM_IND	-	<i>Alternative Technologies Information Message</i> indicator.
14			If NUM_OPT_MSG_BITS is equal to or greater than 6, the base station shall include the field ATIM_IND and shall set this field as shown below; otherwise, the base station shall omit this field.
15			
16			
17			
18			If the base station is sending the <i>Alternative Technologies Information Message</i> on the Paging Channel, it shall set this field to '1'; otherwise, the base station shall set this field to '0'.
19			
20			
21			
22	RESERVED	-	Reserved bits.
23			If NUM_OPT_MSG_BITS is greater than 6, the base station shall include the field RESERVED and shall set this field as shown below; otherwise, the base station shall omit this field.
24			
25			
26			The base station shall add (NUM_OPT_MSG_BITS - 5) reserved bits. The base station shall set these bits to '0'.
27			
28	APPIM_PERIOD_INDEX	-	<i>Access Point Pilot Information Message</i> transmission frequency.
29			
30			If the AP_PILOT_INFO is not included or is included and set to 0, the base station shall omit this field. Otherwise, the base station shall include this field if there are any fields following this field or if the base station needs to set this field to a value other than '000'.
31			
32			
33			
34			
35			The base station shall set this field to the period index value of <i>Access Point Pilot Information Message</i> . The base station shall set this field value in the range '000' - '101', both inclusive.
36			
37			
38			
39	GEN_OVHD_CYCLE_INDEX	-	<i>General Overhead Information Message</i> transmission frequency.
40			
41			If the GEN_OVHD_INF_IND is included and set to 1, the base station shall include this field. Otherwise, the base station shall omit this field.
42			
43			

1		The base station shall set this field to the cycle index value of
2		<i>General Overhead Message</i> . The base station shall set this
3		field value in the range '000' – '101', both inclusive.
4	ATIM_CYCLE_INDEX	– <i>Alternative Technologies Information Message</i> transmission
5		frequency.
6		If the ATIM_IND is included and set to 1, the base station
7		shall include this field. Otherwise, the base station shall omit
8		this field.
9		The base station shall set this field to the cycle index value of
10		<i>Alternative Technologies Information Message</i> . The base
11		station shall set this field value in the range '000' – '101', both
12		inclusive.
13	ADD_LOC_INFO_INCL	– Location information included.
14		The base station shall set this field to '1' to indicate that the
15		LOC_UNC_H, HEIGHT, and LOC_UNC_V fields are included
16		in this message, otherwise, the base station shall set this
17		field to '0'.
18	LOC_UNC_H	– Horizontal location uncertainty.
19		If ADD_LOC_INFO_INCL is set to '1', the base station shall
20		include this field and set it as shown below; otherwise, the
21		base station shall omit this field.
22		The base station shall set this field to the circular horizontal
23		location uncertainty, as specified in Table 3.7.2.3.2.1-2. The
24		value of this field indicates the radius of a circular 95%
25		confidence coverage area.

26 **Table 3.7.2.3.2.1-2. Horizontal Position Uncertainty**

'0000'	LOC_UNC_H < 20 m
'0001'	20 m • LOC_UNC_H < 40 m
'0010'	40 m • LOC_UNC_H < 70 m
'0011'	70 m • LOC_UNC_H < 100 m
'0100'	100 m • LOC_UNC_H < 200 m
'0101'	200 m • LOC_UNC_H < 400 m
'0110'	400 m • LOC_UNC_H < 700 m
'0111'	700 m • LOC_UNC_H < 1,000 m
'1000'	1,000 m • LOC_UNC_H < 2,000 m
'1001'	2,000 m • LOC_UNC_H < 4,000 m
'1010'	4,000 m • LOC_UNC_H < 7,000 m
'1011'	7,000 m • LOC_UNC_H < 10,000 m
'1100'	10,000 m • LOC_UNC_H < 20,000 m

'1101'	20,000 m • LOC_UNC_H < 40,000 m
'1110'	40,000 m • LOC_UNC_H < 70,000 m
'1111'	70,000 m • LOC_UNC_H

1

2 HEIGHT

– Height.

3

4

5

If ADD\_LOC\_INFO\_INCL is set to '1', the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

6

7

8

9

The base station shall set this field to the height, above the WGS-84 reference ellipsoid, in units of 1 meter, in the range from -500 m to 15,882 m, where the binary value of the field conveys the height plus 500 m.

10

11

The base station shall set this field to all ones if its height is not known.

12 LOC\_UNC\_V

– Vertical location uncertainty.

13

14

15

If ADD\_LOC\_INFO\_INCL is set to '1', the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

16

17

18

19

The base station set this field to the vertical location uncertainty, as specified in Table 3.7.2.3.2.1-3. The value of this field indicates the one-sigma uncertainty of HEIGHT within the corresponding horizontal coverage area.

20

21

The base station shall set this field to all ones if its height is not known.

22

23

**Table 3.7.2.3.2.1-3. Vertical Position Uncertainty**

'0000'	0 < LOC_UNC_V < 1 m
'0001'	1 m • LOC_UNC_V < 2 m
'0010'	2 m • LOC_UNC_V < 4 m
'0011'	4 m • LOC_UNC_V < 7 m
'0100'	7 m • LOC_UNC_V < 10 m
'0101'	10 m • LOC_UNC_V < 20 m
'0110'	20 m • LOC_UNC_V < 40 m
'0111'	40 m • LOC_UNC_V < 70 m
'1000'	70 m • LOC_UNC_V < 100 m
'1001'	100 m • LOC_UNC_V < 200 m
'1010'	200 m • LOC_UNC_V < 400 m

'1011'	400 m • LOC_UNC_V < 700 m
'1100'	700 m • LOC_UNC_V < 1,000 m
'1101'	1,000 m • LOC_UNC_V < 2,000 m
'1110'	2,000 m • LOC_UNC_V < 4,000 m
'1111'	4,000 m • LOC_UNC_V

1

2

## 1 3.7.2.3.2.2 Access Parameters Message

2 MSG\_TAG: APM

3

<b>Field</b>	<b>Length (bits)</b>
PILOT_PN	9
ACC_MSG_SEQ	6
ACC_CHAN	5
NOM_PWR	4
INIT_PWR	5
PWR_STEP	3
NUM_STEP	4
MAX_CAP_SZ	3
PAM_SZ	4
PSIST(0-9)	6
PSIST(10)	3
PSIST(11)	3
PSIST(12)	3
PSIST(13)	3
PSIST(14)	3
PSIST(15)	3
MSG_PSIST	3
REG_PSIST	3
PROBE_PN_RAN	4
ACC_TMO	4
PROBE_BKOFF	4
BKOFF	4

(continues on next page)

4

5

1

Field	Length (bits)
MAX_REQ_SEQ	4
MAX_RSP_SEQ	4
AUTH	2
RAND	0 or 32
NOM_PWR_EXT	1
PSIST_EMG_INCL	1
PSIST_EMG	0 or 3
ACCT_INCL	1
ACCT_INCL_EMG	0 or 1
ACCT_AOC_BITMAP_INCL	0 or 1
ACCT_SO_INCL	0 or 1
NUM_ACCT_SO	0 or 4

NUM\_ACCT\_SO + 1 occurrences of the following record:

{ (NUM\_ACCT\_SO + 1)

ACCT_AOC_BITMAP1	0 or 5
ACCT_SO	16

} (NUM\_ACCT\_SO + 1)

ACCT_SO_GRP_INCL	0 or 1
NUM_ACCT_SO_GRP	0 or 3

NUM\_ACCT\_SO\_GRP + 1 occurrences of the following record:

{ ( NUM\_ACCT\_SO\_GRP + 1)

ACCT_AOC_BITMAP2	0 or 5
ACCT_SO_GRP	5

} ( NUM\_ACCT\_SO\_GRP + 1)

2

3 PILOT\_PN - Pilot PN sequence offset index.

4 The base station shall set this field to the pilot PN sequence  
5 offset for this base station, in units of 64 PN chips.

6 ACC\_MSG\_SEQ - Access parameters message sequence number.

7 The base station shall set this field to ACC\_CONFIG\_SEQ  
8 (see 3.6.2.2).

9 ACC\_CHAN - Number of Access Channels.

1			The base station shall set this field to one less than the
2			number of Access Channels associated with this Paging
3			Channel.
4	NOM_PWR	-	Nominal transmit power offset.
5			The base station shall set this field to the correction factor to
6			be used by mobile stations in the open loop power estimate,
7			expressed as a two's complement value in units of 1 dB
8			(see [2]).
9	INIT_PWR	-	Initial power offset for access.
10			The base station shall set this field to the correction factor to
11			be used by mobile stations in the open loop power estimate
12			for the initial transmission on an Access Channel, expressed
13			as a two's complement value in units of 1 dB (see [2]).
14	PWR_STEP	-	Power increment.
15			The base station shall set this field to the value by which
16			mobile stations are to increase their transmit power between
17			successive access probes in an access probe sequence, in
18			units of 1 dB.
19	NUM_STEP	-	Number of access probes.
20			The base station shall set this field to one less than the
21			maximum number of access probes mobile stations are to
22			transmit in a single access probe sequence.
23	MAX_CAP_SZ	-	Maximum Access Channel message capsule size.
24			The base station shall set this field to the value in the range 0
25			to 7, three less than the maximum number of Access Channel
26			frames in an Access Channel message capsule.
27	PAM_SZ	-	Access Channel preamble length.
28			The base station shall set this field to one less than the
29			number of Access Channel frames that mobile stations are to
30			transmit in each Access Channel preamble.
31	PSIST(0-9)	-	Persistence value for access overload classes 0 through 9.
32			If mobile stations in access overload classes 0 through 9 are
33			permitted to transmit requests on the Access Channel, the
34			base station shall set this field to the persistence value to be
35			used. If such mobile stations are not permitted to transmit
36			requests on the Access Channel, the base station shall set
37			this field to '111111'.
38	PSIST(10)	-	Persistence value for access overload class 10 (test mobile
39			stations).
40			If mobile stations in access overload class 10 are permitted to
41			transmit requests on the Access Channel, the base station
42			shall set this field to the persistence value to be used. If such
43			mobile stations are not permitted to transmit requests on the
44			Access Channel, the base station shall set this field to '111'.



1	PSIST(11)	- Persistence value for access overload class 11 (emergency
2		mobile stations).
3		If mobile stations in access overload class 11 are permitted to
4		transmit requests on the Access Channel, the base station
5		shall set this field to the persistence value to be used. If such
6		mobile stations are not permitted to transmit requests on the
7		Access Channel, the base station shall set this field to '111'.
8	PSIST(12)	- Persistence value for access overload class 12.
9		If mobile stations in access overload class 12 are permitted to
10		transmit requests on the Access Channel, the base station
11		shall set this field to the persistence value to be used. If such
12		mobile stations are not permitted to transmit requests on the
13		Access Channel, the base station shall set this field to '111'.
14	PSIST(13)	- Persistence value for access overload class 13.
15		If mobile stations in access overload class 13 are permitted to
16		transmit requests on the Access Channel, the base station
17		shall set this field to the persistence value to be used. If such
18		mobile stations are not permitted to transmit requests on the
19		Access Channel, the base station shall set this field to '111'.
20	PSIST(14)	- Persistence value for access overload class 14.
21		If mobile stations in access overload class 14 are permitted to
22		transmit requests on the Access Channel, the base station
23		shall set this field to the persistence value to be used. If such
24		mobile stations are not permitted to transmit requests on the
25		Access Channel, the base station shall set this field to '111'.
26	PSIST(15)	- Persistence value for access overload class 15.
27		If mobile stations in access overload class 15 are permitted to
28		transmit requests on the Access Channel, the base station
29		shall set this field to the persistence value to be used. If such
30		mobile stations are not permitted to transmit requests on the
31		Access Channel, the base station shall set this field to '111'.
32	MSG_PSIST	- Persistence modifier for Access Channel attempts for message
33		transmissions.
34		A mobile station multiplies its transmission probability by
35		$2^{-\text{MSG\_PSIST}}$ for such attempts.
36		The base station shall set this field to the persistence
37		modifier for Access Channel attempts for message
38		transmissions.
39	REG_PSIST	- Persistence modifier for Access Channel attempts for
40		registrations which are not responses to the <i>Registration</i>
41		<i>Request Order</i> .
42		A mobile station multiplies its transmission probability by
43		$2^{-\text{REG\_PSIST}}$ for such attempts.
44		The base station shall set this field to the persistence
45		modifier for Access Channel attempts for registrations which
46		are not responses to the <i>Registration Request Order</i> .

1	PROBE_PN_RAN	-	Time randomization for Access Channel probes.
2			A mobile station delays its transmission from System Time by
3			RN PN chips, where RN is a number determined by hashing
4			between 0 and $2^{\text{PROBE\_PN\_RAN}} - 1$ PN chips.
5			The base station shall set this field to the value in the range 0
6			to 9 inclusive such that the time randomization range is
7			$2^{\text{PROBE\_PN\_RAN}} - 1$ PN chips.
8	ACC_TMO	-	Acknowledgment timeout.
9			The base station shall set this field to two less than the
10			length of time mobile stations are to wait after the end of an
11			Access Channel transmission before determining that the
12			base station did not receive the transmission, in units of 80
13			ms.
14	PROBE_BKOFF	-	Access Channel probe backoff range.
15			The base station shall set this field to one less than the
16			maximum number of slots mobile stations are to delay due to
17			random backoff between consecutive access probes.
18	BKOFF	-	Access Channel probe sequence backoff range.
19			The base station shall set this field to one less than the
20			maximum number of slots mobile stations are to delay due to
21			random backoff between successive access probe sequences.
22	MAX_REQ_SEQ	-	Maximum number of access probe sequences for an Access
23			Channel request.
24			The base station shall set this field to the maximum number
25			of access probe sequences mobile stations are to transmit for
26			an Access Channel request. The base station shall set this
27			field to a value greater than 0.
28	MAX_RSP_SEQ	-	Maximum number of access probe sequences for an Access
29			Channel response.
30			The base station shall set this field to the maximum number
31			of access probe sequences mobile stations are to transmit for
32			an Access Channel response. The base station shall set this
33			field to a value greater than 0.
34	AUTH	-	Authentication mode.
35			If mobile stations are to include standard authentication data
36			in Access Channel messages, the base station shall set this
37			field to '01'. If mobile stations are not to include
38			authentication data in Access Channel messages, the base
39			station shall set this field to '00'. All other values are
40			reserved.
41	RAND	-	Random challenge value.
42			If the AUTH field is set to '01', the base station shall set this
43			field to the random challenge value to be used by mobile
44			stations for authentication. If the AUTH field is set to any
45			other value, the base station shall omit this field.

1	NOM_PWR_EXT	-	Extended nominal transmit power.
2			If the base station is operating in Band Class 0 or Band Class
3			3, it shall set this field to '0'; otherwise, it shall set this field
4			as follows:
5			If the correction factor to be used by mobile stations in the
6			open loop power estimate is between -24 dB and -9 dB
7			inclusive, the base station shall set this field to '1'; otherwise
8			(the correction factor is in the range -8 dB to 7 dB inclusive),
9			the base station shall set this field to '0'.
10	PSIST_EMG_INCL	-	Emergency persistence included indicator.
11			If PSIST_EMG is included in this message, the base station
12			shall set this field to '1'; otherwise, the base station shall set
13			this field to '0'. The base station shall not include PSIST_EMG
14			in this message if the base station supports the Enhanced
15			Access Channel.
16	PSIST_EMG	-	Persistence value for emergency call for access overload
17			classes 0 through 9.
18			If PSIST_EMG_INCL is set to '0', the base station shall omit
19			this field; otherwise, the base station shall set this field as
20			follows:
21			If a mobile station in access overload classes 0 through 9 is
22			permitted to transmit emergency requests on the Access
23			Channel, the base station shall set this field to the
24			persistence value to be used for the emergency calls. If such
25			a mobile station is not permitted to transmit emergency
26			requests on the Access Channel, the base station shall set
27			this field to '111'.
28	ACCT_INCL	-	Access Control based on Call Type (ACCT) information
29			included indicator.
30			If the base station enables ACCT for at least one service
31			option, the base station shall set this field to '1'; otherwise,
32			the base station shall set this field to '0'.
33			If the base station sets this field to '1', then the base station
34			shall also set at least one of ACCT_SO_INCL or
35			ACCT_SO_GRP_INCL to '1'.
36	ACCT_INCL_EMG	-	Access Control based on Call Type (ACCT) includes
37			emergency calls indicator.
38			If ACCT_INCL is set to '0', the base station shall omit this
39			field; otherwise, the base station shall include this field and
40			set it as follows:
41			The base station shall set this field to '0' if the mobile station
42			is not to apply ACCT to a call that is recognized by the mobile
43			station to be an emergency call; otherwise, the base station
44			shall set this field to '1'.
45	ACCT_AOC_BITMAP_INCL	-	Access Control based on Call Type (ACCT) access overload
46			class bitmap included indicator.

If ACCT\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '0' if all mobile stations are to apply ACCT regardless of their access overload classes; otherwise, the base station shall set this field to '1' to indicate that the mobile station is to apply ACCT according to its access overload class.

ACCT\_SO\_INCL - Access Control based on Call Type (ACCT) service option included indicator.

If ACCT\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '1' if at least one occurrence of the ACCT\_SO field is included in this message; otherwise, the base station shall set this field to '0'.

NUM\_ACCT\_SO - Number of service options for Access Control based on Call Type (ACCT).

If ACCT\_SO\_INCL is not included, or is included and set to '0', then the base station shall omit this field; otherwise, the base station shall include this field and set it to one less than the number of occurrences of the ACCT\_SO field included in this message.

If ACCT\_SO\_INCL is included and set to '1', then the base station shall include NUM\_ACCT\_SO + 1 occurrences of the following variable-field record:

ACCT\_AOC\_BITMAP1 - Access Control based on Call Type (ACCT) access overload class bitmap.

If ACCT\_AOC\_BITMAP\_INCL is set to '0', then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

This field consists of the subfields defined in Table 3.7.2.3.2.2-1.

**Table 3.7.2.3.2.2-1. ACCT Access Overload Class Bitmap Subfields.**

Subfield	Length (bits)	Subfield Description
ACCOLC_0_1	1	Access overload classes 0 and 1
ACCOLC_2_3	1	Access overload classes 2 and 3
ACCOLC_4_5	1	Access overload classes 4 and 5
ACCOLC_6_7	1	Access overload classes 6 and 7
ACCOLC_8_9	1	Access overload classes 8 and 9

1			The base station shall set a subfield to '1' to indicate that
2			mobile stations having the corresponding access overload
3			class are not permitted to perform access attempts using the
4			associated service option ACCT_SO; otherwise, the base
5			station shall set the subfield to '0'.
6	ACCT_SO	-	Access Control based on Call Type (ACCT) service option
7			number.
8			The base station shall set this field to the value of the service
9			option number (as specified in [30]) that has ACCT enabled.
10	ACCT_SO_GRP_INCL	-	Access Control based on Call Type (ACCT) service option
11			group included indicator.
12			If ACCT_INCL is set to '0', the base station shall omit this
13			field; otherwise, the base station shall include this field and
14			set it as follows:
15			The base station shall set this field to '1' if at least one
16			occurrence of the ACCT_SO_GRP field is included in this
17			message; otherwise, the base station shall set this field to '0'.
18	NUM_ACCT_SO_GRP	-	Number of service option groups for Access Control based on
19			Call Type (ACCT).
20			If ACCT_SO_GRP_INCL is not included, or is included and set
21			to '0', then the base station shall omit this field; otherwise,
22			the base station shall include this field and set it to one less
23			than the number of occurrences of the ACCT_SO_GRP field
24			included in this message.
25	If ACCT_SO_GRP_INCL is included and set to '1', then the base station shall include		
26	NUM_ACCT_SO_GRP + 1 occurrences of the following variable-field record:		
27	ACCT_AOC_BITMAP2	-	Access Control based on Call Type (ACCT) access overload
28			class bitmap.
29			If ACCT_AOC_BITMAP_INCL is set to '0', then the base station
30			shall omit this field; otherwise, the base station shall include
31			this field and set it as follows:
32			This field consists of the subfields defined in Table
33			3.7.2.3.2.2-1. The base station shall set a subfield to '1' to
34			indicate that mobile stations having the corresponding access
35			overload class are not permitted to perform access attempts
36			using a service option specified by the associated
37			ACCT_SO_GRP field; otherwise, the base station shall set the
38			subfield to '0'.
39	ACCT_SO_GRP	-	Access Control based on Call Type (ACCT) service option
40			group number.
41			The base station shall set this field to the value of the service
42			option group number (as specified in [30]) whose members all
43			have ACCT enabled.
44			
45			

## 1 3.7.2.3.2.3 Neighbor List Message

2 MSG\_TAG: NLM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
PILOT_INC	4

Zero or more occurrences of the following record:

{

NGHBR_CONFIG	3
NGHBR_PN	9

}

3

4 PILOT\_PN - Pilot PN sequence offset index.

5 The base station shall set this field to the pilot PN sequence  
6 offset for this base station, in units of 64 PN chips.

7 CONFIG\_MSG\_SEQ - Configuration message sequence number.

8 The base station shall set this field to CONFIG\_SEQ  
9 (see 3.6.2.2).

10 PILOT\_INC - Pilot PN sequence offset index increment.

11 A mobile station searches for Remaining Set pilots at pilot PN  
12 sequence index values that are multiples of this value.

13 The base station shall set this field to the pilot PN sequence  
14 increment, in units of 64 PN chips, that mobile stations are to  
15 use for searching the Remaining Set. The base station  
16 should set this field to the largest increment such that the  
17 pilot PN sequence offsets of all its neighbor base stations are  
18 integer multiples of that increment.

19 The base station shall set this field to a value in the range 1  
20 to 15 inclusive.

21

22 The base station shall include one occurrence of the following two-field record for each  
23 member mobile stations are to place in their Neighbor Sets. The base station may include  
24 zero or more occurrences of the following record.

25 NGHBR\_CONFIG - Neighbor configuration.

26 The base station shall set this field to the value shown in  
27 Table 3.7.2.3.2.3-1 corresponding to the configuration of this  
28 neighbor.

29

1

**Table 3.7.2.3.2.3-1. Neighbor Configuration Field**

<b>Value (binary)</b>	<b>Neighbor Configuration</b>
000	<p>The neighbor base station has the same number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment that is same as this current CDMA frequency assignment and with the same number of Paging Channels.</p> <p>The position of the neighbor CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p>
001	<p>The neighbor base station has the same number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment that is same as this current CDMA frequency assignment but possibly with a different number of Paging Channels.</p> <p>The position of the neighbor CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p> <p>This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel.</p>
010	<p>The neighbor base station may have a different number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a Primary Paging Channel on the first CDMA Channel listed in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p>

<b>Value (binary)</b>	<b>Neighbor Configuration</b>
011	The neighbor base station configuration is unknown but the neighbor base station has a Pilot Channel on the CDMA frequency assignment that is same as this current CDMA frequency assignment.
100-111	Reserved.

1

2

NGHBR\_PN - Neighbor pilot PN sequence offset index.

3

The base station shall set this field to the pilot PN sequence offset for this neighbor, in units of 64 PN chips.

4

5



1 3.7.2.3.2.4 CDMA Channel List Message

2 MSG\_TAG: CCLM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6

One or more occurrences of the following field:

{

CDMA_FREQ	11
-----------	----

}

3

4 PILOT\_PN - Pilot PN sequence offset index.

5 The base station shall set this field to the pilot PN sequence  
6 offset for this base station, in units of 64 PN chips.

7 CONFIG\_MSG\_SEQ - Configuration message sequence number.

8 The base station shall set this field to CONFIG\_SEQ  
9 (see 3.6.2.2).

10 CDMA\_FREQ - CDMA Channel frequency assignment.

11 The order in which occurrences of this field are included  
12 gives the designations of the supported CDMA Channels as  
13 CDMA Channel 1 through CDMA Channel N.

14 Each occurrence of this field shall correspond to a CDMA  
15 Channel containing a Paging Channel that is supported by  
16 this base station. If the supported CDMA Channels are in the  
17 preferred set of CDMA frequency assignments (see [2]), the  
18 base station shall include their occurrences of this field first.

19 The base station shall set each occurrence of this field to the  
20 CDMA channel number corresponding to the CDMA  
21 frequency assignment for that CDMA Channel (see [2]).  
22

- 1 3.7.2.3.2.5 Reserved
- 2 This page intentionally left blank.
- 3

- 1 3.7.2.3.2.6 Reserved
- 2 This page intentionally left blank.
- 3

1 3.7.2.3.2.7 Order Message

2 MSG\_TAG: ORDM

Field	Length (bits)
ORDER	6
ADD_RECORD_LEN	3
Order-specific fields (if used)	8 × ADD_RECORD_LEN

3

4 ORDER - Order code.

5 The base station shall set this field to the ORDER code  
6 (see 3.7.4) for this type of order.

7 ADD\_RECORD\_LEN - Additional record length.

8 The base station shall set this field to the number of octets in  
9 the order-specific fields included in this order record.

10 Order-specific fields - Order-specific fields.

11 The base station shall include order-specific fields as  
12 specified in 3.7.4 for this type of order.

13

1 3.7.2.3.2.8 Channel Assignment Message

2 MSG\_TAG: CAM

Field	Length (bits)
ASSIGN_MODE	3
ADD_RECORD_LEN	3
Additional record fields	8 × ADD_RECORD_LEN

3

4 If ASSIGN\_MODE = '000', the additional record fields shall be:

5

FREQ_INCL	1
CODE_CHAN	8
CDMA_FREQ	0 or 11
FRAME_OFFSET	4
ENCRYPT_MODE	2
D_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3
C_SIG_ENCRYPT_MODE_INCL	1
C_SIG_ENCRYPT_MODE	0 or 3
RESERVED	0 - 7 (as needed)

6

7 If ASSIGN\_MODE = '001', the additional record fields shall be:

8

RESPOND	1
FREQ_INCL	1
CDMA_FREQ	0 or 11

One or more occurrences of the following field:

{

PILOT_PN	9
----------	---

}

RESERVED	0 - 7 (as needed)
----------	-------------------

9

10

11

1 If ASSIGN\_MODE = '100', the additional record fields shall be:

2

FREQ_INCL	1
RESERVED	3
BYPASS_ALERT_ANSWER	1
DEFAULT_CONFIG	3
GRANTED_MODE	2
CODE_CHAN	8
FRAME_OFFSET	4
ENCRYPT_MODE	2
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11
D_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3
C_SIG_ENCRYPT_MODE_INCL	1
C_SIG_ENCRYPT_MODE	0 or 3
RESERVED	0 - 7 (as needed)

3

4 If ASSIGN\_MODE = '101', the additional record fields shall be:

5

RESPOND	1
FREQ_INCL	1
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11

One or more occurrences of the following field:

{

PILOT_PN	9
----------	---

}

RESERVED	0 - 7 (as needed)
----------	-------------------

6

7 ASSIGN\_MODE - Assignment mode.

8

The base station shall set this field to the value shown in Table 3.7.2.3.2.8-1 corresponding to the assignment mode for this assignment.

9

10

11

1

**Table 3.7.2.3.2.8-1. Assignment Mode**

<b>Value (binary)</b>	<b>Assignment Mode</b>
000	Traffic Channel Assignment (Band Class 0 only)
001	Paging Channel Assignment (Band Class 0 only)
010	Reserved (Previously: Acquire Analog System)
011	Reserved (Previously: Analog Voice Channel Assignment)
100	Extended Traffic Channel Assignment
101	Extended Paging Channel Assignment
All other values are reserved.	

2

3     **ADD\_RECORD\_LEN**     -     Additional record length.

4                             The base station shall set this field to the number of octets in  
5                             the additional record fields included in this assignment  
6                             record.

7     **Additional record fields**     -     Additional record fields.

8                             The additional record fields are determined by the value of  
9                             ASSIGN\_MODE, as described below.

10    If the ASSIGN\_MODE field is set to '000', the base station shall include the following fields:

11             **FREQ\_INCL**     -     Frequency included indicator.

12                             If the CDMA\_FREQ field is included in this assignment  
13                             record, the base station shall set this bit to '1'. If the  
14                             CDMA\_FREQ field is not included in this assignment record,  
15                             the base station shall set this bit to '0'.

16             **CODE\_CHAN**     -     Code channel.

17                             The base station shall set this field to the code channel index  
18                             (see [2]) in the range 1 to 63 inclusive that the mobile station  
19                             is to use on the Fundamental Channel of the Forward Traffic  
20                             Channel.

21             **CDMA\_FREQ**     -     Frequency assignment.

If the **FREQ\_INCL** bit is set to '1', the base station shall set this field to the CDMA Channel number corresponding to the CDMA frequency assignment for the CDMA Channel containing the Forward Traffic Channel the mobile station is to use. If the **FREQ\_INCL** bit is set to '0', the base station shall omit this field.

**FRAME\_OFFSET** - Frame offset.

The Forward and Reverse Traffic Channel frames are delayed  $\text{FRAME\_OFFSET} \times 1.25 \text{ ms}$  relative to system timing (see [2]).

The base station shall set this field to the Forward and Reverse Traffic Channel frame offset.

**ENCRYPT\_MODE** - Message encryption mode.

The base station shall set this field to the **ENCRYPT\_MODE** value shown in Table 3.7.2.3.2.8-2 corresponding to the encrypting mode that is to be used for signaling messages, as specified in 2.3.12.2.

**Table 3.7.2.3.2.8-2. Message Encryption Modes**

<b>ENCRYPT_MODE Field (binary)</b>	<b>Encryption Mode Used</b>
00	Encryption disabled
01	Basic encryption of call control messages
10	Enhanced encryption of call control messages
11	Extended encryption of call control messages

**D\_SIG\_ENCRYPT\_MODE** - Dedicated channel signaling encryption mode indicator.

If **ENCRYPT\_MODE** is set to '11', the base station shall include this field and shall set it to the dedicated channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.

**ENC\_KEY\_SIZE** - Encryption key size indication.

If **ENCRYPT\_MODE** is set to '10' or '11', the base station shall include this field and shall set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.

**C\_SIG\_ENCRYPT\_MODE\_INCL** - Common channel signaling encryption mode included indicator.



1		If common channel signaling encryption information is
2		included in this message, the base station shall set this field
3		to '1'; otherwise, the base station shall set this field to '0'.
4	C_SIG_ENCRYPT_MODE	- Common channel signaling encryption mode indicator.
5		If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
6		shall include this field and shall set it to the common
7		channel signaling encryption mode, as shown in Table
8		3.7.4.5-1; otherwise, the base station shall omit this field.
9	RESERVED	- Reserved bits.
10		The base station shall add reserved bits as needed in order to
11		make the total length of the fields after the preceding
12		ADD_RECORD_LEN field through this RESERVED field equal
13		to an integer number of octets. The base station shall set
14		these bits to '0'.
15	If the ASSIGN_MODE field is set to '001', the base station shall include the following fields:	
16	RESPOND	- Respond on new Access Channel indicator.
17		If the mobile station is to retransmit an <i>Origination Message</i>
18		or <i>Page Response Message</i> after processing this channel
19		assignment, the base station shall set this field to '1'. The
20		base station may set this field to '0' only in response to a
21		<i>Page Response Message</i> .
22	FREQ_INCL	- Frequency included indicator.
23		If the CDMA_FREQ field is included in this assignment
24		record, the base station shall set this bit to '1'. If the
25		CDMA_FREQ field is not included in this assignment record,
26		the base station shall set this bit to '0'.
27	CDMA_FREQ	- Frequency assignment.
28		If the FREQ_INCL bit is set to '1', the base station shall set
29		this field to the CDMA Channel number corresponding to the
30		CDMA frequency assignment for the CDMA Channel
31		containing the Paging Channel the mobile station is to use. If
32		the FREQ_INCL bit is set to '0', the base station shall omit
33		this field.
34	PILOT_PN	- Pilot PN sequence offset index.
35		The base station shall include one occurrence of this field for
36		each base station whose Paging Channel may be monitored
37		by the mobile station. For each occurrence, the base station
38		shall set this field to the pilot PN sequence offset for a base
39		station, in units of 64 PN chips. The base station having this
40		pilot PN sequence offset should support a Primary Paging
41		Channel with the same Paging Channel rate as the current
42		base station.
43	RESERVED	- Reserved bits.

1                   The base station shall add reserved bits as needed in order to  
2                   make the total length of the fields, after the preceding  
3                   ADD\_RECORD\_LEN field through this RESERVED field,  
4                   equal to an integer number of octets. The base station shall  
5                   set these bits to '0'.

6    If the ASSIGN\_MODE field is set to '100', the base station shall include the following fields:

7                   FREQ\_INCL    -   Frequency included indicator.

8                   If the BAND\_CLASS and CDMA\_FREQ fields are included in  
9                   this assignment record, the base station shall set this bit to  
10                  '1'. If the BAND\_CLASS and CDMA\_FREQ fields are not  
11                  included in this assignment record, the base station shall set  
12                  this bit to '0'.

13                  RESERVED     -   Reserved bits.

14                   The base station shall set this field to '000'.

15    BYPASS\_ALERT\_ANSWER   -   Bypass alert indicator.

16                   If the MOB\_P\_REV of the current band class of the mobile  
17                   station is less than or equal to three, the base station shall  
18                   set this field to '0'; otherwise, the base station shall set this  
19                   field as follows.

20                   If the mobile station is to bypass the *Waiting for Order*  
21                   *Substate* and the *Waiting for Mobile Station Answer Substate*,  
22                   the base station shall set this field to '1'; otherwise, the base  
23                   station shall set this field to '0'.

24    DEFAULT\_CONFIG       -   Default Configuration.

25                   If the GRANTED\_MODE field is set to '00', the base station  
26                   shall set this field as specified in Table 3.7.2.3.2.8-3 to  
27                   indicate an initial multiplex option and radio configuration  
28                   for the Forward and Reverse Traffic Channels.

1

**Table 3.7.2.3.2.8-3. Default Configuration**

<b>Value (binary)</b>	<b>Default Configuration</b>
000	Multiplex Option 1 and Radio Configuration 1 for both the Forward Traffic Channel and the Reverse Traffic Channel
001	Multiplex Option 2 and Radio Configuration 2 for both the Forward Traffic Channel and the Reverse Traffic Channel
010	Multiplex Option 1 and Radio Configuration 1 for the Forward Traffic channel; Multiplex Option 2 and Radio Configuration 2 for the Reverse Traffic channel
011	Multiplex Option 2 and Radio Configuration 2 for the Forward Traffic channel; Multiplex Option 1 and Radio Configuration 1 for the Reverse Traffic channel
All other values are reserved.	

2

3 GRANTED\_MODE - Granted mode.

4 The base station shall set this field to '00' to indicate that the  
5 mobile station is to use an initial service configuration  
6 consisting of the multiplex option and radio configuration  
7 defined by the DEFAULT\_CONFIG field for the Forward and  
8 Reverse Traffic Channels, and to indicate that service  
9 negotiation is to take place before the base station sends the  
10 first *Service Connect Message*.

11 The base station shall set this field to '01' to indicate that the  
12 mobile station is to use an initial service configuration  
13 consisting of the default multiplex option and transmission  
14 rates corresponding to the service option requested by the  
15 mobile station either in the *Origination Message*, or *Page*  
16 *Response Message*, and to indicate that service negotiation is  
17 to take place before the base station sends the first *Service*  
18 *Connect Message*.

1			The base station shall set this field to '10' to indicate that the
2			mobile station is to use an initial service configuration
3			consisting of the default multiplex option and transmission
4			rates corresponding to the service option requested by the
5			mobile station either in the <i>Origination Message</i> , or <i>Page</i>
6			<i>Response Message</i> , and to indicate that service negotiation is
7			not to take place before the base station sends the first
8			<i>Service Connect Message</i> .
9	CODE_CHAN	-	Code channel.
10			The base station shall set this field to the code channel index
11			(see [2]) in the range 1 to 63 inclusive that the mobile station
12			is to use on the Fundamental Channel of the Forward Traffic
13			Channel.
14	FRAME_OFFSET	-	Frame offset.
15			The Forward and Reverse Traffic Channel frames are delayed
16			FRAME_OFFSET $\times$ 1.25 ms relative to system timing (see [2]).
17			The base station shall set this field to the Forward and
18			Reverse Traffic Channel frame offset.
19	ENCRYPT_MODE	-	Message encryption mode.
20			The base station shall set this field to the ENCRYPT_MODE
21			value shown in Table 3.7.2.3.2.8-2 corresponding to the
22			encrypting mode that is to be used for signaling messages, as
23			specified in 2.3.12.2.
24	BAND_CLASS	-	Band class.
25			If the FREQ_INCL bit is set to '1', the base station shall set
26			this field to the CDMA band class, as specified in [30],
27			corresponding to the CDMA frequency assignment for the
28			CDMA Channel containing the Forward Traffic Channel the
29			mobile station is to use. If the FREQ_INCL bit is set to '0', the
30			base station shall omit this field.
31	CDMA_FREQ	-	Frequency assignment.
32			If the FREQ_INCL bit is set to '1', the base station shall set
33			this field to the CDMA Channel number, in the specified
34			CDMA band class, corresponding to the CDMA frequency
35			assignment for the CDMA Channel containing the Forward
36			Traffic Channel the mobile station is to use. If the
37			FREQ_INCL bit is set to '0', the base station shall omit this
38			field.
39	D_SIG_ENCRYPT_MODE	-	Dedicated channel signaling encryption mode indicator.
40			If ENCRYPT_MODE is set to '11', the base station shall include
41			this field and shall set it to the dedicated channel signaling
42			encryption mode, as shown in Table 3.7.4.5-1; otherwise the
43			base station shall omit this field.
44	ENC_KEY_SIZE	-	Encryption key size indication.

1		If ENCRYPT_MODE is set to '10' or '11', the base station shall
2		include this field and shall set it to the encryption key size, as
3		shown in Table 3.7.4.5-2; otherwise, the base station shall omit
4		this field.
5	C_SIG_ENCRYPT_MODE_INCL	- Common channel signaling encryption mode included
6		indicator.
7		If common channel signaling encryption information is
8		included in this message, the base station shall set this field
9		to '1'; otherwise, the base station shall set this field to '0'.
10	C_SIG_ENCRYPT_MODE	- Common channel signaling encryption mode indicator.
11		If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
12		shall include this field and shall set it to the common
13		channel signaling encryption mode, as shown in Table
14		3.7.4.5-1; otherwise, the base station shall omit this field.
15	RESERVED	- Reserved bits.
16		The base station shall add reserved bits as needed in order to
17		make the total length of the fields after the preceding
18		ADD_RECORD_LEN field through this RESERVED field equal
19		to an integer number of octets. The base station shall set
20		these bits to '0'.
21	If the ASSIGN_MODE field is set to '101', the base station shall include the following fields:	
22	RESPOND	- Respond on new Access Channel indicator.
23		If the mobile station is to retransmit an <i>Origination Message</i>
24		or <i>Page Response Message</i> after processing this channel
25		assignment, the base station shall set this field to '1'. The
26		base station may set this field to '0' only in response to a
27		<i>Page Response Message</i> .
28	FREQ_INCL	- Frequency included indicator.
29		If the BAND_CLASS and CDMA_FREQ fields are included in
30		this assignment record, the base station shall set this bit to
31		'1'. If the BAND_CLASS and CDMA_FREQ fields are not
32		included in this assignment record, the base station shall set
33		this bit to '0'.
34	BAND_CLASS	- Band class.
35		If the FREQ_INCL bit is set to '1', the base station shall set
36		this field to the CDMA band class, as specified in [30],
37		corresponding to the CDMA frequency assignment for the
38		CDMA Channel containing the Paging Channel the mobile
39		station is to use. If the FREQ_INCL bit is set to '0', the base
40		station shall omit this field.
41	CDMA_FREQ	- Frequency assignment.

1			If the <code>FREQ_INCL</code> bit is set to '1', the base station shall set
2			this field to the CDMA Channel number, in the specified
3			CDMA band class, corresponding to the CDMA frequency
4			assignment for the CDMA Channel containing the Paging
5			Channel the mobile station is to use. If the <code>FREQ_INCL</code> bit is
6			set to '0', the base station shall omit this field.
7	<code>PILOT_PN</code>	-	Pilot PN sequence offset index.
8			The base station shall include one occurrence of this field for
9			each base station whose Paging Channel may be monitored
10			by the mobile station. For each occurrence, the base station
11			shall set this field to the pilot PN sequence offset for a base
12			station, in units of 64 PN chips. The base station having this
13			pilot PN sequence offset should support a Primary Paging
14			Channel with the same Paging Channel rate as the current
15			base station.
16	<code>RESERVED</code>	-	Reserved bits.
17			The base station shall add reserved bits as needed in order to
18			make the total length of the fields after the preceding
19			<code>ADD_RECORD_LEN</code> field through this <code>RESERVED</code> field equal
20			to an integer number of octets. The base station shall set
21			these bits to '0'.
22			

## 1 3.7.2.3.2.9 Data Burst Message

## 2 MSG\_TAG: DBM

Field	Length (bits)
MSG_NUMBER	8
BURST_TYPE	6
NUM_MSGS	8
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	8
-------------------	---

} (NUM\_FIELDS)

3

4 MSG\_NUMBER - Message number.

5 The base station shall set this field to the number of this  
6 message within the data burst stream.

7 BURST\_TYPE - Data burst type.

8 The base station shall set the value of this field for the type of  
9 this data burst as defined in [30]. If the mobile station sets  
10 this field equal to '111110', it shall set the first two CHAR<sub>i</sub>  
11 fields of this message equal to  
12 EXTENDED\_BURST\_TYPE\_INTERNATIONAL as described in  
13 the definition of CHAR<sub>i</sub> below. If the base station sets this  
14 field equal to '111111', it shall set the first two CHAR<sub>i</sub> fields of  
15 this message equal to the EXTENDED\_BURST\_TYPE as  
16 described in the definition of CHAR<sub>i</sub> below.

17 NUM\_MSGS - Number of messages in the data burst stream.

18 The base station shall set this field to the number of  
19 messages in this data burst stream.

20 NUM\_FIELDS - Number of characters in this message.

21 The base station shall set this field to the number of  
22 occurrences of the CHAR<sub>i</sub> field included in this message.

23 CHAR<sub>i</sub> - Character.

24 The base station shall include NUM\_FIELDS occurrences of  
25 this field. The base station shall set these fields to the  
26 corresponding octet of the data burst stream.

If the BURST\_TYPE field of this message is equal to '111110', the first two CHARi octets shall represent a 16 bit EXTENDED\_BURST\_TYPE\_INTERNATIONAL field, which is encoded as shown below. The first ten bits of this field contain a binary mapping of the Mobile Country Code (MCC) associated with the national standards organization administering the use of the remaining octets of the message. Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the EXTENDED\_BURST\_TYPE\_INTERNATIONAL field shall specify the COUNTRY\_BURST\_TYPE. The base station shall set the value of the COUNTRY\_BURST\_TYPE according to the type of this data burst as defined in standards governed by the country where this data burst type is to be used.

Field	Length (bits)
Mobile Country Code	10
COUNTRY_BURST_TYPE	6
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$

If the BURST\_TYPE field of this message is equal to '111111', the first two CHARi octets shall represent a single, 16 bit, EXTENDED\_BURST\_TYPE field, as shown below. The base station shall set the value of the EXTENDED\_BURST\_TYPE according to the type of this data burst as defined in [30].

Field	Length (bits)
EXTENDED_BURST_TYPE (first two CHARi fields)	16
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$



1 3.7.2.3.2.10 Authentication Challenge Message

2 MSG\_TAG: AUCM

Field	Length (bits)
RANDU	24
GEN_CMEAKEY	1

3

4 RANDU - Random challenge data.

5 The base station shall set this field as specified in 2.3.12.1.4.

6 GEN\_CMEAKEY - Generate CMEAKEY indicator.

7 The base station shall set this field to '1' if it wants the MS to  
8 generate the CMEAKEY during the Unique Challenge-  
9 Response procedure (see 2.3.12.1.4); otherwise, the base  
10 station shall set this field to '0'.

11

12

13

1    3.7.2.3.2.11 SSD Update Message

2    MSG\_TAG: SSDUM

Field	Length (bits)
RANDSSD	56

3

4            RANDSSD    -    Random data for the computation of SSD.

5                            The base station shall set this field as specified in 2.3.12.1.5.

6

1 3.7.2.3.2.12 Feature Notification Message

2 MSG\_TAG: FNM

Field	Length (bits)
RELEASE	1

One or more occurrences of the following record:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

}

3

4 RELEASE - Origination completion indicator.

5 The base station shall set this field to '1' if this message is  
6 used to complete an origination request from the mobile  
7 station (see 2.6.3.5); otherwise, the base station shall set this  
8 field to '0'.

9

10 The base station shall include occurrences of the following three-field record as specified  
11 in 3.7.5.

12 RECORD\_TYPE - Information record type.

13 The base station shall set this field as specified in 3.7.5.

14 RECORD\_LEN - Information record length.

15 The base station shall set this field to the number of octets in  
16 the type-specific fields included in this record.

17 Type-specific fields - Type-specific fields.

18 The base station shall include type-specific fields as specified  
19 in 3.7.5.

20

## 1 3.7.2.3.2.13 Extended System Parameters Message

## 2 MSG\_TAG: ESPM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
DELETE_FOR_TMSI	1
USE_TMSI	1
PREF_MSID_TYPE	2
MCC	10
IMSI_11_12	7
TMSI_ZONE_LEN	4
TMSI_ZONE	$8 \times \text{TMSI\_ZONE\_LEN}$
BCAST_INDEX	3
IMSI_T_SUPPORTED	1
P_REV	8
MIN_P_REV	8
SOFT_SLOPE	6
ADD_INTERCEPT	6
DROP_INTERCEPT	6
PACKET_ZONE_ID	8
MAX_NUM_ALT_SO	3
RESELECT_INCLUDED	1
EC_THRESH	0 or 5
EC_I0_THRESH	0 or 5
PILOT_REPORT	1
NGHBR_SET_ENTRY_INFO	1
ACC_ENT_HO_ORDER	0 or 1
NGHBR_SET_ACCESS_INFO	1
ACCESS_HO	0 or 1
ACCESS_HO_MSG_RSP	0 or 1

(continues on next page)

1

Field	Length (bits)
ACCESS_PROBE_HO	0 or 1
ACC_HO_LIST_UPD	0 or 1
ACC_PROBE_HO_OTHER_MSG	0 or 1
MAX_NUM_PROBE_HO	0 or 3
NGHBR_SET_SIZE	0 or 6

If NGHBR\_SET\_ENTRY\_INFO = 1, NGHBR\_SET\_SIZE occurrences of the following record:

{ (NGHBR\_SET\_SIZE)

ACCESS_ENTRY_HO	1
-----------------	---

} (NGHBR\_SET\_SIZE)

If NGHBR\_SET\_ACCESS\_INFO = 1, NGHBR\_SET\_SIZE occurrences of the following record:

{ (NGHBR\_SET\_SIZE)

ACCESS_HO_ALLOWED	1
-------------------	---

} (NGHBR\_SET\_SIZE)

BROADCAST_GPS_ASST	1
QPCH_SUPPORTED	1
NUM_QPCH	0 or 2
QPCH_RATE	0 or 1
QPCH_POWER_LEVEL_PAGE	0 or 3
QPCH_CCI_SUPPORTED	0 or 1
QPCH_POWER_LEVEL_CONFIG	0 or 3
SDB_SUPPORTED	1
RLGAIN_TRAFFIC_PILOT	6
REV_PWR_CNTL_DELAY_INCL	1
REV_PWR_CNTL_DELAY	0 or 2
AUTO_MSG_SUPPORTED	1
AUTO_MSG_INTERVAL	0 or 3

(continues on next page)

2

3

<b>Field</b>	<b>Length (bits)</b>
MOB_QOS	1
ENC_SUPPORTED	1
SIG_ENCRYPT_SUP	0 or 8
UI_ENCRYPT_SUP	0 or 8
USE_SYNC_ID	1
CS_SUPPORTED	1
BCCH_SUPPORTED	1
MS_INIT_POS_LOC_SUP_IND	1
PILOT_INFO_REQ_SUPPORTED	1
QPCH_BI_SUPPORTED	0 or 1
QPCH_POWER_LEVEL_BCAST	0 or 3
BAND_CLASS_INFO_REQ	1
ALT_BAND_CLASS	0 or 5
CDMA_OFF_TIME_REP_SUP_IND	1
CDMA_OFF_TIME_REP_THRESHOLD _UNIT	0 or 1
CDMA_OFF_TIME_REP_THRESHOLD	0 or 3
CHM_SUPPORTED	1
RELEASE_TO_IDLE_IND	1
RECONNECT_MSG_IND	1
MSG_INTEGRITY_SUP	1
SIG_INTEGRITY_SUP_INCL	0 or 1
SIG_INTEGRITY_SUP	0 or 8
FOR_PDCH_SUPPORTED	1
PDCH_CHM_SUPPORTED	0 or 1
PDCH_PARMS_INCL	0 or 1
FOR_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_ACKCH_PILOT	0 or 6
RLGAIN_CQICH_PILOT	0 or 6
NUM_SOFT_SWITCHING_FRAMES	0 or 4
NUM_SOFTER_SWITCHING_FRAMES	0 or 4

1

Field	Length (bits)
NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTER_SWITCHING_SLOTS	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTER_SWITCHING_DELAY	0 or 8
WALSH_TABLE_ID	0 or 3
NUM_PDCCH	0 or 3

NUM\_PDCCH+1 occurrences of the following record:

{ (NUM\_PDCCH+1)

FOR_PDCCH_WALSH	0 or 6
-----------------	--------

} (NUM\_PDCCH+1)

IMSI_10_INCL	1
IMSI_10	0 or 4
MAX_ADD_SERV_INSTANCE	0 or 3
RER_MODE_SUPPORTED	1
TKZ_MODE_SUPPORTED	1
TKZ_ID	0 or 8
PZ_HYST_ENABLED	0 or 1
PZ_HYST_INFO_INCL	0 or 1
PZ_HYST_LIST_LEN	0 or 4
PZ_HYST_ACT_TIMER	0 or 8
PZ_HYST_TIMER_MUL	0 or 3
PZ_HYST_TIMER_EXP	0 or 5
EXT_PREF_MSID_TYPE	2
MEID_REQD	0 or 1
AUTO_FCSO_ALLOWED	1
REV_PDCH_SUPPORTED	0 or 1
REV_PDCH_PARMS_INCL	0 or 1
REV_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_SPICH_PILOT	0 or 6
RLGAIN_REQCH_PILOT	0 or 6
RLGAIN_PDCCH_PILOT	0 or 6

REV_PDCH_PARMS_1_INCL	0 or 1
REV_PDCH_TABLE_SEL	0 or 1
REV_PDCH_MAX_AUTO_TPR	0 or 8
REV_PDCH_NUM_ARQ_ROUNDS_NORMAL	0 or 2
REV_PDCH_OPER_PARMS_INCL	0 or 1
REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET	0 or 4
REV_PDCH_DEFAULT_PERSISTENCE	0 or 1
REV_PDCH_RESET_PERSISTENCE	0 or 1
REV_PDCH_GRANT_PRECEDENCE	0 or 1
REV_PDCH_MSIB_SUPPORTED	0 or 1
REV_PDCH_SOFT_SWITCHING_RESET_IND	0 or 1
SDB_IN_RCNM_IND	0 or 1
SENDING_BSPM	1
BSPM_PERIOD_INDEX	0 or 4
CAND_BAND_INFO_REQ	1
NUM_CAND_BAND_CLASS	0 or 3

NUM\_CAND\_BAND\_CLASS + 1 occurrences of the following record:

{ (NUM\_CAND\_BAND\_CLASS + 1)

CAND_BAND_CLASS	5
SUBCLASS_INFO_INCL	1
SUBCLASS_REC_LEN	0 or 5

SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord:

{ (SUBCLASS\_REC\_LEN + 1)

BAND_SUBCLASS_IND	1
-------------------	---

} (SUBCLASS\_REC\_LEN + 1)

} (NUM\_CAND\_BAND\_CLASS + 1)

TX_PWR_LIMIT_INCL	1
TX_PWR_LIMIT	0 or 6
BYPASS_REG_IND	2

1

2

PILOT\_PN - Pilot PN sequence offset index.



- 1 The base station shall set this field to the pilot PN sequence  
2 offset for this base station, in units of 64 PN chips.
- 3 CONFIG\_MSG\_SEQ - Configuration message sequence number.  
4 The base station shall set this field to CONFIG\_SEQ  
5 (see 3.6.2.2).
- 6 DELETE\_FOR\_TMSI - Delete foreign TMSI.  
7 The base station shall set this field to '1' to cause the mobile  
8 station to delete its TMSI if the TMSI was assigned in a  
9 different TMSI zone from that specified by the TMSI\_ZONE  
10 field of this message; otherwise, the base station shall set this  
11 field to '0'.
- 12 USE\_TMSI - Use TMSI indicator.  
13 The base station shall set this field to the value shown in  
14 Table 3.7.2.3.2.13-1 corresponding to the type of MSID that  
15 the mobile station is to use on the Access Channel.
- 16 PREF\_MSID\_TYPE - Preferred Access Channel Mobile Station Identifier Type.  
17 The base station shall set this field to the value shown in  
18 Table 3.7.2.3.2.13-1 and Table 3.7.2.3.2.13-1a corresponding  
19 to the type of MSID that the mobile station is to use on the  
20 Access Channel.

21 **Table 3.7.2.3.2.13-1. Preferred MSID Types for**  
22 **P\_REV\_IN\_USE < 11**

USE_TMSI (binary)	PREF_MSID_ TYPE (binary)	EXT_PREF_ MSID_TYPE (binary)	Description
0	00	N/A	IMSI_S and ESN
0	10	N/A	IMSI
0	11	N/A	IMSI and ESN
1	10	N/A	TMSI (valid TMSI is assigned); IMSI (TMSI not assigned)
1	11	N/A	TMSI (valid TMSI is assigned); IMSI and ESN (TMSI not assigned)

**Table 3.7.2.3.2.13-1a. Preferred MSID Types for  
P\_REV\_IN\_USE >= 11**

<b>USE_TMSI (binary)</b>	<b>PREF_MSID_ TYPE (binary)</b>	<b>EXT_PREF_ MSID_TYPE (binary)</b>	<b>Description</b>	
			<b>For Origination, Page Response and Registration messages when P_REV_IN_USE &gt;= 11, MEID_REQD='1', mobile station has a R-UIM which indicates that UIM ID is to be used</b>	<b>All other cases with P_REV_IN_USE &gt;= 11</b>
0	00	00	IMSI, ESN and MEID	IMSI and ESN
0	10	00	IMSI and MEID	IMSI
0	11	00	IMSI, ESN and MEID	IMSI and ESN
1	10	00	TMSI (valid TMSI is assigned); IMSI and MEID (TMSI not assigned)	TMSI (valid TMSI is assigned); IMSI (TMSI not assigned)
1	11	00	TMSI (valid TMSI is assigned); IMSI, ESN, and MEID (TMSI not assigned)	TMSI (valid TMSI is assigned); IMSI and ESN (TMSI not assigned)
0	00	01	IMSI, ESN, and MEID	If the mobile station has a R-UIM which indicates that UIM ID is to be used (see [40]):  IMSI and ESN;  Otherwise:  IMSI and MEID

**Table 3.7.2.3.2.13-1a. Preferred MSID Types for  
P\_REV\_IN\_USE >= 11**

<b>USE_TMSI (binary)</b>	<b>PREF_MSID_ TYPE (binary)</b>	<b>EXT_PREF_ MSID_TYPE (binary)</b>	<b>Description</b>	
			<b>For Origination, Page Response and Registration messages when P_REV_IN_USE &gt;= 11, MEID_REQD='1', mobile station has a R-UIM which indicates that UIM ID is to be used</b>	<b>All other cases with P_REV_IN_USE &gt;= 11</b>
0	10	01	IMSI and MEID	IMSI
0	11	01	IMSI, ESN and MEID	If the mobile station has a R-UIM which indicates that UIM ID is to be used (see [40]):  IMSI and ESN;  Otherwise:  IMSI and MEID
1	10	01	TMSI (valid TMSI is assigned); IMSI and MEID (TMSI not assigned)	TMSI (valid TMSI is assigned); IMSI (TMSI not assigned)

1  
2**Table 3.7.2.3.2.13-1a. Preferred MSID Types for  
P\_REV\_IN\_USE >= 11**

<b>USE_TMSI (binary)</b>	<b>PREF_MSID_ TYPE (binary)</b>	<b>EXT_PREF_ MSID_TYPE (binary)</b>	<b>Description</b>	
			<b>For Origination, Page Response and Registration messages when P_REV_IN_USE &gt;= 11, MEID_REQD='1', mobile station has a R-UIM which indicates that UIM ID is to be used</b>	<b>All other cases with P_REV_IN_USE &gt;= 11</b>
1	11	01	TMSI (valid TMSI is assigned); IMSI, ESN, and MEID (TMSI not assigned)	TMSI (valid TMSI is assigned); If valid TMSI is not assigned and the mobile station has a R-UIM which indicates that UIM ID is to be used (see [40]): IMSI and ESN; Otherwise: IMSI and MEID
0	00	11	N/A	If the mobile station has a R-UIM which indicates that UIM ID is to be used (see [40]): IMSI, ESN and MEID; Otherwise: IMSI and MEID

3

**Table 3.7.2.3.2.13-1a. Preferred MSID Types for  
P\_REV\_IN\_USE >= 11**

<b>USE_TMSI (binary)</b>	<b>PREF_MSID_ TYPE (binary)</b>	<b>EXT_PREF_ MSID_TYPE (binary)</b>	<b>Description</b>	
			<b>For Origination, Page Response and Registration messages when P_REV_IN_USE &gt;= 11, MEID_REQD='1', mobile station has a R-UIM which indicates that UIM ID is to be used</b>	<b>All other cases with P_REV_IN_USE &gt;= 11</b>
0	10	11	IMSI and MEID	IMSI
0	11	11	N/A	<p>If the mobile station has a R-UIM which indicates that UIM ID is to be used (see [40]):</p> <p style="text-align: center;">IMSI, ESN and MEID;</p> <p>Otherwise:</p> <p style="text-align: center;">IMSI and MEID</p>

**Table 3.7.2.3.2.13-1a. Preferred MSID Types for  
P\_REV\_IN\_USE >= 11**

USE_TMSI (binary)	PREF_MSID_ TYPE (binary)	EXT_PREF_ MSID_TYPE (binary)	Description	
			For Origination, Page Response and Registration messages when P_REV_IN_USE >= 11, MEID_REQD='1', mobile station has a R-UIM which indicates that UIM ID is to be used	All other cases with P_REV_IN_USE >= 11
1	10	11	TMSI (valid TMSI is assigned); IMSI and MEID (TMSI not assigned)	TMSI (valid TMSI is assigned); IMSI (TMSI not assigned)
1	11	11	N/A	If valid TMSI is assigned: TMSI.  If valid TMSI is not assigned and the mobile station has a R-UIM which indicates that UIM ID is to be used (see [40]): IMSI, ESN and MEID;  Otherwise: IMSI and MEID
All other values are reserved.				

MCC - Mobile Country Code.  
The base station shall set this field to the MCC (see 2.3.1)

IMSI\_11\_12 - 11<sup>th</sup> and 12<sup>th</sup> digits of the IMSI.  
The base station shall set this field to the IMSI\_11\_12 (see 2.3.1).

1	TMSI_ZONE_LEN	-	TMSI zone length.
2			The base station shall set this field to the number of octets
3			included in the TMSI_ZONE. The base station shall set this
4			field to a value in the range 1 to 8 inclusive.
5	TMSI_ZONE	-	TMSI zone.
6			The base station shall set this field to the TMSI zone number
7			as specified in [27].
8	BCAST_INDEX	-	Broadcast slot cycle index.
9			To enable periodic broadcast paging, the base station shall
10			set this field to an unsigned 3-bit number in the range 1-7,
11			equal to the broadcast slot cycle index as defined in
12			2.6.2.1.1.3.3. To disable periodic broadcast paging, the base
13			station shall set this field to '000'.
14	IMSI_T_SUPPORTED	-	IMSI_T support indicator.
15			The base station shall set this field to '1' to indicate support
16			for a 15-digit IMSI_T addressing according to [18].
17	P_REV	-	Protocol revision level.
18			The base station shall set this field to '00001100'.
19	MIN_P_REV	-	Minimum protocol revision level.
20			The base station sets this field to prevent mobile stations
21			which cannot be supported by the base station from
22			accessing the system.
23			The base station shall set this field to the minimum protocol
24			revision level that it supports.
25	SOFT_SLOPE	-	The slope in the inequality criterion for adding a pilot to the
26			Active Set, or dropping a pilot from the Active Set (see
27			2.6.6.2.3 and 2.6.6.2.5.2).
28			The base station shall set this field as an unsigned binary
29			number.
30	ADD_INTERCEPT	-	The intercept in the inequality criterion for adding a pilot to
31			the Active Set (see 2.6.6.2.5.2).
32			The base station shall set this field as a two's complement
33			signed binary number, in units of 0.5 dB.
34	DROP_INTERCEPT	-	The intercept in the inequality criterion for dropping a pilot
35			from the Active Set (see 2.6.6.2.3).
36			The base station shall set this field as a two's complement
37			signed binary number, in units of 0.5 dB.
38	PACKET_ZONE_ID	-	Packet data services zone identifier.
39			If the base station supports a packet data service zone, the
40			base station shall set this field to its non-zero packet data
41			services zone identifier.
42			If the base station does not support a packet data service
43			zone, the base station shall set this field to '00000000'.
44	MAX_NUM_ALT_SO	-	Maximum number of alternative service options.

1			The base station shall set this field to the maximum number
2			of alternative service option numbers that the mobile station
3			is allowed to include in the <i>Origination Message</i> or the <i>Page</i>
4			<i>Response Message</i> .
5			For mobile stations with MOB_P_REV <sub>s</sub> less than seven, the
6			alternative service options are those service options defined
7			in [30] and related to SERVICE_OPTION in <i>Origination</i>
8			<i>Message</i> and the <i>Page Response Message</i> .
9			For mobile stations with MOB_P_REV <sub>s</sub> equal to or greater
10			than seven, the alternative service options are those service
11			options defined in [30] without service option group number
12			assigned and related to SERVICE_OPTION in <i>Origination</i>
13			<i>Message</i> and the <i>Page Response Message</i> .
14			If the base station sets this field to a value greater than zero,
15			in addition, the base station shall allow the mobile station
16			with MOB_P_REV equal to or greater than seven to include
17			• a 4 or 8-bit service option bitmap in the <i>Origination</i>
18			<i>Message</i> and the <i>Page Response Message</i> ;
19			• alternate service option numbers, not limited to
20			MAX_ALT_SO_NUM, in the <i>Enhanced Origination</i>
21			<i>Message</i> .
22	RESELECT_INCLUDED	-	System reselection parameters included.
23			If the base station is including system reselection parameters,
24			the base station shall set this field to '1'; otherwise, the base
25			station shall set this field to '0'.
26	EC_THRESH	-	Pilot power threshold.
27			If RESELECT_INCLUDED is set to '1', the base station shall
28			include the field EC_THRESH and set this field to:
29			$\lceil (pilot\_power\_threshold + 115) \rceil$
30			where <i>pilot_power_threshold</i> is the pilot power, E <sub>c</sub> , in
31			dBm/1.23 MHz, below which the mobile station is to perform
32			system reselection; otherwise, the base station shall omit this
33			field.
34	EC_IO_THRESH	-	Pilot E <sub>c</sub> / I <sub>0</sub> threshold.
35			If RESELECT_INCLUDED is set to '1', the base station shall
36			include the field EC_IO_THRESH and set this field to:
37			$\lfloor -20 \times \log_{10} (pilot\_threshold) \rfloor$
38			where <i>pilot_threshold</i> is the pilot E <sub>c</sub> /I <sub>0</sub> below which the
39			mobile station is to perform system reselection; otherwise, the
40			base station shall omit this field.
41	PILOT_REPORT	-	Pilot reporting indicator.



1		The base station shall set this field to '1' if the mobile station
2		is to report the additional pilots which have pilot strengths
3		exceeding T_ADD in all Access Channel messages. The base
4		station shall set this field to '0' if the mobile station is to
5		report the additional pilots which have pilot strengths
6		exceeding T_ADD only in the <i>Origination Message</i> , the
7		<i>Reconnect Message</i> , and the <i>Page Response Message</i> .
8	NGHBR_SET_ENTRY_INFO	- Neighbor Set access entry handoff information included
9		indicator.
10		If the base station is including information on the Neighbor
11		Set access entry handoff, the base station shall set this field
12		to '1'; otherwise, the base station shall set this field to '0'.
13	ACC_ENT_HO_ORDER	- Access entry handoff permitted indicator.
14		If NGHBR_SET_ENTRY_INFO is set to '1', the base station
15		shall include this field and set it as described below;
16		otherwise, the base station shall omit this field.
17		The base station shall set this field to '1' if the mobile station
18		is permitted to perform an access entry handoff after receiving
19		a message while performing the <i>Mobile Station Order and</i>
20		<i>Message Processing Operation</i> in the <i>Mobile Station Idle State</i>
21		(see 2.6.2.4); otherwise, the base station shall set this field to
22		'0'.
23	NGHBR_SET_ACCESS_INFO	- Neighbor Set access handoff included indicator.
24		If the base station is including information on the Neighbor
25		Set access handoff or access probe handoff, the base station
26		shall set this field to '1', otherwise, the base station shall set
27		this field to '0'.
28	ACCESS_HO	- Access handoff permitted indicator.
29		If NGHBR_SET_ACCESS_INFO is set to '1', the base station
30		shall include this field and set it as described below;
31		otherwise, the base station shall omit this field.
32		The base station shall set this field to '1' if the mobile station
33		is permitted to perform an access handoff (see 2.6.3.1.3.2);
34		otherwise, the base station shall set this field to '0'.
35	ACCESS_HO_MSG_RSP	- Access handoff permitted for message response indicator.
36		If ACCESS_HO is set to '1', the base station shall include this
37		field and set it as described below; otherwise, the base station
38		shall omit this field.
39		The base station shall set this field to '1' if the mobile station
40		is permitted to perform an access handoff after receiving a
41		message and before responding to that message in the
42		<i>System Access State</i> ; otherwise, the base station shall set this
43		field to '0'.
44	ACCESS_PROBE_HO	- Access probe handoff permitted indicator.
45		If NGHBR_SET_ACCESS_INFO is set to '1', the base station
46		shall include this field and set it as described below;
47		otherwise, the base station shall omit this field.

1		The base station shall set this field to '1' if the mobile station
2		is permitted to perform an access probe handoff (see
3		2.6.3.1.3.3); otherwise, the base station shall set this field to
4		'0'.
5	ACC_HO_LIST_UPD	- Access handoff list update permitted indicator.
6		If ACCESS_PROBE_HO is included and is set to '1', the base
7		station shall include this field and set it as described below;
8		otherwise, the base station shall omit this field.
9		The base station shall set this field to '1' if the mobile station
10		is permitted to update the access handoff list during an
11		access attempt (see 2.6.3.1.7.2); otherwise, the base station
12		shall set this field to '0'.
13	ACC_PROBE_HO_OTHER_MSG	- Access probe handoff permitted for messages other
14		than the <i>Origination Message</i> , the <i>Reconnect Message</i> , and
15		the <i>Page Response Message</i> .
16		If ACCESS_PROBE_HO is set to '1', the base station shall
17		include this field and set it as described below; otherwise, the
18		base station shall omit this field.
19		The base station shall set this field to '1' if the mobile station
20		is permitted to perform an access probe handoff for messages
21		other than the <i>Origination Message</i> , the <i>Reconnect Message</i> ,
22		and the <i>Page Response Message</i> . The base station shall set
23		this field to '0' if the mobile station is permitted to perform an
24		access probe handoff only for the <i>Origination Message</i> , the
25		<i>Reconnect Message</i> , and the <i>Page Response Message</i> . See
26		2.6.3.1.3.3.
27	MAX_NUM_PROBE_HO	- Maximum number of times that the mobile station is
28		permitted to perform an access probe handoff.
29		If ACCESS_PROBE_HO is set to '1', the base station shall
30		include this field and set it as described below; otherwise, the
31		base station shall omit this field.
32		The base station shall set this field to the maximum number
33		of times the mobile station is allowed to perform an access
34		probe handoff within an access attempt minus one.
35	NGHBR_SET_SIZE	- Size of the Neighbor Set.
36		If NGHBR_SET_ENTRY_INFO or NGHBR_SET_ACCESS_INFO
37		is equal to '1', the base station shall set this field to the
38		number of pilots included in the <i>Neighbor List Message</i> ,
39		<i>Extended Neighbor List Message</i> , or <i>General Neighbor List</i>
40		<i>Message</i> ; otherwise, the base station shall omit this field.
41	If NGHBR_SET_ENTRY_INFO is equal to '1', the base station shall include	
42	NGHBR_SET_SIZE occurrences of the following field:	
43	ACCESS_ENTRY_HO	- Access entry handoff permitted when entering the System
44		Access State.

1 The base station shall set this field to '1' if the mobile station  
2 is permitted to perform an access entry handoff to the base  
3 station associated with the corresponding pilot between the  
4 time it receives a message on the Paging Channel when in the  
5 *Mobile Station Idle State* and it enters the *System Access State*  
6 to respond to the message; otherwise, the base station shall  
7 set this field to '0'. The base station shall use the same order  
8 for the ACCESS\_ENTRY\_HO fields in this message as is used  
9 for pilots which are listed in the *Neighbor List Message*,  
10 *Extended Neighbor List Message*, or *General Neighbor List*  
11 *Message*. Specifically, the  $i^{th}$  occurrence of the  
12 ACCESS\_ENTRY\_HO field shall correspond the  $i^{th}$  pilot in the  
13 *Neighbor List Message*, *Extended Neighbor List Message*, or  
14 *General Neighbor List Message*.

15 If NGHBR\_SET\_ACCESS\_INFO is equal to '1', the base station shall include  
16 NGHBR\_SET\_SIZE occurrences of the following field:

17 ACCESS\_HO\_ALLOWED - Access handoff and access probe handoff permitted for the  
18 corresponding pilot while in the *System Access State*.

19 The base station shall set this field to '1' if the mobile station  
20 is permitted to perform an access handoff or access probe  
21 handoff to the base station associated with the corresponding  
22 pilot when the mobile station is in the *System Access State*  
23 (see 2.6.3.1.8 and 2.6.3.1.9); otherwise, the base station shall  
24 set this field to '0'. The base station shall use the same order  
25 for the ACCESS\_HO\_ALLOWED fields in this message as is  
26 used for pilots which are listed in the *Neighbor List Message*,  
27 *Extended Neighbor List Message*, or *General Neighbor List*  
28 *Message*. Specifically, the  $i^{th}$  occurrence of the  
29 ACCESS\_HO\_ALLOWED field shall correspond the  $i^{th}$  pilot in  
30 the *Neighbor List Message*, *Extended Neighbor List Message*,  
31 or *General Neighbor List Message*.

32 The base station shall set this field to '0' if this pilot does not  
33 support a Reverse Access Channel (R-ACH).

34 BROADCAST\_GPS\_ASST - Broadcast GPS Assist Indicator.

35 The base station shall set this field to '1' if it supports  
36 Broadcast GPS Assist capability; otherwise, the base station  
37 shall set this field to '0'.

38 QPCH\_SUPPORTED - Quick Paging Channel Supported Indication.

39 If the base station supports Quick Paging Channel operation,  
40 the base station shall set this field to '1'; otherwise the base  
41 station shall set this field to '0'.

42 NUM\_QPCH - Number of Quick Paging Channels.

43 If the base station sets QPCH\_SUPPORTED to '1', the base  
44 station shall include this field and set it as described below;  
45 otherwise, the base station shall omit this field.

The base station shall set this field to the number of Quick Paging Channels on this CDMA Channel. The base station shall not set this field to '00'.

**QPCH\_RATE** - Quick Paging Channel indicator rate.

If the base station sets QPCH\_SUPPORTED to '1', the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the QPCH\_RATE field value shown in Table 3.7.2.3.2.13-2 corresponding to the indicator rate used by the Quick Paging Channel in the system.

**Table 3.7.2.3.2.13-2. QPCH Indicator Data Rate**

<b>QPCH_RATE Field (binary)</b>	<b>QPCH indicator data rate</b>
0	4800 bps
1	9600 bps

**QPCH\_POWER\_LEVEL\_PAGE** - Quick Paging Channel paging indicator transmit power level.

If the base station sets QPCH\_SUPPORTED to '1', the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel paging indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.13-3.

1  
2  
3

**Table 3.7.2.3.2.13-3 Quick Paging Channel Transmit Power Level**

<b>QPCH_POWER_LEVEL_PA GE QPCH_POWER_LEVEL_C ONFIG (binary)</b>	<b>Transmit Power Level</b>
000	5 dB below the Pilot Channel Transmit Power
001	4 dB below the Pilot Channel Transmit Power
010	3 dB below the Pilot Channel Transmit Power
011	2 dB below the Pilot Channel Transmit Power
100	1 dB below the Pilot Channel Transmit Power
101	Same as the Pilot Channel Transmit Power
110	1 dB above the Pilot Channel Transmit Power
111	2 dB above the Pilot Channel Transmit Power

1	QPCH_CCI_SUPPORTED -	Quick Paging Channel configuration change indicator
2		supported.
3		If QPCH_SUPPORTED is set to '1', the base station shall
4		include this field and set it as described below; otherwise, the
5		base station shall omit this field.
6		If the base station supports configuration change indicators
7		on the Quick Paging Channel, the base station shall set this
8		field to '1'; otherwise the base station shall set this field to '0'.
9	QPCH_POWER_LEVEL_CONFIG -	Quick Paging Channel configuration change indicator
10		transmit power level.
11		If the base station includes the QPCH_CCI_SUPPORTED field
12		and sets it to '1', the base station shall include this field and
13		set it as described below; otherwise, the base station shall
14		omit this field.
15		The base station shall set this field to the Quick Paging
16		Channel configuration change indicator transmit power level
17		relative to that of the Pilot Channel as specified in Table
18		3.7.2.3.2.13-3.
19	SDB_SUPPORTED -	Short Data Burst supported indicator.
20		The base station shall set this field to '1' if the mobile station
21		is permitted to send a Short Data Burst; otherwise, the base
22		station shall set this field to '0'.
23	RLGAIN_TRAFFIC_PILOT -	Gain adjustment of the Reverse Traffic Channel relative to the
24		Reverse Pilot Channel for Radio Configurations greater than
25		2.
26		The base station shall set this field to the correction factor to
27		be used by mobile stations in setting the power of a reverse
28		traffic channel, expressed as a two's complement value in
29		units of 0.125 dB (see [2]).
30	REV_PWR_CNTL_DELAY_INCL -	Reverse Power Control Delay included indicator.
31		The base station shall set this field to '1' if the base station
32		includes the REV_PWR_CNTL_DELAY field in this message;
33		otherwise, the base station shall set this field to '0'.
34	REV_PWR_CNTL_DELAY -	The reverse power control delay.
35		If REV_PWR_CNTL_DELAY_INCL is set to '0', the base station
36		shall omit this field; otherwise, the base station shall include
37		this field and set it as follows:
38		The base station shall set this field to the closed-loop reverse
39		power control delay minus one (the closed-loop reverse power
40		control delay is the time between the end of a gated-on
41		reverse PCG and the beginning of the reverse PCG where the
42		corresponding feedback is sent on the Forward Power Control
43		Subchannel, see [2]), in units of 1.25 ms.
44	AUTO_MSG_SUPPORTED -	Autonomous message supported indicator.

If the base station allows the autonomous delivery of the *Device Information Message* on the r-csch, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

AUTO\_MSG\_INTERVAL - Autonomous message interval.

If AUTO\_MSG\_SUPPORTED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and shall set this field to the AUTO\_MSG\_INTERVAL value shown in Table 3.7.2.3.2.13-4 to indicate the minimum time interval between autonomous messages sent by a mobile station to the infrastructure. This parameter is intended to allow the infrastructure to limit the frequency of autonomous messages sent by a mobile station on the r-csch.

**Table 3.7.2.3.2.13-4. AUTO\_MSG\_INTERVAL Values**

<b>AUTO_MSG_INTERVAL (binary)</b>	<b>Interval Length (milliseconds)</b>
000	200
001	500
010	1000
011	1500
100	2000
101	5000
110	10000
111	15000

MOB\_QOS - Indicator granting permission to the mobile station to request QoS parameter settings in the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination Message*.

The base station shall set this field to '1', if the mobile station is allowed to include a QoS record in the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination Message*; otherwise, the base station shall set this field to '0'.

1	ENC_SUPPORTED	-	Encryption fields included.
2			The base station shall set this field to '1' if the encryption
3			related fields are included; otherwise the base station shall
4			set this field to '0'.
5	SIG_ENCRYPT_SUP	-	Signaling encryption supported indicator.
6			If ENC_SUPPORTED is equal to '1', the base station shall
7			include this field; otherwise, the base station shall omit this
8			field. If this field is included, this field indicates which
9			signaling encryption algorithms are supported by the base
10			station.
11			This field consists of the subfields shown in Table
12			2.7.1.3.2.1-5.
13			If this field is included, the base station shall set the
14			subfields as follows:
15			The base station shall set the CMEA subfield to '1'.
16			The base station shall set each other subfield to '1' if the
17			corresponding signaling encryption algorithm is supported by
18			the base station; otherwise, the base station shall set the
19			subfield to '0'.
20			The base station shall set the RESERVED subfield to '00000'.
21	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
22			If ENC_SUPPORTED is equal to '1', the base station shall
23			include this field; otherwise, the base station shall omit this
24			field. If this field is included, the base station shall set this
25			field to indicate the supported user information encryption
26			algorithms.
27			This field consists of the subfields shown in Table
28			2.7.1.3.2.4-9.
29			The base station shall set each subfield to '1' if the
30			corresponding user information encryption algorithm is
31			supported by the base station; otherwise, the base station
32			shall set the subfield to '0'.
33	USE_SYNC_ID	-	Sync ID supported indicator.
34			The base station shall set this field to '1' to indicate that the
35			mobile station is permitted to include the SYNC_ID field in
36			the <i>Page Response Message</i> , the <i>Reconnect Message</i> , the
37			<i>Origination Message</i> , and the <i>Enhanced Origination Message</i> ;
38			otherwise, the base station shall set this field to '0'.
39	CS_SUPPORTED	-	Concurrent Services supported indicator.
40			If the base station supports concurrent services, the base
41			station shall set this field to '1'; otherwise, the base station
42			shall set this field to '0'.
43	BCCH_SUPPORTED	-	Primary Broadcast Control Channel Supported Indicator.
44			If the base station supports Primary Broadcast Control



1		Channel, the base station shall set this field to '1'; otherwise,
2		the base station shall set this field to '0'.
3	MS_INIT_POS_LOC_SUP_IND	- Mobile station initiated position location
4		determination supported indicator.
5		If the base station supports mobile station initiated position
6		determination, the base station shall set this field to '1';
7		otherwise, the base station shall set this field to '0'.
8	PILOT_INFO_REQ_SUPPORTED	- Pilot information request supported indicator.
9		If the base station supports mobile station request for pilot
10		information using the "Pilot Information" record in the <i>Base</i>
11		<i>Station Status Request Message</i> , the base station shall set
12		this field to '1'; otherwise, the base station shall set this field
13		to '0'.
14	QPCH_BI_SUPPORTED	- Quick Paging Channel broadcast indicator supported.
15		If QPCH_SUPPORTED is included and set to '1', the base
16		station shall include this field and set it as described below;
17		otherwise, the base station shall omit this field.
18		If the base station supports broadcast indicators on the
19		Quick Paging Channel, the base station shall set this field to
20		'1'; otherwise the base station shall set this field to '0'.
21	QPCH_POWER_LEVEL_BCAST	- Quick Paging Channel broadcast indicator transmit
22		power level.
23		If QPCH_BI_SUPPORTED is included and set to '1', the base
24		station shall include this field and set it as described below;
25		otherwise, the base station shall omit this field.
26		The base station shall set this field to the Quick Paging
27		Channel broadcast indicator transmit power level relative to
28		that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.
29	BAND_CLASS_INFO_REQ	- Band class information request indicator.
30		The base station shall set this field to '1' if the
31		ALT_BAND_CLASS field is included in this message;
32		otherwise, the base station shall set this field to '0'.
33	ALT_BAND_CLASS	- Alternate band class.
34		If BAND_CLASS_INFO_REQ is set to '0', then the base station
35		shall omit this field; otherwise, the base station shall include
36		this field and set it as follows:
37		The base station shall set this field to an alternate CDMA
38		band class (see [30]) supported by the base station. The
39		mobile station is to indicate its capability to support the
40		alternate band class in the <i>Origination Message</i> and <i>Page</i>
41		<i>Response Message</i> .
42	CDMA_OFF_TIME_REP_SUP_IND	- CDMA off time report supported indicator.

If the base station supports mobile station report for CDMA off time information using the *CDMA Off Time Report Message*, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**CDMA\_OFF\_TIME\_REP\_THRESHOLD\_UNIT** – CDMA off time report threshold unit

If CDMA\_OFF\_TIME\_REP\_SUP\_IND is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the time unit used in CDMA\_OFF\_TIME\_REP\_THRESHOLD, as specified in Table 3.7.2.3.2.13-5

**Table 3.7.2.3.2.13-5. CDMA Off Time Report Threshold Unit**

<b>CDMA_OFF_TIME_REP_UNIT (binary)</b>	<b>Time Unit (decimal)</b>
0	80 ms
1	0.5 sec

**CDMA\_OFF\_TIME\_REP\_THRESHOLD** – CDMA off time report threshold

If CDMA\_OFF\_TIME\_REP\_SUP\_IND is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the time in units of CDMA\_OFF\_TIME\_REP\_THRESHOLD\_UNIT such that if the mobile station goes away from the CDMA traffic channel longer than this value, the mobile station is to send a *CDMA Off Time Report Message*.

**CHM\_SUPPORTED** – Control Hold Mode supported indicator.

The base station shall set this field to '1' to indicate that the base station supports the Control Hold Mode; otherwise, the base station shall set this field to '0'.

**RELEASE\_TO\_IDLE\_IND** – Release to Idle State allowed indicator.

If the mobile station is allowed to return to the *Mobile Station Idle State* upon call release, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**RECONNECT\_MSG\_IND** – *Reconnect Message* supported indicator.

The base station shall set this field to '0' if the mobile station is not allowed to send a *Reconnect Message* instead of an *Origination Message* or a *Page Response Message*; otherwise, the base station shall set this field to '1'.

**MSG\_INTEGRITY\_SUP** – Message integrity supported indicator.

1		If the base station supports message integrity, the base
2		station shall set this field to '1'; otherwise, the base station
3		shall set this field to '0'.
4	SIG_INTEGRITY_SUP_INCL	- Signaling message integrity information included
5		indicator.
6		If MSG_INTEGRITY_SUP is set to '1', the base station shall
7		include this field and set it as follows; otherwise, the base
8		station shall omit this field.
9		If the base station supports other integrity algorithm(s) in
10		addition to the default integrity algorithm, the base station
11		shall set this field to '1'; otherwise, the base station shall set
12		this field to '0'.
13	SIG_INTEGRITY_SUP	- Signaling integrity algorithm supported by the base station.
14		If SIG_INTEGRITY_SUP_INCL is included and set to '1', the
15		base station shall set this field as follows; otherwise, the base
16		station shall omit this field.
17		The base station shall set this field to indicate the supported
18		message integrity algorithms in addition to the default
19		integrity algorithm.
20		This field consists of the subfields shown in Table
21		2.7.1.3.2.1-6.
22		The base station shall set each subfield to '1' if the
23		corresponding message integrity algorithm is supported by
24		the base station; otherwise, the base station shall set the
25		subfield to '0'.
26		The base station shall set the RESERVED subfield to
27		'00000000'.
28	FOR_PDCH_SUPPORTED	- Forward Packet Data Channel supported indicator.
29		If the base station supports the Forward Packet Data Channel
30		(F-PDCH), the base station shall set this field to '1'; otherwise,
31		the base station shall set this field to '0'.
32	PDCH_CHM_SUPPORTED	- PDCH Control Hold Mode supported indicator.
33		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
34		omit this field; otherwise, the base station shall include this
35		field and set it as follows:
36		The base station shall set this field to '1' to indicate that the
37		base station supports the PDCH Control Hold Mode;
38		otherwise, the base station shall set this field to '0'.
39	PDCH_PARMS_INCL	- Forward Packet Data Channel related parameters included
40		indicator.
41		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
42		omit this field; otherwise, the base station shall set this field
43		as follows:

1		The base station shall set this field to '1' if the following F-
2		PDCH related fields are included in this message; otherwise,
3		the base station shall set this field to '0'.
4	FOR_PDCH_RLGAIN_INCL	- Forward Packet Data Channel parameters related to
5		reverse link adjustment gains included indicator.
6		If PDCH_PARMS_INCL is omitted, or if it is included and set
7		to '0', the base station shall omit this field; otherwise, the
8		base station shall include this field, and set it as follows.
9		The base station shall set this field to '1' if the following F-
10		PDCH gain related fields are included in this message;
11		otherwise, the base station shall set this field to '0'.
12	RLGAIN_ACKCH_PILOT	- Reverse Acknowledgment Channel to pilot adjustment gain.
13		If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included
14		and set to '0', the base station shall omit this field; otherwise,
15		the base station shall include this field, and set it as follows.
16		The base station shall set this field to the Reverse
17		Acknowledgment Channel to pilot adjustment gain expressed
18		as a two's complement value in units of 0.125 dB (see [2]).
19	RLGAIN_CQICH_PILOT	- Reverse Channel Quality Indicator Channel to pilot
20		adjustment gain.
21		If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included
22		and set to '0', the base station shall omit this field; otherwise,
23		the base station shall include this field, and set it as follows.
24		The base station shall set this field to the Reverse Channel
25		Quality Indicator Channel to pilot adjustment gain expressed
26		as a two's complement value in units of 0.125 dB (see [2]).
27	NUM_SOFT_SWITCHING_FRAMES	- Number of frames for R-CQICH soft switching.
28		If PDCH_PARMS_INCL is not included, or is included and set
29		to '0', the base station shall omit this field; otherwise, the
30		base station shall include this field and set it as follows:
31		The base station shall set this field to the duration of the cell
32		switching period, in units of 20 ms, minus one, during which
33		the mobile station is to transmit the cell switch sequence on
34		the R-CQICH when it switches between two pilots which are
35		in different groups (see [3]).
36	NUM_SOFTEN_SWITCHING_FRAMES	- Number of frames for R-CQICH softer
37		switching.
38		If PDCH_PARMS_INCL is not included, or is included and set
39		to '0', the base station shall omit this field; otherwise, the
40		base station shall include this field and set it as follows:
41		The base station shall set this field to the duration of the cell
42		switching period, in units of 20 ms, minus one, during which
43		the mobile station is to transmit the cell switch sequence on
44		the R-CQICH when it switches between two pilots which are
45		in the same group (see [3]).

1	NUM_SOFT_SWITCHING_SLOTS	-	Number of slots per frame for R-CQICH soft
2			switching.
3			If PDCH_PARMS_INCL is not included, or is included and set
4			to '0', the base station shall omit this field; otherwise, the
5			base station shall include this field and set it as follows:
6			The base station shall set this field to the duration of the cell
7			switching slots within a switching frame, in units of 1.25 ms
8			as specified in Table 3.7.2.3.2.21-10, during which the mobile
9			station is to transmit the cell switch indication by using
10			Walsh cover of target on the R-CQICH when it switches
11			between two pilots which are in different groups.
12	NUM_SOFTER_SWITCHING_SLOTS	-	Number of slots per frame for R-CQICH softer
13			switching.
14			If PDCH_PARMS_INCL is not included, or is included and set
15			to '0', the base station shall omit this field; otherwise, the
16			base station shall include this field and set it as follows:
17			The base station shall set this field to the duration of the cell
18			switching slots within a switching frame, in units of 1.25 ms
19			as specified in Table 3.7.2.3.2.21-10, during which the mobile
20			station is to transmit the cell switch indication by using
21			Walsh cover of target on the R-CQICH when it switches
22			between two pilots which are in the same group.
23	PDCH_SOFT_SWITCHING_DELAY	-	F-PDCH soft switching delay.
24			If PDCH_PARMS_INCL is not included, or is included and set
25			to '0', the base station shall omit this field; otherwise, the
26			base station shall include this field and set it as follows:
27			The base station shall set this field to the minimum
28			interruption seen by the mobile station, in units of 10 ms,
29			minus one, when the mobile station is to transmit the cell
30			switch sequence on the R-CQICH channel when it switches
31			between two pilots which are in different groups (see [3]).
32	PDCH_SOFTER_SWITCHING_DELAY	-	F-PDCH softer switching delay.
33			If PDCH_PARMS_INCL is not included, or is included and set
34			to '0', the base station shall omit this field; otherwise, the
35			base station shall include this field and set it as follows:
36			The base station shall set this field to the minimum
37			interruption seen by the mobile station, in units of 10 ms,
38			minus one, when the mobile station is to transmit the cell
39			switch sequence on the R-CQICH channel when it switches
40			between two pilots which are in the same group (see [3]).
41	WALSH_TABLE_ID	-	The index of the Walsh Table used.
42			If PDCH_PARMS_INCL is not included, or is included and set
43			to '0', the base station shall omit this field; otherwise, the
44			base station shall set this field as follows:
45			The base station shall set this field to the index of the Walsh
46			Table being used by the Packet Data Channel. (See [3]).

1	NUM_PDCCH	-	The number of Packet Data Control Channels supported.
2			If PDCH_PARMS_INCL is not included, or is included and set
3			to '0', the base station shall omit this field; otherwise, the
4			base station shall include this field and set it as follows:
5			The base station shall set this field to '000' if the pilot
6			supports one Packet Data Control Channel. The base station
7			shall set this field to '001' if the pilot supports two Packet
8			Data Control Channels. The base station shall not set this
9			field to any other value.
10	The base station shall include NUM_PDCCH+1 occurrences of the field		
11	FOR_PDCCH_WALSH:		
12	FOR_PDCCH_WALSH	-	Forward Packet Data Control Channel Walsh code
13			assignment.
14			If PDCH_PARMS_INCL is not included, or is included and set
15			to '0', the base station shall omit this field; otherwise, the
16			base station shall include this field and set it as follows:
17			The base station shall set this field to the Walsh code
18			assignment for the Forward Packet Data Control Channel.
19			If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
20			shall be included first, followed by the Walsh code for
21			PDCCH1.
22	IMSI_10_INCL	-	IMSI_10 included.
23			If the MNC is a 3-digit number and the base station wants to
24			convey the third digit of the MNC to the mobile station, the
25			base station shall set this field to '1'; otherwise, the base
26			station shall set this field to '0'.
27	IMSI_10	-	The least significant digit of MNC when the MNC is a 3-digit
28			number.
29			If IMSI_10_INCL is set to '0', the base station shall omit this
30			field; otherwise, the base station shall set this field to the
31			least significant digit of MNC converted to binary by the
32			standard decimal-to-binary conversion as shown in Table
33			2.3.1.1-1.
34	MAX_ADD_SERV_INSTANCE	-	Maximum number of additional service reference
35			identifiers allowed in origination
36			If the CS_SUPPORTED field is set to '0', the base station shall
37			omit this field; otherwise, the base station shall include this
38			field and set it as follows:
39			The base station shall set this field to the maximum number
40			of additional service reference identifiers that can be included
41			in the <i>Origination Message</i> or <i>Enhanced Origination Message</i> .
42	RER_MODE_SUPPORTED	-	Radio environment reporting mode supported indicator.
43			If the base station supports radio environment reporting
44			mode, the base station shall set this field to '1'; otherwise, the
45			base station shall set this field to '0'.

1	TKZ_MODE_SUPPORTED	-	Tracking zone mode supported indicator.
2			The base station shall set this field to '1' if the tracking zone
3			mode is supported; otherwise, the base station shall set this
4			field to '0'.
5	TKZ_ID	-	Tracking zone identifier.
6			If TKZ_MODE_SUPPORTED is set to '1', the base station shall
7			set this field to its tracking zone identifier; otherwise, the
8			base station shall omit this field.
9	PZ_HYST_ENABLED	-	Packet zone hysteresis enabled.
10			If the PACKET_ZONE_ID field is set to '00000000', the base
11			station shall omit this field; otherwise, the base station shall
12			include this field and set it as follows:
13			If the packet zone hysteresis feature is to be enabled at the
14			mobile station, the base station shall set this field to '1';
15			otherwise, the base station shall set this field to '0'.
16	PZ_HYST_INFO_INCL	-	Packet zone hysteresis information included indicator.
17			If the PZ_HYST_ENABLED field is included and is set to '1',
18			the base station shall include this field and set it as follows;
19			otherwise, the base station shall omit this field.
20			If the base includes the PZ_HYST_LIST_LEN,
21			PZ_HYST_ACT_TIMER and PZ_HYST_TIMER fields, the base
22			station shall set this field to '1'; otherwise, the base station
23			shall set this field to '0'.
24	PZ_HYST_LIST_LEN	-	Packet zone hysteresis list length.
25			If the PZ_HYST_INFO_INCL field is included and is set to '1',
26			the base station shall include this field and set it as follows;
27			otherwise, the base station shall omit this field.
28			The base station shall set this field to the length of the packet
29			zone hysteresis list. This field shall be within the range '0001'
30			through '1111', inclusive.
31	PZ_HYST_ACT_TIMER	-	Packet zone hysteresis activation timer.
32			If the PZ_HYST_INFO_INCL field is included and is set to '1',
33			the base station shall include this field and set it as follows;
34			otherwise, the base station shall omit this field.
35			The base station shall set to the value of the packet zone
36			hysteresis activation timer (in units of seconds). This field
37			shall be within the range '00000001' through '11111111',
38			inclusive.
39	PZ_HYST_TIMER_MUL	-	Packet zone hysteresis timer multiplier.
40			If the PZ_HYST_INFO_INCL field is included and is set to '1',
41			the base station shall include this field and set it as follows;
42			otherwise, the base station shall omit this field.

1			The base station shall set the field to $x$ , where $x \times 8^y$
2			seconds is the value of the hysteresis timer and $y$ is the value
3			indicated in the PZ_HYST_TIMER_EXP field. The base station
4			shall set this field to a value that is between 1 and 7
5			inclusive. The value 0 is reserved.
6	PZ_HYST_TIMER_EXP	-	Packet zone hysteresis timer exponent.
7			If the PZ_HYST_INFO_INCL field is included and is set to '1',
8			the base station shall include this field and set it as follows;
9			otherwise, the base station shall omit this field.
10			The base station shall set the field to $y$ , where $x \times 8^y$
11			seconds is the value of the hysteresis timer and $x$ is the value
12			indicated in the PZ_HYST_TIMER_MUL field. The base station
13			shall set this field to a value that is between 0 and 4
14			inclusive. All the other values are reserved.
15	EXT_PREF_MSID_TYPE	-	Extended Preferred Access Channel Mobile Station Identifier
16			Type.
17			The base station shall set this field to the value shown in
18			Table 3.7.2.3.2.13-1 and Table 3.7.2.3.2.13-1a corresponding
19			to the type of MSID that the mobile station is to use on the
20			Access Channel.
21	MEID_REQD	-	MEID Required Indicator.
22			If EXT_PREF_MSID_TYPE is set to '11' and PREF_MSID_TYPE
23			is set to either '00' or '11', the base station shall omit this
24			field; otherwise, the base station shall include this field and
25			set it as follows:
26			The base station shall set this field to '1' to indicate that
27			network requires MEID (of mobile stations having R-UIM) in
28			registrations; otherwise the base station shall set this field to
29			'0'.
30	AUTO_FCSO_ALLOWED	-	Autonomous <i>Fast Call Setup Order</i> allowed indicator.
31			The base station shall set this field to '1' if the mobile station
32			is allowed to send an autonomous <i>Fast Call Setup Order</i> ;
33			otherwise, the base station shall set this field to '0'.
34	REV_PDCH_SUPPORTED	-	Reverse Packet Data Channel supported indicator.
35			If FOR_PDCH_SUPPORTED is set to '0', the base station shall
36			omit this field; otherwise, the base station shall include this
37			field and set it as follows:
38			If the base station supports the Reverse Packet Data Channel
39			(R-PDCH), the base station shall set this field to '1';
40			otherwise, the base station shall set this field to '0'.
41	REV_PDCH_PARMS_INCL	-	Reverse Packet Data Channel related parameters included
42			indicator.
43			If REV_PDCH_SUPPORTED is omitted, or if it is included and
44			set to '0', the base station shall omit this field; otherwise, the
45			base station shall include this field and set it as follows:



1		The base station shall set this field to '1' if the R-PDCH
2		parameters are included in this message; otherwise, the base
3		station shall set this field to '0'.
4	REV_PDCH_RLGAIN_INCL	- Reverse Packet Data Channel parameters related to
5		reverse link adjustment gains included indicator.
6		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
7		set to '0', the base station shall omit this field; otherwise, the
8		base station shall include this field, and set it as follows.
9		The base station shall set this field to '1' if the following R-
10		PDCH gain related fields are included in this message;
11		otherwise, the base station shall set this field to '0'.
12	RLGAIN_SPICH_PILOT	- Reverse Secondary Pilot Channel to pilot adjustment gain.
13		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
14		and set to '0', the base station shall omit this field; otherwise,
15		the base station shall include this field, and set it as follows.
16		The base station shall set this field to the Reverse Secondary
17		Pilot Channel to pilot adjustment gain expressed as a two's
18		complement value in units of 0.125 dB (see [2]).
19	RLGAIN_REQCH_PILOT	- Reverse Request Channel to pilot adjustment gain.
20		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
21		and set to '0', the base station shall omit this field; otherwise,
22		the base station shall include this field, and set it as follows.
23		The base station shall set this field to the Reverse Request
24		Channel to pilot adjustment gain expressed as a two's
25		complement value in units of 0.125 dB (see [2]).
26	RLGAIN_PDCCH_PILOT	- Reverse Packet Data Control Channel to pilot adjustment
27		gain.
28		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
29		and set to '0', the base station shall omit this field; otherwise,
30		the base station shall include this field, and set it as follows.
31		The base station shall set this field to the Reverse Packet
32		Data Channel to pilot adjustment gain expressed as a two's
33		complement value in units of 0.125 dB (see [2]).
34	REV_PDCH_PARMS_1_INCL	- Reverse Packet Data Channel parameters subset included
35		indicator.
36		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
37		set to '0', the base station shall omit this field; otherwise, the
38		base station shall include this field, and set it as follows.
39		The base station shall set this field to '1' if the following R-
40		PDCH parameters are included in this message; otherwise,
41		the base station shall set this field to '0'.
42	REV_PDCH_TABLE_SEL	- Reverse Packet Data Channel Table selector.
43		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
44		and set to '0', the base station shall omit this field; otherwise,
45		the base station shall include this field, and set it as follows.

1		The base station shall set this field to the Reverse Packet
2		Data Channel Table selector (see [2]).
3	REV_PDCH_MAX_AUTO_TPR	- Reverse Packet Data Channel maximum traffic to
4		pilot ratio for autonomous transmission.
5		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
6		and set to '0', the base station shall omit this field; otherwise,
7		the base station shall include this field and set it as follows.
8		The base station shall set this field to the maximum traffic to
9		pilot ratio for autonomous transmission on the Reverse
10		Packet Data Channel (see [2] and [3]).
11		The base station shall set this field to a value in the range 0
12		to 18 dB inclusive in units of 0.125 dB.
13	REV_PDCH_NUM_ARQ_ROUNDS_NORMAL	- Maximum number of allowed ARQ rounds on
14		the Reverse PDCH in the non-boosted mode.
15		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
16		and set to '0', the base station shall omit this field; otherwise,
17		the base station shall include this field and set it as follows:
18		The base station shall set this field to one less the maximum
19		number of allowed ARQ rounds on the Reverse PDCH in the
20		non-boosted mode. The base station shall set this field to 0,
21		1, or 2 corresponding to 1, 2, or 3 rounds respectively (See
22		[3]).
23	REV_PDCH_OPER_PARMS_INCL	- Reverse Packet Data Channel operational parameters
24		included indicator.
25		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
26		set to '0', the base station shall omit this field; otherwise, the
27		base station shall include this field, and set it as follows.
28		The base station shall set this field to '1' if the following R-
29		PDCH operational parameters are included in this message;
30		otherwise, the base station shall set this field to '0'.
31	REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET	- Maximum Allowed Reverse
32		PDCH encoder packet size.
33		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
34		included and set to '0', the base station shall omit this field;
35		otherwise, the base station shall include this field and set it
36		as follows.
37		The base station shall set this field to the maximum size
38		encoder packet that the mobile station is allowed to use. (see
39		[2] and [3]).
40		The base station shall set this field to a value in the range 0
41		to 10 inclusive, corresponding to the encoder packet sizes
42		192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384,
43		and 18456 bits respectively.
44	REV_PDCH_DEFAULT_PERSISTENCE	- Reverse Packet Data Channel default initial
45		persistence.

1 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
2 included and set to '0', the base station shall omit this field;  
3 otherwise, the base station shall include this field and set it  
4 as follows:

5 The base station shall set this field to '1' if the mobile station  
6 is to be persistent at the call setup; otherwise, the base  
7 station shall set this field to '0' (See [3]).

8 REV\_PDCH\_RESET\_PERSISTENCE - Reverse Packet Data Channel reset persistence  
9 indicator.

10 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
11 included and set to '0', the base station shall omit this field;  
12 otherwise, the base station shall include this field and set it  
13 as follows:

14 The base station shall set this field to '1' if, at the end of a  
15 persistent grant, the mobile station shall reset its persistent  
16 indicator to persistent; otherwise, the base station shall set  
17 this field to '0' if the mobile station shall reset its persistent  
18 indicator to non-persistent (See [3]).

19 REV\_PDCH\_GRANT\_PRECEDENCE - Reverse Packet Data Channel Grant Precedence  
20 Indicator.

21 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
22 included and set to '0', the base station shall omit this field;  
23 otherwise, the base station shall include this field and set it  
24 as follows:

25 The base station shall set this field to '1' if unicast Forward  
26 Grant Channel messages have precedence over Rate Control  
27 commands; otherwise, the base station shall set this field to  
28 '0' to indicate that Rate Control down commands from non-  
29 serving sectors have precedence over Forward Grant Channel  
30 messages (see [3]).

31 REV\_PDCH\_MSIB\_SUPPORTED - Reverse PDCH MSIB usage indicator.

32 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
33 included and set to '0', the base station shall omit this field;  
34 otherwise, the base station shall include this field and set it  
35 as follows:

36 The base station shall set this field to '1' if the mobile station  
37 is to use the MSIB bit on the Reverse Packet Data Control  
38 Channel; otherwise, the base station shall set this field to '0'  
39 (see [3]).

40 REV\_PDCH\_SOFT\_SWITCHING\_RESET\_IND - Reverse Packet Data Channel soft  
41 switching reset indicator.

42 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
43 included and set to '0', the base station shall omit this field;  
44 otherwise, the base station shall include this field and set it  
45 as follows:

1			The base station shall set this field to '1' if the mobile station
2			is to initialize RPDCHCF when soft selection occurs in the
3			FPDCHCF; otherwise, the base station shall set this field to
4			'0' (see [3]).
5	SDB_IN_RCNM_IND	-	Short Data Burst allowed in <i>Reconnect Message</i> indicator.
6			If RECONNECT_MSG_IND is set to '0' or SDB_SUPPORTED is
7			set to '0', the base station shall omit this field; otherwise, the
8			base station shall include this field and set it as follows:
9			The base station shall set this field to '1' if the mobile station
10			is allowed to include a Short Data Burst (see [30]) in the
11			<i>Reconnect Message</i> ; otherwise, the base station shall set this
12			field to '0'.
13	SENDING_BSPM	-	<i>BCMC Service Parameters Message</i> indicator.
14			If the base station is sending the <i>BCMC Service Parameters</i>
15			<i>Message</i> on the Paging Channel, it shall set this field to '1';
16			otherwise, it shall set this field to '0'.
17	BSPM_PERIOD_INDEX	-	BSPM Transmission Periodicity Index.
18			If the SENDING_BSPM field is set to '0', the base station shall
19			omit this field; otherwise, the base station shall include this
20			field and set it as follows:
21			The base station shall set this field to the BSPM transmission
22			periodicity index corresponding to the periodicity with which
23			the BSPM with DIFF_BSPM equal to '0' is transmitted on the
24			paging channel.
25	CAND_BAND_INFO_REQ	-	Candidate band class information request indicator
26			The base station shall set this field to '1' when requesting
27			mobiles to report whether various candidate band class and
28			band subclass (if applicable) combinations are supported;
29			otherwise, the base station shall set this field to '0'.
30			The base station shall not include more than 16 band class-
31			band subclass queries in this message.
32	NUM_CAND_BAND_CLASS	-	Number of candidate band classes
33			If CAND_BAND_INFO_REQ is set to '0', the base station shall
34			omit this field; otherwise, the base station shall include this
35			field and set it as follows:
36			The base station shall set this field to the number of
37			candidate band classes included in the record minus one.
38	If CAND_BAND_INFO_REQ is set to '1', the base station shall include		

- 1 NUM\_CAND\_BAND\_CLASS + 1 occurrences of the following record:
- 2 CAND\_BAND\_CLASS - Candidate band class
- 3 The base station shall set this field (see [30]) to a band class  
4 for which the mobile is to report it's capabilities upon system  
5 access. It may be used in conjunction with the  
6 BAND\_SUBCLASS\_IND fields to specify band subclass(es) for  
7 which the mobile is to report it's capabilities upon system  
8 access.
- 9 SUBCLASS\_INFO\_INCL - Band subclass information included
- 10 The base station shall set this field to '0' when no band  
11 subclasses are associated with CAND\_BAND\_CLASS or if the  
12 base station requires only the band class capabilities of the  
13 mobile station. Otherwise, the base station shall set this field  
14 to '1'.
- 15 SUBCLASS\_REC\_LEN - Band subclass subrecord length
- 16 If SUBCLASS\_INFO\_INCL is set to '0', the base station shall  
17 omit this field; otherwise, the base station shall set this field  
18 as follows:
- 19 The base station shall set this field to the number of band  
20 subclass indicator fields included in the subrecord minus  
21 one. The number of subclass indicator fields included  
22 depends on the highest band subclass being queried for  
23 mobile support for the associated CAND\_BAND\_CLASS (i.e. if  
24 the highest band subclass being queried is K, then  
25 SUBCLASS\_REC\_LEN = K).
- 26 If the SUBCLASS\_REC\_LEN field is included, the base station shall include  
27 SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord. The first field included  
28 corresponds to band subclass '0' and the N<sup>th</sup> field included corresponds to band subclass  
29 'N-1'.
- 30 BAND\_SUBCLASS\_IND - Band subclass indicator
- 31 The base station shall set this field to '1' if it requires the  
32 mobile to report whether it supports this band subclass for  
33 the associated CAND\_BAND\_CLASS; otherwise, the base  
34 station shall set this field to '0'.
- 35 The mobile station is to indicate its capability to support the  
36 candidate band class and band subclass (if applicable)  
37 combination in the *Registration Message*, *Origination*  
38 *Message*, and *Page Response Message*.
- 39 TX\_PWR\_LIMIT\_INCL - Transmit Power Limit Inclusion for the current base station
- 40 If the transmit power limit field is included in this message,  
41 the base station shall set this field to '1'; otherwise, the base  
42 station shall set this field to '0'.
- 43 TX\_PWR\_LIMIT - Transmit Power Limit for the current base station

If TX\_PWR\_LIMIT\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set to as follows.

The base station shall set this field to thirty dB more than transmit power limit in dBm EIRP, in steps of 1 dB. This field can take the values 30 to 53 corresponding to maximum transmit power values 0 dBm to 23 dBm.

**BYPASS\_REG\_IND** - Indication to bypass the power up registration upon the change of bands, serving systems and frequency blocks.

The base station shall set this field to '00' if the mobile station is to perform a power up registration upon band, frequency block or serving system change.

The base station shall set this field to '01' if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system changes due to processing the *Extended CDMA Channel List Message*.

The base station shall set this field to '10' if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system change when the SID remains the same.

The base station shall set this field to '11' if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system change.

#### 3.7.2.3.2.14 Extended Neighbor List Message

MSG\_TAG: ENLM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
PILOT_INC	4

Zero or more occurrences of the following record:

{	
NGHBR_CONFIG	3
NGHBR_PN	9
SEARCH_PRIORITY	2
FREQ_INCL	1
NGHBR_BAND	0 or 5
NGHBR_FREQ	0 or 11
}	

**PILOT\_PN** - Pilot PN sequence offset index.

1			The base station shall set this field to the pilot PN sequence
2			offset for this base station, in units of 64 PN chips.
3	CONFIG_MSG_SEQ	-	Configuration message sequence number.
4			The base station shall set this field to CONFIG_SEQ
5			(see 3.6.2.2).
6	PILOT_INC	-	Pilot PN sequence offset index increment.
7			A mobile station searches for Remaining Set pilots at pilot PN
8			sequence index values that are multiples of this value.
9			The base station shall set this field to the pilot PN sequence
10			increment, in units of 64 PN chips, that mobile stations are to
11			use for searching the Remaining Set. The base station
12			should set this field to the largest increment such that the
13			pilot PN sequence offsets of all its neighbor base stations are
14			integer multiples of that increment.
15			The base station shall set this field to a value in the range 1
16			to 15 inclusive.

The base station shall include one occurrence of the following record for each pilot that a mobile station is to place in its Neighbor Set.

NGHBR\_CONFIG - Neighbor configuration.

The base station shall set this field to the value shown in Table 3.7.2.3.2.14-1 corresponding to the configuration of this neighbor.

**Table 3.7.2.3.2.14-1. Neighbor Configuration Field**

<b>Value (binary)</b>	<b>Neighbor Configuration</b>
000	<p>The neighbor base station has the same number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment corresponding to this CDMA frequency assignment with the same number of Paging Channels, and the neighbor CDMA frequency is given as follows:</p> <ul style="list-style-type: none"> <li>• If FREQ_INCL equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</li> <li>• If FREQ_INCL equals '1' for this record, this corresponding CDMA frequency assignment is given by NGHBR_BAND and NGHBR_FREQ.</li> </ul> <p>The position of the neighbor CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p>



001	<p>The neighbor base station has the same number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment corresponding to this CDMA frequency assignment with a different number of Paging Channels, and the neighbor CDMA frequency is given as follows:</p> <ul style="list-style-type: none"> <li>• If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</li> <li>• If <code>FREQ_INCL</code> equals '1' for this record, this corresponding CDMA frequency assignment is given by <code>NGHBR_BAND</code> and <code>NGHBR_FREQ</code>.</li> </ul> <p>The position of the neighbor CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p> <p>This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel.</p>
010	<p>The neighbor base station may have a different number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a Primary Paging Channel on the following CDMA frequency:</p> <ul style="list-style-type: none"> <li>• If <code>FREQ_INCL</code> equals '0' for this record, the neighbor base station has a Primary Paging Channel on the first CDMA Channel listed in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</li> <li>• If <code>FREQ_INCL</code> equals '1' for this record, the neighbor base station has a Primary Paging Channel on the CDMA frequency assignment given by <code>NGHBR_BAND</code> and <code>NGHBR_FREQ</code>.</li> </ul>

011	<p>The neighbor base station configuration is unknown but the neighbor base station has a Pilot Channel on the following frequency:</p> <ul style="list-style-type: none"> <li>• If FREQ_INCL equals '0' for this record, the neighbor CDMA frequency assignment is the same as the current CDMA frequency assignment and has a Pilot Channel.</li> <li>• If FREQ_INCL equals '1' for this record, the CDMA frequency assignment given by NGHBR_BAND and NGHBR_FREQ has a Pilot Channel.</li> </ul>
100-111	Reserved.

NGHBR\_PN - Neighbor pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this neighbor, in units of 64 PN chips.

SEARCH\_PRIORITY - Pilot Channel search priority.

The base station shall set this field to the search priority for the Pilot Channel corresponding to NGHBR\_PN. The base station shall set the search priority as shown in Table 3.7.2.3.2.14-2.

**Table 3.7.2.3.2.14-2. Search Priority Field**

Value (binary)	Search Priority
00	Low
01	Medium
10	High
11	Very high

FREQ\_INCL - Frequency included indicator.

If the NGHBR\_BAND and NGHBR\_FREQ fields are included for this neighbor base station, the base station shall set this bit to '1'. If the NGHBR\_BAND and NGHBR\_FREQ fields are not included for this neighbor base station, the base station shall set this bit to '0'.

NGHBR\_BAND - Neighbor band class.

If the FREQ\_INCL bit is set to '1', the base station shall set this field to the CDMA band class, as specified in [30], corresponding to the CDMA frequency assignment for the CDMA Channel containing the Paging Channel the mobile station is to search. If the FREQ\_INCL bit is set to '0', the base station shall omit this field.

1       NGHBR\_FREQ   -   Neighbor frequency assignment.  
2  
3       If the FREQ\_INCL bit is set to '1', the base station shall set  
4       this field to the CDMA Channel number, in the specified  
5       CDMA band class, corresponding to the CDMA frequency  
6       assignment for the CDMA Channel containing the Paging  
7       Channel the mobile station is to search. If the FREQ\_INCL  
8       bit is set to '0', the base station shall omit this field.

## 1 3.7.2.3.2.15 Status Request Message

2 MSG\_TAG: STRQM

Field	Length (bits)
RESERVED	4
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields	$8 \times \text{QUAL\_INFO\_LEN}$
NUM_FIELDS	4

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

RECORD_TYPE	8
-------------	---

} (NUM\_FIELDS)

3

4 RESERVED - Reserved bits.

5 The base station shall set this field to '0000'.

6 QUAL\_INFO\_TYPE - Qualification information type.

7 The base station shall set this field to the value shown in  
 8 Table 3.7.2.3.2.15-1 to show the inclusion of qualification  
 9 information in the type-specific fields. The base station shall  
 10 include the required qualification information in this  
 11 message.

12 **Table 3.7.2.3.2.15-1. Qualification Information Type**

Value (binary)	Included Information
00000000	None
00000001	BAND_CLASS
00000010	BAND_CLASS and OP_MODE
All other values are reserved.	

13

14 QUAL\_INFO\_LEN - Qualification information length.

15 The base station shall set this field to the number of octets  
 16 included in the type-specific fields of the qualification  
 17 information.

18 Type-specific fields - Type-specific fields.

19 The base station shall set these fields to the qualification  
 20 information according to the QUAL\_INFO\_TYPE field.

1  
2  
3  
4  
5  
6  
  
7  
  
8  
9  
10  
11  
  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

If QUAL\_INFO\_TYPE is equal to '00000000', the type-specific fields are omitted.

If QUAL\_INFO\_TYPE is equal to '00000001', the base station shall use the following fixed-length format for the type-specific fields:

Type-specific Field	Length (bits)
BAND_CLASS	5
RESERVED	3

If QUAL\_INFO\_TYPE is equal to '00000010', the base station shall use the following fixed-length format for the type-specific fields:

Type-specific Field	Length (bits)
BAND_CLASS	5
OP_MODE	8
RESERVED	3

- BAND\_CLASS

- Band class.

The base station shall set this field as defined in [30] to specify the band class qualification information.
- OP\_MODE

- Operating mode.

The base station shall set this field as shown in Table 3.7.2.3.2.15-2 to specify the operating mode qualification information if MOB\_P\_REV of the current band class is less than or equal to three. The base station shall set this field as shown in Table 3.7.2.3.2.15-3 to specify the operating mode qualification information if MOB\_P\_REV of the current band class is greater than three.

**Table 3.7.2.3.2.15-2. Operating Mode for MOB\_P\_REV  
Less Than or Equal to Three**

<b>Description</b>	<b>Value (binary)</b>
CDMA mode in Band Class 1 or Band Class 4	00000000
CDMA mode in Band Class 0 or Band Class 3	00000001
Reserved (Previously: analog mode)	00000010
Reserved (Previously: wide analog mode)	00000011
Reserved (Previously: Narrow analog mode)	00000100
All other values are reserved.	

**Table 3.7.2.3.2.15-3. Operating Mode for MOB\_P\_REV  
Greater Than Three**

<b>Description</b>	<b>Standards</b>	<b>Value (binary)</b>
CDMA mode		00000000 or 00000001
Reserved (Previously: Analog mode)		00000010
Reserved (Previously: Wide analog mode)		00000011
Reserved (Previously: Narrow analog mode)		00000100
DS-41 mode	[32]	00000101
MC-MAP mode	[31]	00000110
All other values are reserved.		

**NUM\_FIELDS** - Number of requested fields in this message.  
The base station shall set this field to the number of occurrences of RECORD\_TYPE in this message.

1 The base station shall only request the status information records qualified by the  
2 included qualification information (see Table 2.7.4-1) in this message. The base station  
3 shall include one occurrence of the following field for each information record that is  
4 requested:

5       RECORD\_TYPE     -   Information record type.

6                        The base station shall set this field to the record type value  
7                        shown in Table 2.7.4-1 corresponding to the information  
8                        record requested.

9                        If MOB\_P\_REV is equal to or greater than seven, the base  
10                       station shall not request the Call Mode information record  
11                       (record type '00000111' in Table 2.7.4-1).

## 1 3.7.2.3.2.16 Service Redirection Message

2 MSG\_TAG: SRDM

Field	Length (bits)
RETURN_IF_FAIL	1
DELETE_TMSI	1
REDIRECT_TYPE	1
RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

3

4 RETURN\_IF\_FAIL - Return if fail indicator.

5 The base station shall set this field to '1' if the mobile station  
6 is required to return to the system from which it is being  
7 redirected upon failure to obtain service using the redirection  
8 criteria specified in this message; otherwise, the base station  
9 shall set this field to '0'.

10 DELETE\_TMSI - Delete TMSI indicator.

11 The base station shall set this field to '1' if the mobile station  
12 is required to delete the TMSI assigned to the mobile station;  
13 otherwise, the base station shall set this field to '0'.

14 REDIRECT\_TYPE - Redirect indicator.

15 The base station shall set this field to the REDIRECT\_TYPE  
16 value shown in table 3.7.2.3.2.16-1 corresponding to the  
17 redirection type.

18 **Table 3.7.2.3.2.16-1. Redirection Types**

Description	REDIRECT_TYPE (binary)
Normal redirection	0
NDSS redirection	1

19

20 RECORD\_TYPE - Redirection record type.

21 The base station shall set this field to the RECORD\_TYPE  
22 value shown in Table 3.7.2.3.2.16-2 corresponding to the  
23 type of redirection specified by this record.

24



1

**Table 3.7.2.3.2.16-2. Redirection Record Types**

<b>Description</b>	<b>RECORD_TYPE (binary)</b>
NDSS off indication	00000000
Reserved (Previously: Redirection to an analog system)	00000001
Redirection to a CDMA system as defined in [24] and [2]	00000010
Reserved (Previously: Redirection to a TACS analog system as defined in Department of Trade and Industry's TACS Mobile Station-Land Station Compatibility Specification, Issue 4, Amendment 1.)	00000011
Reserved (Previously: Redirection to a JTACS analog system as defined in ARIB's RCR STD-36.)	00000100
Redirection to a DS-41 system as defined in [32].	00000101
All other RECORD_TYPE values are reserved	

2

3        RECORD\_LEN        -        Redirection record length.

4        If RECORD\_TYPE equals to '00000000', the base station shall  
5        set this field to '00000000'; otherwise, the base station shall  
6        set this field to the number of octets in the type-specific fields  
7        of this redirection record.

8        Type-specific fields        -        Redirection record type-specific fields.

9        The base station shall include type-specific fields based on  
10       the RECORD\_TYPE of this redirection record.

11       If RECORD\_TYPE is equal to '00000000', the base station shall not include the type-  
12       specific fields.

13       If RECORD\_TYPE is equal to '00000010', the base station shall include the following fields:

14

1

Subfield	Length (bits)
BAND_CLASS	5
EXPECTED_SID	15
EXPECTED_NID	16
RESERVED	4
NUM_CHANS	4

NUM\_CHANS occurrences of the following field:

{ (NUM\_CHANS)

CDMA_CHAN	11
-----------	----

} (NUM\_CHANS)

RESERVED	0-7 (as needed)
----------	-----------------

2

3 BAND\_CLASS - Band class.

4 The base station shall set this field to the CDMA band class,  
5 as specified in [30].

6 EXPECTED\_SID - Expected SID.

7 If the base station is redirecting the mobile station to a  
8 specific system, the base station shall set this field to the SID  
9 of that system; otherwise, the base station shall set this field  
10 to 0.

11 EXPECTED\_NID - Expected NID.

12 If the base station is redirecting the mobile station to a  
13 specific network, the base station shall set this field to the  
14 NID of that network; otherwise, the base station shall set this  
15 field to 65535.

16 RESERVED - Reserved bits.

17 The base station shall set this field to '0000'.

18 NUM\_CHANS - Number of CDMA Channels.

19 The base station shall set this field to the number of  
20 occurrences of the CDMA\_CHAN field in this record.

21 CDMA\_CHAN - CDMA Channel number.

22 For each CDMA Channel on which the mobile station is to  
23 attempt to acquire a CDMA system, the base station shall  
24 include one occurrence of this field specifying the associated  
25 CDMA Channel number.

26 RESERVED - Reserved bits.

1  
2  
3  
4

The base station shall add reserved bits as needed in order to make the length of the record equal to an integer number of octets. The base station shall set these bits to '0'.

## 3.7.2.3.2.17 General Page Message

MSG\_TAG: GPM

When Layer 3 at the base station sends a PDU corresponding to the *General Page Message* to Layer 2, it also sends the GPM Common fields to Layer 2. These GPM Common fields and PDUs are used by Layer 2 to assemble a Layer 2 PDU corresponding to the *General Page Message* (see [4]).

GPM Common Fields:

Field	Length (bits)
CONFIG_MSG_SEQ	6
ACC_MSG_SEQ	6
CLASS_0_DONE	1
CLASS_1_DONE	1
TMSI_DONE	1
ORDERED_TMSIS	1
BROADCAST_DONE	1
RESERVED	4
ADD_LENGTH	3
ADD_PFIELD	$8 \times \text{ADD\_LENGTH}$

PDU Format for a mobile station-addressed page:

Field	Length (bits)
SERVICE_OPTION	0 or 16

PDU Format for a broadcast page: There are no Layer 3 fields associated with this record.

PDU Format for an enhanced broadcast page:

Field	Length (bits)
BCN	3
TIME_OFFSET	10
REPEAT_TIME_OFFSET	0 or 5
ADD_BCAST_RECORD	0 or $8 \times \text{EXT\_BCAST\_SDU\_LENGTH}$ (see [4])

- 1
- 2      CONFIG\_MSG\_SEQ      -      Configuration message sequence number.
- 3                              The base station shall set this field to CONFIG\_SEQ
- 4                              (see 3.6.2.2).
- 5              ACC\_MSG\_SEQ      -      Access parameters message sequence number.
- 6                              The base station shall set this field to ACC\_CONFIG\_SEQ
- 7                              (see 3.6.2.2).
- 8              CLASS\_0\_DONE      -      Class 0 pages are done.
- 9                              If all messages and records directed to mobile stations
- 10                             operating in the slotted mode, active in this slot, and having
- 11                             an assigned class 0 IMSI have been sent by the end of this
- 12                             *General Page Message*, the base station shall set this field to
- 13                             '1'; otherwise, the base station shall set this field to '0'.
- 14              CLASS\_1\_DONE      -      Class 1 pages are done.
- 15                              If all messages and records directed to mobile stations
- 16                             operating in the slotted mode, active in this slot, and having
- 17                             an assigned class 1 IMSI have been sent by the end of this
- 18                             *General Page Message*, the base station shall set this field to
- 19                             '1'; otherwise, the base station shall set this field to '0'.
- 20              TMSI\_DONE      -      TMSI pages are done.
- 21                              If all the page records having PAGE\_CLASS equal to '10' or
- 22                             other directed messages for mobile stations operating in the
- 23                             slotted mode, active in this slot, and having an assigned TMSI
- 24                             have been sent by the end of this *General Page Message*, the
- 25                             base station shall set this field to '1'; otherwise, the base
- 26                             station shall set this field to '0'.
- 27              ORDERED\_TMSIS      -      TMSIs sent in numerical order.
- 28                              If all the page records of PAGE\_CLASS equal to '10' are sent
- 29                             such that the TMSI code values of the TMSI\_CODE\_ADDR
- 30                             fields for the mobile stations operating in the slotted mode
- 31                             are in ascending numerical order in all the *General Page*
- 32                             *Messages* sent within this slot, the base station shall set this
- 33                             field to '1'; otherwise, the base station shall set this field to
- 34                             '0'.
- 35              BROADCAST\_DONE      -      Broadcast pages are done.

1			If all broadcast page records (PAGE_CLASS equal to '11') have
2			been sent by the end of this <i>General Page Message</i> , the base
3			station shall set this field to '1'; otherwise, the base station
4			shall set this field to '0'.
5	RESERVED	-	Reserved bits.
6			The base station shall set this field to '0000'.
7	ADD_LENGTH	-	Number of octets in the page message specific fields.
8			If there are no additional page message specific fields, the
9			base station shall set this field to '000'.
10	ADD_PFIELD	-	Additional page message specific fields.
11			The base station shall not include any additional page
12			message specific fields, if ADD_LENGTH is '000'.
13	SERVICE_OPTION	-	Service option.
14			If the base station requests a special service option (i.e., the
15			SDU_INCLUDED field, see [4], is set to '1'), the base station
16			shall set this field to the service option code shown in [30],
17			corresponding to the requested service option; otherwise, the
18			base station shall omit this field.
19	BCN	-	Broadcast Control Channel Number.
20			If NUM_BCCH_BCAST is equal to '000', base station shall set
21			this field to '000' and this field is to be ignored by the mobile
22			station.
23			Otherwise, the base station shall set this field to the
24			Broadcast Control Channel number of the F-BCCH to which
25			the mobile station is being redirected. The base station shall
26			not set this field to '000' (reserved) or '001'.
27	TIME_OFFSET	-	BCCH time offset.
28			If NUM_BCCH_BCAST is equal to '000', base station shall set
29			this field to one less than the time offset, in units of 40 ms,
30			from the beginning of the slot in which this message began to
31			the beginning of the Forward Common Control Channel slot
32			to which the mobile station is being directed.
33			Otherwise,,the base station shall set this field to one less
34			than the time offset, in units of 40 ms, from the beginning of
35			the slot in which this message began to the beginning of the
36			Broadcast Control Channel slot to which the mobile station is
37			being directed.
38	REPEAT_TIME_OFFSET	-	BCCH offset of repeat.
39			If EXT_BCAST_SDU_LENGTH_IND (see [4]) is set to '01' or
40			'11', the base station shall set this field as follows:

- If NUM\_BCCH\_BCAST is equal to '000', the base station shall set this field to one less than the time offset, in units of 40 ms, from the time specified by TIME\_OFFSET to the beginning of the Forward Common Control Channel slot to which the mobile station is being directed for a repeat of the broadcast message.
- Otherwise, the base station shall set this field to one less than the time offset, in units of 40 ms, from the time specified by TIME\_OFFSET to the beginning of the Broadcast Control Channel slot to which the mobile station is being directed for a repeat of the broadcast message;

Otherwise, the base station shall omit this field.

ADD\_BCAST\_RECORD - Additional broadcast information record.

The base station shall omit this field if EXT\_BCAST\_SDU\_LENGTH\_IND (see [4]) is set to '00' or '01'; otherwise, the base station shall include EXT\_BCAST\_SDU\_LENGTH (see [4]) octets in this field.

1 3.7.2.3.2.18 Global Service Redirection Message

2 MSG\_TAG: GSRDM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
REDIRECT_ACCOLC	16
RETURN_IF_FAIL	1
DELETE_TMSI	1
EXCL_P_REV_MS	1
RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

3

4 PILOT\_PN - Pilot PN sequence offset index.

5 The base station shall set this field to the pilot PN sequence  
6 offset for this base station, in units of 64 PN chips.

7 CONFIG\_MSG\_SEQ - Configuration message sequence number.

8 The base station shall set this field to CONFIG\_SEQ  
9 (see 3.6.2.2).

10



1 REDIRECT\_ACCOLC - Redirected access overload classes.

2 This field consists of the following subfields:

Subfield	Length (bits)	Subfield Description
ACCOLC_0	1	Access overload class 0
ACCOLC_1	1	Access overload class 1
ACCOLC_2	1	Access overload class 2
ACCOLC_3	1	Access overload class 3
ACCOLC_4	1	Access overload class 4
ACCOLC_5	1	Access overload class 5
ACCOLC_6	1	Access overload class 6
ACCOLC_7	1	Access overload class 7
ACCOLC_8	1	Access overload class 8
ACCOLC_9	1	Access overload class 9
ACCOLC_10	1	Access overload class 10
ACCOLC_11	1	Access overload class 11
ACCOLC_12	1	Access overload class 12
ACCOLC_13	1	Access overload class 13
ACCOLC_14	1	Access overload class 14
ACCOLC_15	1	Access overload class 15

3

4 The base station shall set the subfields corresponding to the  
5 access overload classes of mobile stations which are to be  
6 redirected to '1', and shall set the remaining subfields to '0'.

7 RETURN\_IF\_FAIL - Return if fail indicator.

8 The base station shall set this field to '1' if the mobile station  
9 is required to return to the system from which it is being  
10 redirected upon failure to obtain service using the redirection  
11 criteria specified in this message; otherwise, the base station  
12 shall set this field to '0'.

13 DELETE\_TMSI - Delete TMSI indicator.

14 The base station shall set this field to '1' if the mobile station,  
15 which the corresponding REDIRECT\_ACCOLC subfield is set  
16 to '1', is required to delete the TMSI assigned to the mobile  
17 station; otherwise, the base station shall set this field to '0'.

18 EXCL\_P\_REV\_MS - Exclude redirection indicator.

1 If this message does not apply to mobile stations with  
 2 MOB\_P\_REV greater than or equal to six, the base station  
 3 shall set this field to '1'; otherwise, the base station shall set  
 4 this field to '0'.

5 RECORD\_TYPE - Redirection record type.

6 The base station shall set this field to the RECORD\_TYPE  
 7 value shown in Table 3.7.2.3.2.16-2 corresponding to the  
 8 type of redirection specified by this record.

9 RECORD\_LEN - Redirection record length.

10 The base station shall set this field to the number of octets in  
 11 the type-specific fields of this redirection record.

12 Type-specific fields - Redirection record type-specific fields.

13 The base station shall include type-specific fields based on  
 14 the RECORD\_TYPE of this redirection record.

15

16 If RECORD\_TYPE is equal to '00000010', the base station shall include the following fields:

17

Subfield	Length (bits)
BAND_CLASS	5
EXPECTED_SID	15
EXPECTED_NID	16
RESERVED	4
NUM_CHANS	4

NUM\_CHANS occurrences of the following field:

{ (NUM\_CHANS)

CDMA_CHAN	11
-----------	----

}(NUM\_CHANS)

RESERVED	0-7 (as needed)
----------	-----------------

18

19 BAND\_CLASS - Band class.

20 The base station shall set this field to the CDMA band class,  
 21 as specified in [30].

22 EXPECTED\_SID - Expected SID.

23 If the base station is redirecting the mobile station to a  
 24 specific system, the base station shall set this field to the SID  
 25 of that system; otherwise, the base station shall set this field  
 26 to 0.

27 EXPECTED\_NID - Expected NID.

1			If the base station is redirecting the mobile station to a
2			specific network, the base station shall set this field to the
3			NID of that network; otherwise, the base station shall set this
4			field to 65535.
5	RESERVED	-	Reserved bits.
6			The base station shall set this field to '0000'.
7	NUM_CHANS	-	Number of CDMA Channels.
8			The base station shall set this field to the number of
9			occurrences of the CDMA_CHAN field in this record.
10	CDMA_CHAN	-	CDMA Channel number.
11			For each CDMA Channel on which the mobile station is to
12			attempt to acquire a CDMA system, the base station shall
13			include one occurrence of this field specifying the associated
14			CDMA Channel number.
15	RESERVED	-	Reserved bits.
16			The base station shall add reserved bits as needed in order to
17			make the length of the record equal to an integer number of
18			octets. The base station shall set these bits to '0'.
19			

## 1 3.7.2.3.2.19 TMSI Assignment Message

2 MSG\_TAG: TASM

Field	Length (bits)
RESERVED	5
TMSI_ZONE_LEN	4
TMSI_ZONE	$8 \times \text{TMSI\_ZONE\_LEN}$
TMSI_CODE	32
TMSI_EXP_TIME	24

3

4 RESERVED - Reserved bits.

5 The base station shall set this field to '00000'.

6 TMSI\_ZONE\_LEN - TMSI zone length.

7 The base station shall set this field to the number of octets  
 8 included in the TMSI\_ZONE. The base station shall set this  
 9 field to a value in the range 1 to 8 inclusive.

10 TMSI\_ZONE - TMSI zone.

11 The base station shall set this field to the TMSI zone number,  
 12 as specified in [27].

13 TMSI\_CODE - Temporary mobile station identity code.

14 The base station shall set this field to the 32-bit TMSI code  
 15 assigned to the mobile station.

16 If the base station is to deassign the TMSI, the base station  
 17 shall set all the bits in this field to '1'.

18 TMSI\_EXP\_TIME - TMSI expiration time.

19 The base station shall set this field to the System Time in the  
 20 units of  $80 \text{ ms} \times 2^{12}$  when the TMSI is to expire.  
 21

## 1 3.7.2.3.2.20 PACA Message

2 MSG\_TAG: PACAM

Field	Length (bits)
RESERVED	7
PURPOSE	4
Q_POS	8
PACA_TIMEOUT	3

3

4 RESERVED - Reserved bits.

5 The base station shall set this field to '0000000'.

6 PURPOSE - Purpose of the *PACA Message*.

7 The base station shall set this field to the appropriate  
 8 PURPOSE code from Table 3.7.2.3.2.20-1 to indicate the  
 9 purpose of the message.

10

11

**Table 3.7.2.3.2.20-1. Purpose of PACA Message**

PURPOSE (binary)	Meaning
0000	Indicates that the purpose of the message is to respond to an <i>Origination Message</i> .
0001	Indicates that the purpose of the message is to provide the queue position of the PACA call.
0010	Indicates that the purpose of the message is to instruct the mobile station to re-originate the PACA call.
0011	Indicates that the purpose of the message is to cancel the PACA call.
0100 – 1111	Reserved

12

13 Q\_POS - PACA queue position.

14 If the PURPOSE field of this message is set to '0000' or '0001',  
 15 the base station shall set this field to the queue position of  
 16 the PACA call. If the queue position exceeds 255, the base  
 17 station shall set this field to '11111111'. If the queue  
 18 position is unknown or the PURPOSE field of this message is  
 19 set to '0010' or '0011', the base station shall set this field to  
 20 '00000000'.

1           PACA\_TIMEOUT    -   PACA state timer duration.

2                               The base station shall set this field to the PACA\_TIMEOUT  
3                               value shown in Table 3.7.2.3.2.20-2 corresponding to the  
4                               length of the PACA state timer to be used by the mobile  
5                               stations.

6                               **Table 3.7.2.3.2.20-2. Value of PACA State Timer**

<b>PACA_TIMEOUT Value (binary)</b>	<b>Timer Length (Minutes)</b>
000	1
001	2
010	5
011	10
100	20
101	30
110	45
111	60

7

1     3.7.2.3.2.21 Extended Channel Assignment Message

2     MSG\_TAG: ECAM

Field	Length (bits)
ASSIGN_MODE	3
DIRECT_CH_ASSIGN_IND	0 or 1
RESERVED_2	4 or 5
Additional record fields	8 × (ADD_RECORD_LEN - 1) See [4]

3

- 1 If ASSIGN\_MODE = '000', the additional record fields shall be:

FREQ_INCL	1
DEFAULT_CONFIG	3
BYPASS_ALERT_ANSWER	1
RESERVED	1
NUM_PILOTS	3
GRANTED_MODE	2
FRAME_OFFSET	4
ENCRYPT_MODE	2
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11

NUM\_PILOTS plus one occurrences of the following record:

{ (NUM\_PILOTS+1)

PILOT_PN	9
PWR_COMB_IND	1
CODE_CHAN	8

} (NUM\_PILOTS+1)

FOR_FCH_RC	5
REV_FCH_RC	5
FPC_FCH_INIT_SETPT	8
FPC_SUBCHAN_GAIN	5
RLGAIN_ADJ	4
FPC_FCH_FER	5
FPC_FCH_MIN_SETPT	8
FPC_FCH_MAX_SETPT	8
REV_FCH_GATING_MODE	1
REV_PWR_CNTL_DELAY_INCL	0 or 1
REV_PWR_CNTL_DELAY	0 or 2
D_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3

(continues on next page)



C_SIG_ENCRYPT_MODE_INCL	1
C_SIG_ENCRYPT_MODE	0 or 3
MSG_INT_INFO_INCL	1
CHANGE_KEYS	0 or 1
USE_UAK	0 or 1
PLCM_TYPE_INCL	1
PLCM_TYPE	0 or 4
PLCM_39	0 or 39
RESERVED	0 – 7 (as needed)

1  
2

1 If ASSIGN\_MODE = '001', the additional record fields shall be:

RESPOND	1
FREQ_INCL	1
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11
NUM_PILOTS	6

NUM\_PILOTS plus one occurrences of the following field:

{ (NUM\_PILOTS+1)

PILOT_PN	9
----------	---

} (NUM\_PILOTS+1)

RESERVED	0 – 7 (as needed)
----------	-------------------

2

3

- 1 If ASSIGN\_MODE = '100', the additional record fields shall be:

FREQ_INCL	1
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11
BYPASS_ALERT_ANSWER	1
GRANTED_MODE	2
SR_ID_RESTORE	0 or 3
SR_ID_RESTORE_BITMAP	0 or 6
DEFAULT_CONFIG	3
FOR_RC	5
REV_RC	5
FRAME_OFFSET	4
ENCRYPT_MODE	2
FPC_SUBCHAN_GAIN	5
RLGAIN_ADJ	4
NUM_PILOTS	3
CH_IND	2
CH_RECORD_LEN	5
CH_RECORD_FIELDS	8 × CH_RECORD_LEN
REV_FCH_GATING_MODE	1
REV_PWR_CNTL_DELAY_INCL	0 or 1
REV_PWR_CNTL_DELAY	0 or 2
D_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3
C_SIG_ENCRYPT_MODE_INCL	1
C_SIG_ENCRYPT_MODE	0 or 3
3XFL_1XRL_INCL	1
1XRL_FREQ_OFFSET	0 or 2

(continues on next page)

2  
3

1

MSG_INT_INFO_INCL	1
CHANGE_KEYS	0 or 1
USE_UAK	0 or 1
PLCM_TYPE_INCL	1
PLCM_TYPE	0 or 4
PLCM_39	0 or 39
SYNC_ID_INCL	0 or 1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
CONFIG_MSG_SEQ	0 or 6
RTC_NOM_PWR	0 or 5
RESPOND_IND	0 or 1
DIRECT_CH_ASSIGN_RECOVER_I ND	0 or 1
FIXED_PREAMBLE_TRANSMIT_IN D	0 or 1
FIXED_NUM_PREAMBLE	0 or 3
EARLY_RL_TRANSMIT_IND	1
TX_PWR_LIMIT_INCL	1
TX_PWR_LIMIT	0 or 6
RESERVED	0 – 7 (as needed)

2

3

- 1 If CH\_IND = '01', the CH\_RECORD\_FIELDS shall be:

FPC_FCH_INIT_SETPT	8
FPC_FCH_FER	5
FPC_FCH_MIN_SETPT	8
FPC_FCH_MAX_SETPT	8

NUM\_PILOTS plus one occurrences of the following record:

{ (NUM\_PILOTS+1)

PILOT_PN	9
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or (8 × RECORD_LEN)
PWR_COMB_IND	1
CODE_CHAN_FCH	11
QOF_MASK_ID_FCH	2

} (NUM\_PILOTS+1)

3X_FCH_INFO_INCL	1
------------------	---

NUM\_PILOTS plus one occurrences of the following record if 3X\_FCH\_INFO\_INCL is set to '1':

{ (NUM\_PILOTS+1)

3X_FCH_LOW_INCL	1
QOF_MASK_ID_FCH_LOW	0 or 2
CODE_CHAN_FCH_LOW	0 or 11
3X_FCH_HIGH_INCL	1
QOF_MASK_ID_FCH_HIGH	0 or 2
CODE_CHAN_FCH_HIGH	0 or 11

} (NUM\_PILOTS+1)

RESERVED	0 – 7 (as needed)
----------	-------------------

2

3

- 1 If CH\_IND = '10', the CH\_RECORD\_FIELDS shall be:

FPC_DCCH_INIT_SETPT	8
FPC_DCCH_FER	5
FPC_DCCH_MIN_SETPT	8
FPC_DCCH_MAX_SETPT	8

NUM\_PILOTS plus one occurrences of the following record:

{ (NUM\_PILOTS+1)

PILOT_PN	9
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or (8 × RECORD_LEN)
PWR_COMB_IND	1
CODE_CHAN_DCCH	11
QOF_MASK_ID_DCCH	2

} (NUM\_PILOTS+1)

3X_DCCH_INFO_INCL	1
-------------------	---

NUM\_PILOTS plus one occurrences of the following record if  
3X\_DCCH\_INFO\_INCL is set to '1':

{ (NUM\_PILOTS+1)

3X_DCCH_LOW_INCL	1
QOF_MASK_ID_DCCH_LOW	0 or 2
CODE_CHAN_DCCH_LOW	0 or 11
3X_DCCH_HIGH_INCL	1
QOF_MASK_ID_DCCH_HIGH	0 or 2
CODE_CHAN_DCCH_HIGH	0 or 11

} (NUM\_PILOTS+1)

FUNDICATED_BCMC_IND	1
---------------------	---

NUM\_PILOTS plus one occurrence of the following record if  
FUNDICATED\_BCMC\_IND is set to '1':

{ (NUM\_PILOTS+1)

FOR_CPCCH_WALSH	7
FOR_CPCSCH	5

} (NUM\_PILOTS+1)

RESERVED	0-7 (as needed)
----------	-----------------

1

2

- 1 If CH\_IND = '11', the CH\_RECORD\_FIELDS shall be:

FPC_FCH_INIT_SETPT	8
FPC_DCCH_INIT_SETPT	8
FPC_PRI_CHAN	1
FPC_FCH_FER	5
FPC_FCH_MIN_SETPT	8
FPC_FCH_MAX_SETPT	8
FPC_DCCH_FER	5
FPC_DCCH_MIN_SETPT	8
FPC_DCCH_MAX_SETPT	8

NUM\_PILOTS plus one occurrences of the following record:

{ (NUM\_PILOTS+1)

PILOT_PN	9
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or (8 × RECORD_LEN)
PWR_COMB_IND	1
CODE_CHAN_FCH	11
QOF_MASK_ID_FCH	2
CODE_CHAN_DCCH	11
QOF_MASK_ID_DCCH	2

} (NUM\_PILOTS+1)

3X_FCH_INFO_INCL	1
------------------	---

NUM\_PILOTS plus one occurrence of the following record if 3X\_FCH\_INFO\_INCL is set to '1':

{ (NUM\_PILOTS+1)

3X_FCH_LOW_INCL	1
QOF_MASK_ID_FCH_LOW	0 or 2
CODE_CHAN_FCH_LOW	0 or 11

(continues on next page)



1

3X_FCH_HIGH_INCL	1
QOF_MASK_ID_FCH_HIGH	0 or 2
CODE_CHAN_FCH_HIGH	0 or 11

} (NUM\_PILOTS+1)

3X_DCCH_INFO_INCL	1
-------------------	---

NUM\_PILOTS plus one occurrence of the following record if  
3X\_DCCH\_INFO\_INCL is set to '1':

{ (NUM\_PILOTS+1)

3X_DCCH_LOW_INCL	1
QOF_MASK_ID_DCCH_LOW	0 or 2
CODE_CHAN_DCCH_LOW	0 or 11
3X_DCCH_HIGH_INCL	1
QOF_MASK_ID_DCCH_HIGH	0 or 2
CODE_CHAN_DCCH_HIGH	0 or 11

} (NUM\_PILOTS+1)

FUNDICATED_BCNC_IND	1
REV_FCH_ASSIGNED	0 or 1
ADD_PLCM_FOR_FCH_INCL	0 or 1
ADD_PLCM_FOR_FCH_TYPE	0 or 1
ADD_PLCM_FOR_FCH_39	0 or 39
FOR_CPCCH_INFO_INCL	0 or 1

NUM\_PILOTS plus one occurrence of the following record if  
FOR\_CPCCH\_INFO\_INCL is set to '1':

{ (NUM\_PILOTS+1)

FOR_CPCCH_WALSH	7
FOR_CPCSCH	5

} (NUM\_PILOTS+1)

RESERVED	0 – 7 (as needed)
----------	-------------------

2

3

- 1 If ASSIGN\_MODE = '101', the additional record fields shall be:

FREQ_INCL	1
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11
BYPASS_ALERT_ANSWER	1
GRANTED_MODE	2
SR_ID_RESTORE	0 or 3
SR_ID_RESTORE_BITMAP	0 or 6
FRAME_OFFSET	4
ENCRYPT_MODE	2
D_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3
C_SIG_ENCRYPT_MODE_INCL	1
C_SIG_ENCRYPT_MODE	0 or 3
MSG_INT_INFO_INCL	1
CHANGE_KEYS	0 or 1
USE_UAK	0 or 1
PLCM_TYPE_INCL	1
PLCM_TYPE	0 or 4
PLCM_39	0 or 39
RLGAIN_ADJ	4
NUM_PILOTS	3
EXT_CH_IND	5
FPC_SUBCHAN_GAIN	0 or 5
REV_FCH_GATING_MODE	0 or 1
REV_PWR_CNTL_DELAY_INCL	0 or 1
REV_PWR_CNTL_DELAY	0 or 2
FULL_CI_FEEDBACK_IND	1
FOR_CPCCH_RATE	0 or 2
FOR_CPCCH_UPDATE_RATE	0 or 2
REV_CQICH_FRAME_OFFSET	4
REV_CQICH_REPS	2
REV_ACKCH_REPS	2
FOR_PDCH_RC	5
REV_PDCH_RC	0 or 5
FOR_FCH_DCCH_RC	0 or 5

REV_FCH_DCCH_RC	0 or 5
FPC_PRI_CHAN	0 or 1
FPC_FCH_INIT_SETPT	0 or 8
FPC_FCH_FER	0 or 5
FPC_FCH_MIN_SETPT	0 or 8
FPC_FCH_MAX_SETPT	0 or 8
FPC_DCCH_INIT_SETPT	0 or 8
FPC_DCCH_FER	0 or 5
FPC_DCCH_MIN_SETPT	0 or 8
FPC_DCCH_MAX_SETPT	0 or 8
PDCH_GROUP_IND_INCL	1
FOR_PDCH_PARMS_INCL	1
FOR_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_ACKCH_PILOT	0 or 6
RLGAIN_CQICH_PILOT	0 or 6
NUM_SOFT_SWITCHING_FRAMES	0 or 4
NUM_SOFTSWITCHING_FRAMES	0 or 4
NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTSWITCHING_SLOTS	0 or 2
CHM_SWITCHING_PARMS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFTSWITCHING_FRAMES_CHM	0 or 4
NUM_SOFT_SWITCHING_SLOTS_CHM	0 or 2
NUM_SOFTSWITCHING_SLOTS_CHM	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTSWITCHING_DELAY	0 or 8
TX_DISABLED_TIMER_INCL	1
TX_DISABLED_TIMER	0 or 8
FOR_GCH_ASSIGNED	0 or 1
FOR_RCCH_ASSIGNED	0 or 1
FOR_RCCH_DRC_MODE	0 or 1
FOR_RCCH_REPETITION	0 or 2
FOR_RCCH_UPDATE_RATE	0 or 2
FOR_ACKCH_ASSIGNED	0 or 1

FOR_ACKCH_MODE	0 or 2
FOR_ACKCH_COMB_SEL	0 or 1
REV_PDCH_PARMS_INCL	0 or 1
REV_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_SPICH_PILOT	0 or 6
RLGAIN_REQCH_PILOT	0 or 6
RLGAIN_PDCCH_PILOT	0 or 6
REV_PDCH_PARMS_1_INCL	0 or 1
REV_PDCH_TABLE_SEL	0 or 1
REV_PDCH_MAX_AUTO_TPR	0 or 8

NUM\_PILOTS plus one occurrence of the following record:

*{ (NUM\_PILOTS+1)*

PILOT_PN	9
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or (8 × RECORD_LEN)
FOR_PDCH_INCL	1
WALSH_TABLE_ID	0 or 3
NUM_PDCCH	0 or 3

NUM\_PDCCH+1 occurrences of the following record:

*{ (NUM\_PDCCH+1)*

FOR_PDCCH_WALSH	0 or 6
-----------------	--------

*} (NUM\_PDCCH+1)*

MAC_ID	0 or 8
REV_CQICH_COVER	0 or 3
FOR_CPCCH_WALSH	0 or 7
FOR_CPCSCH	0 or 7
PWR_COMB_IND	1
PDCH_GROUP_IND	0 or 1
CODE_CHAN_FCH	0 or 11
QOF_MASK_ID_FCH	0 or 2
CODE_CHAN_DCCH	0 or 11
QOF_MASK_ID_DCCH	0 or 2

FOR_ACKCH_WALSH_INDEX	0 or 6
FOR_ACKSCH_INDEX	0 or 8
FOR_RCCH_INCL	0 or 1
FOR_RCCH_WALSH_INDEX	0 or 7
FOR_RCSCH_INDEX	0 or 7
NUM_FOR_GCH	0 or 2

NUM\_FOR\_GCH occurrences of the following record:

{ (NUM\_FOR\_GCH)

FOR_GCH_WALSH_INDEX	0 or 8
---------------------	--------

} (NUM\_FOR\_GCH)

} (NUM\_PILOTS+1)

SYNC_ID_INCL	0 or 1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
CONFIG_MSG_SEQ	0 or 6
RTC_NOM_PWR	0 or 5
RESPOND_IND	0 or 1
DIRECT_CH_ASSIGN_RECOVER_IND	0 or 1
EARLY_RL_TRANSMIT_IND	0 or 1
FUNDICATED_BCNC_IND	1
ADD_PLCM_FOR_FCH_INCL	0 or 1
ADD_PLCM_FOR_FCH_TYPE	0 or 1
ADD_PLCM_FOR_FCH_39	0 or 39
FIXED_PREAMBLE_TRANSMIT_IND	0 or 1
FIXED_NUM_PREAMBLE	0 or 3
TX_PWR_LIMIT_INCL	1
TX_PWR_LIMIT	0 or 6
RESERVED	0~7 (as needed)

1  
2  
3  
4  
5  
6

ASSIGN\_MODE - Assignment mode.

The base station shall set this field to the value shown in Table 3.7.2.3.2.21-1 corresponding to the assignment mode for this assignment.

1

**Table 3.7.2.3.2.21-1. Assignment Mode**

<b>Value (binary)</b>	<b>Assignment Mode</b>
000	Traffic Channel Assignment
001	Paging Channel Assignment
010	Reserved (Previously: Acquire Analog System)
011	Reserved (Previously: Analog Voice Channel Assignment)
100	Enhanced Traffic Channel Assignment
101	Packet Data Traffic Channel Assignment
All other values are reserved.	

2      **DIRECT\_CH\_ASSIGN\_IND**

-      Direct Channel Assignment Indicator.

3      If ASSIGN\_MODE is set to a value other than '100' or '101',  
4      the base station shall omit this field; otherwise, the base  
5      station shall include this field and set it as follows:

6      If any channel assigned by this message is to use Radio  
7      Configuration 1 or 2 (see [2]), then the base station shall set  
8      this field to '0'. Otherwise, base station shall set this field as  
9      follows:

10      - If this message is for a mobile station terminated call using  
11      direct channel assignment, the base station shall set this  
12      field to '1'; otherwise, the base station shall set this field to  
13      '0'.

14      If this field is set to '1', the base station should send this  
15      message in unassured mode.

16      **RESERVED\_2**

-      Reserved bits.

17      If ASSIGN\_MODE is set to '100' or '101', the base station  
18      shall set this field to '0000'; otherwise, the base station shall  
19      set this field to '00000'.

20      **Additional record fields**

-      Additional record fields.

21      The additional record fields are determined by the value of  
22      ASSIGN\_MODE, as described below.

23      If the ASSIGN\_MODE field is set to '000', the base station shall include the following fields:

24      **FREQ\_INCL**

-      Frequency included indicator.

25      If the BAND\_CLASS and CDMA\_FREQ fields are included in  
26      this assignment record, the base station shall set this bit to  
27      '1'. If the BAND\_CLASS and CDMA\_FREQ fields are not  
28      included in this assignment record, the base station shall set  
29      this bit to '0'.

30      **DEFAULT\_CONFIG**

-      Default Configuration.

If the GRANTED\_MODE field is set to '00', the base station shall set this field as specified in Table 3.7.2.3.2.21-2 to indicate an initial multiplex option and radio configuration for the Forward and Reverse Traffic Channels.

If MOB\_P\_REV is less than six, the base station shall not set this field to '100'.

**Table 3.7.2.3.2.21-2. Default Configuration**

<b>Value (binary)</b>	<b>Default Configuration</b>
000	Multiplex Option 1 and Radio Configuration 1 for both the Forward Traffic Channel and the Reverse Traffic Channel
001	Multiplex Option 2 and Radio Configuration 2 for both the Forward Traffic Channel and the Reverse Traffic Channel
010	Multiplex Option 1 and Radio Configuration 1 for the Forward Traffic channel; Multiplex Option 2 and Radio Configuration 2 for the Reverse Traffic channel
011	Multiplex Option 2 and Radio Configuration 2 for the Forward Traffic channel; Multiplex Option 1 and Radio Configuration 1 for the Reverse Traffic channel
100	FOR_FCH_RC or FOR_RC included in this message for the Forward Fundamental Channel or the Forward Dedicated Control Channel and REV_FCH_RC or REV_RC included in this message for the Reverse Fundamental or the Reverse Dedicated Control Channel. Use 20ms frames. Use Multiplex Option 1 for radio configurations that include the bit rate of 9600 bps; Use Multiplex Option 2 for radio configurations that include the bit rate of 14400 bps.
All other values are reserved.	

**BYPASS\_ALERT\_ANSWER** - Bypass alert indicator.

If the mobile station is to bypass the *Waiting for Order Substate* and the *Waiting for Mobile Station Answer Substate*, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**RESERVED** - Reserved bit.



1		The base station shall set this field to '0'.
2	NUM_PILOTS	- Number of pilots in the Active Set.
3		The base station shall set this field to number of pilots that
4		are to be in the mobile station's Active Set on the Traffic
5		Channel minus one. The base station shall set this field to
6		the value in the range 0 to $N_{6m}-1$ inclusive.
7	GRANTED_MODE	- Granted mode.
8		The base station shall set this field to '00' to indicate that the
9		mobile station is to use an initial service configuration
10		consisting of the multiplex option and radio configuration
11		defined by the DEFAULT_CONFIG field for the Forward and
12		Reverse Traffic Channels, and to indicate that service
13		negotiation may take place before the base station sends one
14		of the following messages: <i>Service Connect Message</i> , <i>General</i>
15		<i>Handoff Direction Message</i> (with SCR) or <i>Universal Handoff</i>
16		<i>Direction Message</i> (with SCR).
17		The base station shall set this field to '01' to indicate that the
18		mobile station is to use an initial service configuration
19		consisting of the default multiplex option that is derived from
20		the radio configuration corresponding to Table 3.7.2.3.2.21-3,
21		and to indicate that service negotiation may take place before
22		the base station sends one of the following messages: <i>Service</i>
23		<i>Connect Message</i> , <i>General Handoff Direction Message</i> (with
24		SCR) or <i>Universal Handoff Direction Message</i> (with SCR).
25		The base station shall set this field to '10' to indicate that the
26		mobile station is to use an initial service configuration
27		consisting of the default multiplex option that is derived from
28		the radio configuration corresponding to Table 3.7.2.3.2.21-3,
29		and to indicate that service negotiation is not to take place
30		before the base station sends one of the following messages:
31		<i>Service Connect Message</i> , <i>General Handoff Direction Message</i>
32		(with SCR) or <i>Universal Handoff Direction Message</i> (with
33		SCR).

**Table 3.7.2.3.2.21-3. Mapping between Multiplex Options and Radio Configurations**

<b>Multiplex Option</b>	<b>Radio Configuration</b>
Multiplex Option 1	Forward link: RC1, RC3, RC4, RC6, RC7, RC11, or RC12 Reverse Link: RC1, RC3, RC5, or RC8
Multiplex Option2	Forward link: RC2, RC5, RC 8, or RC9 Reverse Link: RC2, RC4 or RC 6
Multiplex Option 0xf00	Forward link: RC10
Multiplex Option 0xf00 is used for the Reverse Packet Data Channel Multiplex Option for Higher Data Rates and Multiplex Option 1 is used for the Reverse Packet Data Channel Multiplex Option for Lower Data Rate (see [3])	Reverse Link: RC7

**FRAME\_OFFSET** - Frame offset.

The Forward and Reverse Traffic Channel frames are delayed  $\text{FRAME\_OFFSET} \times 1.25$  ms relative to system timing (see [2]).

The base station shall set this field to the Forward and Reverse Traffic Channel frame offset.

**ENCRYPT\_MODE** - Message encryption mode.

The base station shall set this field to the ENCRYPT\_MODE value shown in Table 3.7.2.3.2.8-2 corresponding to the encrypting mode that is to be used for signaling messages, as specified in 2.3.12.2.

**BAND\_CLASS** - Band class.

If the **FREQ\_INCL** bit is set to '1', the base station shall set this field to the CDMA band class, as specified in [30], corresponding to the CDMA frequency assignment for the CDMA Channel containing the Forward Traffic Channel the mobile station is to use. If the **FREQ\_INCL** bit is set to '0', the base station shall omit this field.

1	CDMA_FREQ	-	Frequency assignment.
2			If the FREQ_INCL bit is set to '1', the base station shall set
3			this field to the CDMA Channel number, in the specified
4			CDMA band class, corresponding to the CDMA frequency
5			assignment for the CDMA Channel containing the Forward
6			Traffic Channel the mobile station is to use. If the
7			FREQ_INCL bit is set to '0', the base station shall omit this
8			field.
9	The base station shall include NUM_PILOTS plus one occurrences of the following three-		
10	field record, one for each member of the mobile station's Active Set on the Traffic Channel.		
11	PILOT_PN	-	Pilot PN sequence offset index.
12			The base station shall set this field to the pilot PN sequence
13			offset for this pilot in units of 64 PN chips.
14	PWR_COMB_IND	-	Power control symbol combining indicator.
15			If the Forward Traffic Channel associated with this pilot will
16			carry the same closed-loop power control subchannel bits as
17			that of the previous pilot in this message, the base station
18			shall set this field to '1'; otherwise, the base station shall set
19			this field to '0'. For the first occurrence of this record in the
20			message, the base station shall set this field to '0'.
21	CODE_CHAN	-	Code channel index.
22			The base station shall set this field to the code channel index
23			(see [2]) that the mobile station is to use on the Forward
24			Traffic Channel associated with this pilot. If Radio
25			Configuration 1, 2, 3, or 5 (see [2]) is used, the base station
26			shall set this field in the range 1 to 63 inclusive. If Radio
27			Configuration 4, 6, 8, 11 or 12 is used, the base station shall
28			set this field in the range 1 to 127 inclusive. If Radio
29			Configuration 7 or 9 is used, the base station shall set this
30			field in the range 1 to 255 inclusive.
31	FOR_FCH_RC	-	Forward Fundamental Channel radio configuration
32			The base station shall set this field to the radio configuration
33			(see Table 3.7.2.3.2.21-4) to be used by the mobile station on
34			the Forward Fundamental Channel before the first <i>Service</i>
35			<i>Connect Message</i> is sent to the mobile station.
36			If GRANTED_MODE is set to '00', and DEFAULT_CONFIG is
37			not set to '100' (see Table 3.7.2.3.2.21-2), the base station
38			shall set this field to either '00001' or '00010' (see Table
39			3.7.2.3.2.21-4).
40	REV_FCH_RC	-	Reverse Fundamental Channel radio configuration
41			The base station shall set this field to the radio configuration
42			(see Table 3.7.2.3.2.21-4) to be used by the mobile station on
43			the Reverse Fundamental Channel before the first <i>Service</i>
44			<i>Connect Message</i> is sent to the mobile station.

If GRANTED\_MODE is set to '00', and DEFAULT\_CONFIG is not set to '100' (see Table 3.7.2.3.2.21-2), the base station shall set this field to either '00001' or '00010' (see Table 3.7.2.3.2.21-4).

**Table 3.7.2.3.2.21-4. Radio Configurations**

<b>Value (binary)</b>	<b>Radio Configuration</b>
00001	RC 1
00010	RC 2
00011	RC 3
00100	RC 4
00101	RC 5
00110	RC 6
00111	RC 7
01000	RC 8
01001	RC 9
01010	RC 10
01011	RC 11
01100	RC 12
All other values are reserved.	

- FPC\_FCH\_INIT\_SETPT** - Initial Fundamental Channel outer loop  $E_b/N_t$  setpoint.  
The base station shall set this field to initial Fundamental Channel outer loop  $E_b/N_t$  setpoint, in units of 0.125 dB.
- FPC\_SUBCHAN\_GAIN** - Forward power control subchannel relative gain.  
The base station shall set FPC\_SUBCHAN\_GAIN equal to the power level of the forward link power control subchannel relative to the power level of 20 ms frames at a 9600 bps or 14400 bps rate of the Forward Fundamental Channel that the Forward Power Control Subchannel is punctured on. The base station shall set the value in units of 0.25 dB.
- RLGAIN\_ADJ** - Reverse Traffic Channel power relative to access power.  
The base station shall set this field to adjust the initial Traffic Channel transmission power relative to the Access Channel or Enhanced Access Channel transmission power. The base station shall set this field as a two's complement signed binary number, in units of 1 dB.
- FPC\_FCH\_FER** - Fundamental Channel target Frame Error Rate.

1		The base station shall set this field to the target Frame Error
2		Rate on the Forward Fundamental Channel, as specified in
3		Table 3.7.3.3.2.25-2.
4	FPC_FCH_MIN_SETPT	- Minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
5		The base station shall set this field to minimum Fundamental
6		Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.
7	FPC_FCH_MAX_SETPT	- Maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
8		The base station shall set this field to maximum
9		Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of
10		0.125 dB.
11	REV_FCH_GATING_MODE	- Reverse eighth gating mode indicator.
12		The base station shall set this field to '1' if the mobile station
13		is allowed to perform the reverse eighth gating mode where
14		the $1/8^{\text{th}}$ rate frames on the Reverse Fundamental Channel
15		are gated off for 10 ms per frame (see [2]); otherwise, the base
16		station shall set this field to '0'.
17		The base station shall not set this field to '1' if
18		REV_FCH_GATING_REQ included in the <i>Origination Message</i>
19		or <i>Page Response Message</i> is set to '0'.
20	REV_PWR_CNTL_DELAY_INCL	- Reverse power control delay included indicator.
21		If REV_FCH_GATING_MODE is set to '0', the base station
22		shall omit this field; otherwise, the base station shall include
23		this field and set it as follows.
24		The base station shall set this field to '1' if
25		REV_PWR_CNTL_DELAY is included in this message;
26		otherwise, the base station shall set this field to '0'.
27		If the REV_FCH_GATING_MODE field in this message is set to
28		'1' and the REV_PWR_CNTL_DELAY_INCL field in the
29		<i>Extended System Parameters Message</i> or <i>MC-RR Parameters</i>
30		<i>Message</i> is set to '0', the base station shall set this field to '1'.
31	REV_PWR_CNTL_DELAY	- The reverse power control delay.
32		If REV_PWR_CNTL_DELAY_INCL is set to '0', the base station
33		shall omit this field; otherwise, the base station shall include
34		this field and set it as follows:
35		The base station shall set this field to the closed-loop reverse
36		power control delay minus one (the closed-loop reverse power
37		control delay is the time between the end of a gated-on
38		reverse PCG and the beginning of the reverse PCG where the
39		corresponding feedback is sent on the Forward Power Control
40		Subchannel, see [2]) in units of 1.25 ms.
41	D_SIG_ENCRYPT_MODE	- Dedicated channel signaling encryption mode indicator.
42		If ENCRYPT_MODE is set to '11', the base station shall include
43		this field and shall set it to the dedicated channel signaling
44		encryption mode, as shown in Table 3.7.4.5-1; otherwise the
45		base station shall omit this field.

1	ENC_KEY_SIZE	-	Encryption key size indication.
2			If ENCRYPT_MODE is set to '10' or '11', the base station shall
3			include this field and shall set it to the encryption key size, as
4			shown in Table 3.7.4.5-2; otherwise, the base station shall omit
5			this field.
6	C_SIG_ENCRYPT_MODE_INCL	-	Common channel signaling encryption mode included
7			indicator.
8			If common channel signaling encryption information is
9			included in this message, the base station shall set this field
10			to '1'; otherwise, the base station shall set this field to '0'.
11	C_SIG_ENCRYPT_MODE	-	Common channel signaling encryption mode indicator.
12			If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
13			shall include this field and shall set it to the common
14			channel signaling encryption mode, as shown in Table
15			3.7.4.5-1; otherwise, the base station shall omit this field.
16	MSG_INT_INFO_INCL	-	Message integrity information included indicator
17			The base station shall set this field to '1' if the base station
18			supports message integrity; otherwise, the base station shall
19			set this field to '0'. If this field is set to '1', the base station
20			shall require the LAC Layer to include a MACI in this
21			message; otherwise, the base station shall require the LAC
22			Layer not to include a MACI in this message.
23	CHANGE_KEYS	-	Change keys indicator
24			If MSG_INT_INFO_INCL is set to '0', the base station shall
25			omit this field; otherwise, the base station shall include this
26			field and set it as follows:
27			The base station shall set this field to '0' to command the
28			mobile station not to update the encryption key and integrity
29			key. The base station shall set this field to '1' to command the
30			mobile station to update the encryption key and integrity key
31			to the latest being generated.
32	USE_UAK	-	Use UAK indicator
33			If MSG_INT_INFO_INCL is set to '0', the base station shall
34			omit this field; otherwise, the base station shall include this
35			field and set it as follows:
36			If the base station receives an authentication vector with a
37			UAK, the base station shall set this field to '1' to indicate that
38			the mobile station is to use UMAC; otherwise, the base
39			station shall set this field to '0' to indicate that the mobile
40			station is to use MAC-I.
41	PLCM_TYPE_INCL	-	The Public Long Code Mask type included indicator.
42			The base station shall set this field to '1' if the base station
43			include PLCM_TYPE in the message; otherwise, the base
44			station shall set this field to '0'.
45	PLCM_TYPE	-	The Public Long Code Mask type indicator.

If PLCM\_TYPE\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the corresponding Public Long Code Mask type as specified in Table 3.7.2.3.2.21-5.

PLCM\_TYPE '0010' shall not be used when the mobile station is not in its home country (i.e., the MCC of the mobile station is different from the MCC of this base station).

PLCM\_TYPE '0011' shall not be used when the mobile station is not in its home network (i.e., the MCC or MNC of the mobile station is different from the MCC or MNC of this base station).

**Table 3.7.2.3.2.21-5. The Public Long Code Mask Type**

<b>PLCM_TYPE (binary)</b>	<b>Descriptions</b>
0000	PLCM derived from ESN
0001	PLCM specified by the base station
0010	PLCM derived from IMSI_O_S when IMSI_O is derived from IMSI_M
0011	PLCM derived from IMSI_O_S when IMSI_O is derived from IMSI_T
0100	PLCM derived from MEID
All other values	Reserved

PLCM\_39 - The 39 LSBs bits of the Public Long Code Mask.

If PLCM\_TYPE is not set to '0001', the base station shall omit this field; otherwise, the base station shall include this field and set it to the 39 least significant bits of the public long code mask as defined in 3.6.4.1.10.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the total length of the fields after the preceding ADD\_RECORD\_LEN field through this RESERVED field equal to an integer number of octets. The base station shall set these bits to '0'.

If the ASSIGN\_MODE field is set to '001', the base station shall include the following fields:

1	RESPOND	- Respond on new Access Channel indicator.
2		If the mobile station is to retransmit an <i>Origination Message</i>
3		or <i>Page Response Message</i> after processing this channel
4		assignment, the base station shall set this field to '1'. The
5		base station may set this field to '0' only in response to a
6		<i>Page Response Message</i> .
7	FREQ_INCL	- Frequency included indicator.
8		If the BAND_CLASS and CDMA_FREQ fields are included in
9		this assignment record, the base station shall set this bit to
10		'1'. If the BAND_CLASS and CDMA_FREQ fields are not
11		included in this assignment record, the base station shall set
12		this bit to '0'.
13	BAND_CLASS	- Band class.
14		If the FREQ_INCL bit is set to '1', the base station shall set
15		this field to the CDMA band class, as specified in [30],
16		corresponding to the CDMA frequency assignment for the
17		CDMA Channel containing the Paging Channel the mobile
18		station is to use. If the FREQ_INCL bit is set to '0', the base
19		station shall omit this field.
20	CDMA_FREQ	- Frequency assignment.
21		If the FREQ_INCL bit is set to '1', the base station shall set
22		this field to the CDMA Channel number, in the specified
23		CDMA band class, corresponding to the CDMA frequency
24		assignment for the CDMA Channel containing the Paging
25		Channel the mobile station is to use. If the FREQ_INCL bit is
26		set to '0', the base station shall omit this field.
27	NUM_PILOTS	- Number of pilots whose Paging Channel may be monitored.
28		The base station shall set this field to the number of pilots
29		whose Paging Channel may be monitored by the mobile
30		station minus one. The base station shall set this field to the
31		value in the range 0 to $N_{8m} - 1$ inclusive.
32	The base station shall include NUM_PILOTS plus one occurrences of the following field	
33	record for each pilot whose Paging Channel may be monitored by the mobile station.	
34	PILOT_PN	- Pilot PN sequence offset index.
35		The base station shall include one occurrence of this field for
36		each base station whose Paging Channel may be monitored
37		by the mobile station. For each occurrence, the base station
38		shall set this field to the pilot PN sequence offset for a base
39		station, in units of 64 PN chips. The base station having this
40		pilot PN sequence offset should support a Primary Paging
41		Channel with the same Paging Channel rate as the current
42		base station.
43	RESERVED	- Reserved bits.



1                   The base station shall add reserved bits as needed in order to  
2                   make the total length of the fields after the preceding  
3                   ADD\_RECORD\_LEN field through this RESERVED field equal  
4                   to an integer number of octets. The base station shall set  
5                   these bits to '0'.

6    If the ASSIGN\_MODE field is set to '100', the base station shall include the following fields:

7                   FREQ\_INCL    -   Frequency included indicator.

8                   If the BAND\_CLASS and CDMA\_FREQ fields are included in  
9                   this assignment record, the base station shall set this bit to  
10                  '1'. If the BAND\_CLASS and CDMA\_FREQ fields are not  
11                  included in this assignment record, the base station shall set  
12                  this bit to '0'.

13                  BAND\_CLASS    -   Band class.

14                  If the FREQ\_INCL bit is set to '1', the base station shall set  
15                  this field to the CDMA band class, as specified in [30],  
16                  corresponding to the CDMA frequency assignment for the  
17                  CDMA Channel containing the Forward Traffic Channel(s) the  
18                  mobile station is to use. If the FREQ\_INCL bit is set to '0', the  
19                  base station shall omit this field.

20                  CDMA\_FREQ    -   Frequency assignment.

21                  If the FREQ\_INCL bit is set to '0', the base station shall omit  
22                  this field; otherwise, the base station shall include this field  
23                  and set it as follows:

24                  If FOR\_RC is set to a Radio Configuration associated with  
25                  Spreading Rate 1, the FREQ\_INCL bit is set to '1', the base  
26                  station shall set this field to the CDMA Channel number, in  
27                  the specified CDMA band class, corresponding to the CDMA  
28                  frequency assignment for the CDMA Channel containing the  
29                  Forward Traffic Channel(s) the mobile station is to use. If  
30                  FOR\_RC is set to a Radio Configuration associated with  
31                  Spreading Rate 3, the base station shall set this field to the  
32                  center SR3 frequency assignment containing the Forward  
33                  Traffic Channel(s) the mobile station is to use.

34    BYPASS\_ALERT\_ANSWER   -   Bypass alert indicator.

35                  If the mobile station is to bypass the *Waiting for Order*  
36                  *Substate* and the *Waiting for Mobile Station Answer Substate*,  
37                  the base station shall set this field to '1'; otherwise, the base  
38                  station shall set this field to '0'.

1        GRANTED\_MODE    -    Granted mode.

2        The base station shall set this field to '00' to indicate that the  
3        mobile station is to use an initial service configuration  
4        consisting of the multiplex option and Radio Configuration  
5        defined by the DEFAULT\_CONFIG field for the Forward and  
6        Reverse Traffic channels, and to indicate that service  
7        negotiation may take place before the base station sends one  
8        of the following messages: *Service Connect Message*, *General*  
9        *Handoff Direction Message* (with SCR) or *Universal Handoff*  
10       *Direction Message* (with SCR).

11       The base station shall set this field to '01' to indicate that the  
12       mobile station is to use an initial service configuration  
13       consisting of the default multiplex option that is derived from  
14       the radio configuration corresponding to Table 3.7.2.3.2.21-3,  
15       and to indicate that service negotiation may take place before  
16       the base station sends one of the following messages: *Service*  
17       *Connect Message*, *General Handoff Direction Message* (with  
18       SCR) or *Universal Handoff Direction Message* (with SCR).

19       The base station shall set this field to '10' to indicate that the  
20       mobile station is to use an initial service configuration  
21       consisting of the default multiplex option that is derived from  
22       the radio configuration corresponding to Table 3.7.2.3.2.21-3,  
23       and to indicate that service negotiation is not to take place  
24       before the base station sends one of the following messages:  
25       *Service Connect Message*, *General Handoff Direction Message*  
26       (with SCR) or *Universal Handoff Direction Message* (with  
27       SCR).

28       The base station shall set this field to '11' to instruct the  
29       mobile station to use the stored service configuration (that is,  
30       both the Service Configuration information record and the  
31       Non-negotiable Service Configuration information record).

32       SR\_ID\_RESTORE    -    Service reference identifier to be restored.

33       If the GRANTED\_MODE field is not set to '11', the base  
34       station shall omit this field; otherwise, the base station shall  
35       include this field and set it as follows:

- 36       o    If the mobile station is to restore all the service option  
37            connections from the stored service configuration, the  
38            base station shall set this field to '111'.
- 39       o    If the mobile station is to restore more than one but not  
40            all the service option connections from the stored service  
41            configuration, the base station shall set this field to '000'.
- 42       o    Otherwise, the base station shall set this field to the  
43            service reference identifier corresponding to the service  
44            option connection to be restored.

**SR\_ID\_RESTORE\_BITMAP** – Bitmap of service reference identifiers to be restored.

If the SR\_ID\_RESTORE field is included and set to '000', the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

This field consists of the subfields defined in Table 3.7.2.3.2.21-6. The base station shall set a subfield to '1' to indicate that the mobile station is to restore the service option connection of the corresponding service reference identifier; otherwise, the base station shall set the subfield to '0'.

**Table 3.7.2.3.2.21-6. SR\_ID\_RESTORE\_BITMAP Subfields.**

Subfield	Length (bits)	Subfield Description
SR_ID_1	1	sr_id 1 to be restored
SR_ID_2	1	sr_id 2 to be restored
SR_ID_3	1	sr_id 3 to be restored
SR_ID_4	1	sr_id 4 to be restored
SR_ID_5	1	sr_id 5 to be restored
SR_ID_6	1	sr_id 6 to be restored

**DEFAULT\_CONFIG** - Default Configuration.

If the GRANTED\_MODE field is set to '00', the base station shall set this field as specified in Table 3.7.2.3.2.21-2 to indicate an initial multiplex option and Radio Configuration for the Forward and Reverse Traffic Channels.

FOR\_RC - Forward Traffic Channel radio configuration.

The base station shall set this field to the radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Forward Traffic (Fundamental and Dedicated Control) Channel before the first *Service Connect Message* is sent to the mobile station.

If GRANTED\_MODE is set to '00', and DEFAULT\_CONFIG is not set to '100' (see Table 3.7.2.3.2.21-2), the base station shall set this field to either '00001' or '00010' (see Table 3.7.2.3.2.21-4).

**REV\_RC** - Reverse Traffic Channel radio configuration.

The base station shall set this field to the radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Reverse Traffic (Fundamental and Dedicated Control) Channel before the first *Service Connect Message* is sent to the mobile station.

1			If GRANTED_MODE is set to '00', and DEFAULT_CONFIG is
2			not set to '100' (see Table 3.7.2.3.2.21-2), the base station
3			shall set this field to either '0001' or '0010' (see Table
4			3.7.2.3.21-3).
5	FRAME_OFFSET	-	Frame offset.
6			The Forward and Reverse Traffic Channel frames are delayed
7			FRAME_OFFSET $\times$ 1.25 ms relative to system timing (see [2]).
8			The base station shall set this field to the Forward and
9			Reverse Traffic Channel frame offset.
10	ENCRYPT_MODE	-	Message encryption mode.
11			The base station shall set this field to the ENCRYPT_MODE
12			value shown in Table 3.7.2.3.2.8-2 corresponding to the
13			encrypting mode that is to be used for signaling messages, as
14			specified in 2.3.12.2.
15	FPC_SUBCHAN_GAIN	-	Forward Power Control Subchannel relative gain.
16			The base station shall set FPC_SUBCHAN_GAIN equal to the
17			power level of the forward link power control subchannel
18			relative to the power level of 20 ms frames at a 9600 bps or
19			14400 bps rate on the Forward Fundamental Channel or the
20			Forward Dedicated Control Channel indicated by
21			FPC_PRI_CHAN <sub>s</sub> . The base station shall set the value in
22			units of 0.25 dB.
23	RLGAIN_ADJ	-	Reverse Traffic Channel power.
24			If DIRECT_CH_ASSIGN_IND field is set to '0', the base station
25			shall set this field to adjust the initial Traffic Channel
26			transmission power relative to the Access Channel or
27			Enhanced Access Channel transmission power. The base
28			station shall set this field as a two's complement signed
29			binary number, in units of 1 dB.
30			If DIRECT_CH_ASSIGN_IND field is set to '1', the base station
31			shall set this field to adjust the initial Traffic Channel
32			transmission power as specified 2.6.4.2. The base station
33			shall set this field as a two's complement signed binary
34			number, in units of 1 dB.
35	NUM_PILOTS	-	Number of pilots in the Active Set.
36			The base station shall set this field to number of pilots that
37			are to be in the mobile station's Active Set on the Traffic
38			Channel minus one. The base station shall set this field to
39			the value in the range 0 to N <sub>6m</sub> -1 inclusive.
40	CH_IND	-	Channel indicator.
41			The base station shall set this field as shown in Table
42			3.7.2.3.2.21-7.

1

**Table 3.7.2.3.2.21-7. Channel Indicator**

<b>Value (Binary)</b>	<b>Channels Being Assigned</b>
00	Reserved
01	Fundamental Channel only
10	Dedicated Control Channel only
11	Both Fundamental Channel and Dedicated Control Channel

2

3      CH\_RECORD\_LEN      -      Channel record length.

4                                      The base station shall set this field to the number of octets in  
5                                      the CH\_RECORD\_FIELDS included in this channel record.

6      CH\_RECORD\_FIELDS      -      Channel record fields.

7                                      The channel record fields are determined by the value of  
8                                      CH\_IND, as described below.

9      REV\_FCH\_GATING\_MODE      -      Reverse eighth gating mode indicator.

10                                      The base station shall set this field to '1' if the mobile station  
11                                      is allowed to perform the reverse eighth gating mode where  
12                                      the 1/8<sup>th</sup> rate frames on the Reverse Fundamental Channel  
13                                      are gated off for 10 ms per frame (see [2]); otherwise, the base  
14                                      station shall set this field to '0'.15                                      The base station shall not set this field to '1' if  
16                                      REV\_FCH\_GATING\_REQ included in the *Origination Message*  
17                                      or *Page Response Message* is set to '0'.

18      REV\_PWR\_CNTL\_DELAY\_INCL      -      Reverse power control delay included indicator.

19                                      If REV\_FCH\_GATING\_MODE is set to '0', the base station  
20                                      shall omit this field; otherwise, the base station shall include  
21                                      this field and set it as follows.22                                      The base station shall set this field to '1' if  
23                                      REV\_PWR\_CNTL\_DELAY is included in this message;  
24                                      otherwise, the base station shall set this field to '0'.25                                      If the REV\_FCH\_GATING\_MODE field in this message is set to  
26                                      '1' and the REV\_PWR\_CNTL\_INCL field in the *Extended*  
27                                      *System Parameters Message* is set to '0', the base station  
28                                      shall set this field to '1'.

29      REV\_PWR\_CNTL\_DELAY      -      The reverse power control delay.

30                                      If REV\_PWR\_CNTL\_DELAY\_INCL is set to '0', the base station  
31                                      shall omit this field; otherwise, the base station shall include  
32                                      this field and set it as follows:

1		The base station shall set this field to the closed-loop reverse
2		power control delay minus one (the closed-loop reverse power
3		control delay is the time between the end of a gated-on
4		reverse PCG and the beginning of the reverse PCG where the
5		corresponding feedback is sent on the Forward Power Control
6		Subchannel, see [2]), in units of 1.25 ms.
7	D_SIG_ENCRYPT_MODE -	Dedicated channel encryption mode indicator.
8		If ENCRYPT_MODE is set to '11', the base station shall include
9		this field and shall set it to the dedicated channel signaling
10		encryption mode, as shown in Table 3.7.4.5-1; otherwise the
11		base station shall omit this field.
12	ENC_KEY_SIZE -	Encryption key size indication.
13		If ENCRYPT_MODE is set to '10' or '11', the base station shall
14		include this field and shall set it to the encryption key size, as
15		shown in Table 3.7.4.5-2; otherwise, the base station shall omit
16		this field.
17	C_SIG_ENCRYPT_MODE_INCL -	Common channel signaling encryption mode included
18		indicator.
19		If common channel signaling encryption information is
20		included in this message, the base station shall set this field
21		to '1'; otherwise, the base station shall set this field to '0'.
22	C_SIG_ENCRYPT_MODE -	Common channel signaling encryption mode indicator.
23		If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
24		shall include this field and shall set it to the common
25		channel signaling encryption mode, as shown in Table
26		3.7.4.5-1; otherwise, the base station shall omit this field.
27	3XFL_1XRL_INCL -	3X Forward Link and 1X Reverse Link indicator.
28		The base station shall set this field to '1' if the base station is
29		assigning 3X traffic channel on the Forward Link and 1X
30		traffic channel on the Reverse Link; otherwise, the base
31		station shall set this field to '0'.
32	1XRL_FREQ_OFFSET -	1X Reverse Link frequency offset.
33		If 3XFL_1XRL_INCL is set to '0', the base station shall omit
34		this field; otherwise, the base station shall set this field as
35		follows:
36		The base station shall set this field to the value shown in
37		Table 3.7.2.3.2.21-8 corresponding to the frequency offset of
38		the 1X reverse link.

1

**Table 3.7.2.3.2.21-8. 1X Reverse Link Frequency Offset**

<b>1XRL_FREQ_OFFSET (Binary)</b>	<b>1X Reverse Link frequency offset</b>
00	The Reverse Link is on the lowest SR3 frequency
01	The Reverse Link is on the center SR3 frequency
10	The Reverse Link is on the highest SR3 frequency
11	Reserved

2

3     MSG\_INT\_INFO\_INCL     -   Message integrity information included indicator  
4     The base station shall set this field to '1' if the base station  
5     supports message integrity; otherwise, the base station shall  
6     set this field to '0'. If this message is to include a MACI in the  
7     LAC Layer, the base station shall set this field to '1'.

8     CHANGE\_KEYS         -   Change keys indicator  
9     If MSG\_INT\_INFO\_INCL is set to '0', the base station shall  
10    omit this field; otherwise, the base station shall include this  
11    field and set it as follows:  
12    The base station shall set this field to '0' to command the  
13    mobile station not to update the encryption key and integrity  
14    key. The base station shall set this field to '1' to command the  
15    mobile station to update the encryption key and integrity key  
16    to the latest being generated.

17    USE\_UAK             -   Use UAK indicator  
18    If MSG\_INT\_INFO\_INCL is set to '0', the base station shall  
19    omit this field; otherwise, the base station shall include this  
20    field and set it as follows:  
21    If the base station receives an authentication vector with a  
22    UAK, the base station shall set this field to '1' to indicate that  
23    the mobile station is to use UMAC; otherwise, the base station  
24    shall set this field to '0' to indicate that the mobile  
25    station is to use MAC-I.

26    PLCM\_TYPE\_INCL     -   The Public Long Code Mask type included indicator.  
27    The base station shall set this field to '1' if the base station  
28    include PLCM\_TYPE in the message; otherwise, the base  
29    station shall set this field to '0'.

30    PLCM\_TYPE           -   The Public Long Code Mask type indicator.

1			If PLCM_TYPE_INCL is set to '0', the base station shall omit
2			this field; otherwise, the base station shall include this field
3			and set it as follows.
4			The base station shall set this field to the corresponding
5			Public Long Code Mask type as specified in Table
6			3.7.2.3.2.21-5.
7			PLCM_TYPE '0010' shall not be used when the mobile station
8			is not in its home country (i.e., the MCC of the mobile station
9			is different from the MCC of this base station).
10			PLCM_TYPE '0011' shall not be used when the mobile station
11			is not in its home network (i.e., the MCC or MNC of the
12			mobile station is different from the MCC or MNC of this base
13			station).
14	PLCM_39	-	The 39 LSB bits of the Public Long Code Mask.
15			If PLCM_TYPE is not set to '0001', the base station shall omit
16			this field; otherwise, the base station shall include this field
17			and set it to the 39 least significant bits of the public long
18			code mask as defined in 3.6.4.1.10.
19	SYNC_ID_INCL	-	Service Configuration synchronization identifier included
20			indicator.
21			The base station shall omit this field if the GRANTED_MODE
22			field is not set to '11'; otherwise, the base station shall
23			include this field and set it as follows:
24			If the mobile station is to use a stored service configuration
25			corresponding to SYNC_ID field included in this message, the
26			base station shall set this field to '1', otherwise, the base
27			station shall set this field to '0'.
28	SYNC_ID_LEN	-	Service Configuration synchronization identifier length
29			indicator.
30			If the SYNC_ID_INCL field is not included or is included and
31			is set to '0', the base station shall omit this field; otherwise
32			the base station shall include this field and set it as follows:
33			The base station shall set this field to the length of the
34			SYNC_ID field included in this message.
35	SYNC_ID	-	Service Configuration synchronization identifier.
36			If the SYNC_ID_INCL field is not included or is included and
37			is set to '0', the base station shall omit this field; otherwise,
38			the base station shall include this field and set it as follows:
39			The base station shall set this field to the Service
40			Configuration synchronization identifier corresponding to the
41			stored service configuration that the mobile station is to use.
42	CONFIG_MSG_SEQ	-	Configuration message sequence number.



1		If the DIRECT_CH_ASSIGN_IND is to '0', the base station
2		shall omit this field; otherwise the base station shall include
3		this field and set it as follows:
4		The base station shall set this field to CONFIG_SEQ
5		(see 3.6.2.2).
6	RTC_NOM_PWR	- Reverse Traffic Channel Nominal Power.
7		If DIRECT_CH_ASSIGN_IND is set to '0', the base station shall
8		omit this field; otherwise, the base station shall include this
9		field and set it as follows:
10		The base station shall set this field to the value of the
11		nominal power correction to be used by the mobile station
12		when transmitting on the Reverse Traffic Channel after the
13		Direct Channel Assignment call setup procedure as specified
14		in 2.6.4.2. The base station shall set this field as a two's
15		complement signed binary number, in units of 1 dB.
16	RESPOND_IND	- Response requested indicator.
17		If DIRECT_CH_ASSIGN_IND is set to '0', the base station shall
18		omit this field; otherwise, the base station shall include this
19		field and set it as follows:
20		The base station shall set this field to '1' if the mobile station
21		is to respond to the <i>Extended Channel Assignment Message</i>
22		with a <i>Page Response Message</i> or <i>Reconnect Message</i> in
23		unassured mode on the r-csch; otherwise, the base station
24		shall set this field to '0' to indicate that the mobile station is
25		not to respond on the r-csch.
26	DIRECT_CH_ASSIGN_RECOVER_IND	- Direct Channel Assignment Recover Indicator
27		If DIRECT_CH_ASSIGN_IND is set to '0', the base station shall
28		omit this field; otherwise, the base station shall include this
29		field and set it as follows:
30		The base station shall set this field to '1' if the mobile station
31		is to transmit a <i>Page Response Message</i> or a <i>Reconnect</i>
32		<i>Message</i> after failing to acquire the forward traffic channel
33		assigned in this message; otherwise, the base station shall
34		set this field to '0'.
35	FIXED_PREAMBLE_TRANSMIT_IND	- Fixed Preamble Length Transmission Indicator.
36		If GRANTED_MODE is not set to '11', the base station shall
37		omit this field; otherwise, the base station shall include this
38		field and set it as follows:
39		The base station shall set this field to '1' to indicate if the
40		mobile station is allowed to enter the <i>Traffic Channel Substate</i>
41		of the <i>Mobile Station Control on the Traffic Channel State</i> after
42		sending the number of preambles specified in this message;
43		otherwise the base station shall set this field to '0'.
44		If any channel assigned by this message is to use Radio
45		Configuration 1 or 2 (see [2]), then the base station shall set
46		this field to '0'.

**FIXED\_NUM\_PREAMBLE** - Traffic Channel preamble length.

If **FIXED\_PREAMBLE\_TRANSMIT\_IND** is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it to the minimum length of Traffic Channel preamble that the mobile station is to transmit, before entering the *Traffic Channel Substate* of the *Mobile Station Control on the Traffic Channel State* without having received a *forward dedicated channel acquired* indication from Layer 2 (see [4]).

The base station shall set **FIXED\_NUM\_PREAMBLE** to the value shown in Table 3.7.2.3.2.21-13 corresponding to the Traffic Channel preamble length in ms.

**Table 3.7.2.3.2.21-13 Traffic Channel Preamble Length**

<b>FIXED_NUM_PREAMBLE (binary)</b>	<b>Preamble Length in ms</b>
000	0
001	20
010	40
011	60
100	80
101	100
110	200
111	300

**EARLY\_RL\_TRANSMIT\_IND** - Early Reverse Link Transmission indicator.

The base station shall set this field to '1' if, upon channel assignment, the mobile station is to enable the transmitter prior to receiving sufficient signal quality on the forward link; otherwise, the base station shall set this field to '0'.

**TX\_PWR\_LIMIT\_INCL** - Transmit Power Limit Inclusion for the current base station

If the transmit power limit field is included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**TX\_PWR\_LIMIT** - Transmit Power Limit for the current base station

If **TX\_PWR\_LIMIT\_INCL** is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set to as follows.

1		The base station shall set this field to thirty dB more than
2		transmit power limit in dBm EIRP, in steps of 1 dB. This field
3		can take the values 30 to 53 corresponding to maximum
4		transmit power values 0 dBm to 23 dBm.
5	RESERVED	- Reserved bits.
6		The base station shall set all the bits of this field to '0' to
7		make the entire record octet-aligned.
8	If the CH_IND field is set to '01', the base station shall include the following fields:	
9	FPC_FCH_INIT_SETPT	- Initial Fundamental Channel outer loop $E_b/N_t$ setpoint.
10		The base station shall set this field to initial Fundamental
11		Channel outer loop $E_b/N_t$ setpoint, in units of 0.125 dB.
12	FPC_FCH_FER	- Fundamental Channel target Frame Error Rate.
13		The base station shall set this field to the target Frame Error
14		Rate on the Forward Fundamental Channel, as specified in
15		Table 3.7.3.3.2.25-2.
16	FPC_FCH_MIN_SETPT	- Minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
17		The base station shall set this field to minimum Fundamental
18		Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.
19	FPC_FCH_MAX_SETPT	- Maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
20		The base station shall set this field to maximum
21		Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of
22		0.125 dB.
23	The base station shall include NUM_PILOTS plus one occurrences of the following record,	
24	one for each member of the mobile station's Active Set on the Traffic Channel.	
25	PILOT_PN	- Pilot PN sequence offset index.
26		The base station shall set this field to the pilot PN sequence
27		offset for this pilot in units of 64 PN chips.
28	ADD_PILOT_REC_INCL	- Additional pilot information included indicator.
29		The base station shall set this field to '1' if additional pilot
30		information listed in PILOT_REC_TYPE and RECORD_LEN
31		fields are included. The base station shall set this field to '0'
32		if the corresponding pilot is the common pilot and there is no
33		additional pilot information included.
34	PILOT_REC_TYPE	- Pilot record type.
35		If ADD_PILOT_REC_INCL is set to '1', the base station shall
36		set this field to the PILOT_REC_TYPE value shown in Table
37		3.7.2.3.2.21-9 corresponding to the type of Pilot Record
38		specified by this record.
39		If ADD_PILOT_REC_INCL is set to '0', the base station shall
40		omit this field.
41		

1

**Table 3.7.2.3.2.21-9. Pilot Record Types**

<b>Description</b>	<b>PILOT_REC_TYPE (binary)</b>
1X Common Pilot with Transmit Diversity	000
1X Auxiliary Pilot	001
1X Auxiliary Pilot with Transmit Diversity	010
3X Common Pilot	011
3X Auxiliary Pilot	100
All other PILOT_REC_TYPE values are reserved	

2

3

RECORD\_LEN - Pilot record length.

4

If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

5

6

7

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

8

9

Type-specific fields - Pilot record type-specific fields.

10

If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall include type-specific fields based on the PILOT\_REC\_TYPE of this pilot record as described in 3.7.6.1.

11

12

13

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

14

15

PWR\_COMB\_IND - Power control symbol combining indicator.

16

If the Forward Fundamental Traffic Channel associated with this pilot will carry the same closed-loop power control subchannel bits as that of the previous pilot in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'. For the first occurrence of this record in the message, the base station shall set this field to '0'.

17

18

19

20

21

22

23

CODE\_CHAN\_FCH - Code channel index for the Fundamental Channel.

24

If FOR\_RC is set to a Radio Configuration associated with Spreading Rate 1, the base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Forward Fundamental Channel associated with this pilot. If FOR\_RC is set to a Radio Configuration associated with Spreading Rate 3, the base station shall set this field to the code channel index that the mobile station is to use on the Forward Fundamental on the center SR3 frequency.

25

26

27

28

29

30

31

1			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
2			station shall set this field in the range 1 to 63 inclusive. If
3			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
4			station shall set this field in the range 1 to 127 inclusive. If
5			Radio Configuration 7 or 9 is used, the base station shall set
6			this field in the range 1 to 255 inclusive.
7	QOF_MASK_ID_FCH	-	Quasi-Orthogonal Function Mask Identifier for the
8			Fundamental Channel.
9			If FOR_RC is set to a Radio Configuration associated with
10			Spreading Rate 1, the base station shall set this field to the
11			quasi-orthogonal function mask identifier (see [2]) that the
12			mobile station is to use on the Forward Fundamental
13			Channel associated with this pilot. If FOR_RC is set to a
14			Radio Configuration associated with Spreading Rate 3, the
15			base station shall set this field to the quasi-orthogonal
16			function mask identifier that the mobile station is to use on
17			the Forward Fundamental Channel on the center SR3
18			frequency.
19	3X_FCH_INFO_INCL	-	3X Fundamental Channel information included indicator.
20			If the 3X Fundamental Channel information is included, the
21			base station shall set this field to '1'; otherwise, the base
22			station shall set this field to '0'.
23	The base station shall include NUM_PILOTS plus one occurrences of the following record if		
24	3X_FCH_INFO_INCL is set to '1'. The base station shall use the same order for the		
25	following fields as is used for the PILOT_PN fields listed in this message.		
26	3X_FCH_LOW_INCL	-	FCH code channel on the lowest SR3 frequency included
27			indicator.
28			If the Fundamental Channel on the lowest SR3 frequency has
29			a different code channel than the Fundamental Channel on
30			the center SR3 frequency, the base station shall set this field
31			to '1'; otherwise, the base station shall set this field to '0'.
32	QOF_MASK_ID_FCH_LOW	-	QOF index for the Fundamental Channel on the lowest
33			SR3 frequency.
34			If 3X_FCH_LOW_INCL is set to '0', the base station shall omit
35			this field; otherwise, the base station shall set this field as
36			follows:
37			The base station shall set this field to the index of the Quasi-
38			orthogonal function (see [2]) corresponding to the QOF index
39			for the Fundamental Channel on the lowest SR3 frequency.
40	CODE_CHAN_FCH_LOW	-	Code channel for the Fundamental Channel on the lowest
41			SR3 frequency.
42			If 3X_FCH_LOW_INCL is set to '0', the base station shall omit
43			this field; otherwise, the base station shall set this field as
44			follows:

1			The base station shall set this field to the code channel index
2			(see [2]) that the mobile station is to use on the Fundamental
3			Channel on the lowest SR3 frequency. If Radio Configuration
4			6 or 8 is used, the base station shall set this field in the range
5			1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
6			base station shall set this field in the range 1 to 255
7			inclusive.
8	3X_FCH_HIGH_INCL	-	FCH code channel on the highest SR3 frequency included
9			indicator.
10			If the Fundamental Channel on the highest SR3 frequency
11			has a different code channel than the Fundamental Channel
12			on the center SR3 frequency, the base station shall set this
13			field to '1'; otherwise, the base station shall set this field to
14			'0'.
15	QOF_MASK_ID_FCH_HIGH	-	QOF index for the Fundamental Channel on the highest
16			SR3 frequency.
17			If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
18			this field; otherwise, the base station shall set this field as
19			follows:
20			The base station shall set this field to the index of the Quasi-
21			orthogonal function (see [2]) corresponding to the QOF index
22			for the Fundamental Channel on the highest SR3 frequency.
23	CODE_CHAN_FCH_HIGH	-	Code channel for the Fundamental Channel on the
24			highest SR3 frequency.
25			If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
26			this field; otherwise, the base station shall set this field as
27			follows:
28			The base station shall set this field to the code channel index
29			(see [2]) that the mobile station is to use on the Fundamental
30			Channel on the highest SR3 frequency. If Radio
31			Configuration 6 or 8 is used, the base station shall set this
32			field in the range 1 to 127 inclusive. If Radio Configuration 7
33			or 9 is used, the base station shall set this field in the range 1
34			to 255 inclusive.
35	RESERVED	-	Reserved bits.
36			The base station shall add reserved bits as needed in order to
37			make the total length of the fields after the preceding
38			CH_RECORD_LEN field through this RESERVED field equal
39			to an integer number of octets. The base station shall set
40			these bits to '0'.
41	If the CH_IND field is set to '10', the base station shall include the following fields:		
42	FPC_DCCH_INIT_SETPT	-	Initial Dedicated Control Channel outer loop $E_b/N_t$ setpoint.
43			The base station shall set this field to initial Dedicated
44			Control Channel outer loop $E_b/N_t$ setpoint, in units of 0.125
45			dB.
46	FPC_DCCH_FER	-	Dedicated Control Channel target Frame Error Rate.

1		The base station shall set this field to the target Frame Error
2		Rate on the Dedicated Control Channel, as specified in Table
3		3.7.3.3.2.25-2.
4	FPC_DCCH_MIN_SETPT -	Minimum Dedicated Control Channel Outer Loop $E_b/N_t$
5		setpoint.
6		The base station shall set this field to minimum Dedicated
7		Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125
8		dB.
9	FPC_DCCH_MAX_SETPT -	Maximum Dedicated Control Channel Outer Loop $E_b/N_t$
10		setpoint.
11		The base station shall set this field to maximum Dedicated
12		Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125
13		dB.
14	The base station shall include NUM_PILOTS plus one occurrences of the following three-	
15	field record for each member of the mobile station's Active Set on the Traffic Channel.	
16	PILOT_PN -	Pilot PN sequence offset index.
17		The base station shall set this field to the pilot PN sequence
18		offset for this pilot in units of 64 PN chips.
19	ADD_PILOT_REC_INCL -	Additional pilot information included indicator.
20		The base station shall set this field to '1' if additional pilot
21		information listed in PILOT_REC_TYPE and RECORD_LEN
22		fields are included. The base station shall set this field to '0'
23		if the corresponding pilot is the common pilot and there is no
24		additional pilot information included.
25	PILOT_REC_TYPE -	Pilot record type.
26		If ADD_PILOT_REC_INCL is set to '1', the base station shall
27		set this field to the PILOT_REC_TYPE value shown in Table
28		3.7.2.3.2.21-9 corresponding to the type of Pilot Record
29		specified by this record.
30		If ADD_PILOT_REC_INCL is set to '0', the base station shall
31		omit this field.
32	RECORD_LEN -	Pilot record length.
33		If ADD_PILOT_REC_INCL is set to '1', the base station shall
34		set this field to the number of octets in the type-specific fields
35		of this pilot record.
36		If ADD_PILOT_REC_INCL is set to '0', the base station shall
37		omit this field.
38	Type-specific fields -	Pilot record type-specific fields.
39		If ADD_PILOT_REC_INCL is set to '1', the base station shall
40		include type-specific fields based on the PILOT_REC_TYPE of
41		this pilot record.
42		If ADD_PILOT_REC_INCL is set to '0', the base station shall
43		omit this field as described in 3.7.6.1.

1	PWR_COMB_IND	-	Power control symbol combining indicator.
2			If this pilot will carry the same closed-loop power control
3			subchannel bits as that of the previous pilot in this message,
4			the base station shall set this field to '1'; otherwise, the base
5			station shall set this field to '0'. The base station shall set
6			this field to '0' in the first record in the pilot list.
7	CODE_CHAN_DCCH	-	Code channel index for the Dedicated Control Channel.
8			If FOR_RC is set to a Radio Configuration associated with
9			Spreading Rate 1, the base station shall set this field to the
10			code channel index (see [2]), in the range of 1 to 127
11			inclusive, that the mobile station is to use on the Forward
12			Dedicated Control Channel associated with this pilot. If
13			FOR_RC is set to a Radio Configuration associated with
14			Spreading Rate 3, the base station shall set this field to the
15			code channel index in the range of 1 to 255 inclusive, that
16			the mobile station is to use on the Forward Dedicated Control
17			Channel on the center SR3 frequency.
18			If Radio Configuration 3 or 5 (see [2]) is used, the base station
19			shall set this field in the range 1 to 63 inclusive. If Radio
20			Configuration 4, 6 or 8 is used, the base station shall set this
21			field in the range 1 to 127 inclusive. If Radio Configuration 7
22			or 9 is used, the base station shall set this field in the range 1
23			to 255 inclusive.
24	QOF_MASK_ID_DCCH	-	Quasi-Orthogonal Function Mask Identifier for the Dedicated
25			Control Channel.
26			If FOR_RC is set to a Radio Configuration associated with
27			Spreading Rate 1, the base station shall set this field to the
28			quasi-orthogonal function mask identifier (see [2]) that the
29			mobile station is to use on the Forward Dedicated Control
30			Channel associated with this pilot. If FOR_RC is set to a
31			Radio Configuration associated with Spreading Rate 3, the
32			base station shall set this field to the quasi-orthogonal
33			function mask identifier (see [2]) that the mobile station is to
34			use on the Forward Dedicated Control Channel on the center
35			SR3 frequency.
36	3X_DCCH_INFO_INCL	-	3X Dedicated Control Channel information included
37			indicator.
38			If the 3X Dedicated Control Channel information is included,
39			the base station shall set this field to '1'; otherwise, the base
40			station shall set this field to '0'.
41	The base station shall include NUM_PILOTS plus one occurrences of the following record if		
42	3X_DCCH_INFO_INCL is set to '1'. The base station shall use the same order for the		
43	following fields as is used for the PILOT_PN fields listed in this message.		
44	3X_DCCH_LOW_INCL	-	DCCH code channel on the lowest SR3 frequency included
45			indicator.



1		If the Dedicated Control Channel on the lowest SR3
2		frequencies has a different code channel than the Dedicated
3		Control Channel on the center SR3 frequency, the base
4		station shall set this field to '1'; otherwise, the base station
5		shall set this field to '0'.
6	QOF_MASK_ID_DCCH_LOW	- QOF index for the Dedicated Control Channel on the
7		lowest SR3 frequency.
8		If 3X_DCCH_LOW_INCL is set to '0', the base station shall
9		omit this field; otherwise, the base station shall set this field
10		as follows:
11		The base station shall set this field to the index of the Quasi-
12		orthogonal function (see [2]) corresponding to the QOF index
13		for the Dedicated Control Channel on the lowest SR3
14		frequency.
15	CODE_CHAN_DCCH_LOW	- Code channel for the Dedicated Control Channel on the
16		lowest SR3 frequency.
17		If 3X_DCCH_LOW_INCL is set to '0', the base station shall
18		omit this field; otherwise, the base station shall set this field
19		as follows:
20		The base station shall set this field to the code channel index
21		(see [2]) that the mobile station is to use on the Dedicated
22		Control Channel on the lowest SR3 frequency. If Radio
23		Configuration 6 or 8 is used, the base station shall set this
24		field in the range 1 to 127 inclusive. If Radio Configuration 7
25		or 9 is used, the base station shall set this field in the range 1
26		to 255 inclusive.
27	3X_DCCH_HIGH_INCL	- DCCH code channel on the highest SR3 frequency included
28		indicator.
29		If the Dedicated Control Channel on the highest SR3
30		frequencies has a different code channel than the Dedicated
31		Control Channel on the center SR3 frequency, the base
32		station shall set this field to '1'; otherwise, the base station
33		shall set this field to '0'.
34	QOF_MASK_ID_DCCH_HIGH	- QOF index for the Dedicated Control Channel on the
35		highest SR3 frequency.
36		If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
37		omit this field; otherwise, the base station shall set this field
38		as follows:
39		The base station shall set this field to the index of the Quasi-
40		orthogonal function (see [2]) corresponding to the QOF index
41		for the Dedicated Control Channel on the highest SR3
42		frequency.
43	CODE_CHAN_DCCH_HIGH	- Code channel for the Dedicated Control Channel on the
44		highest SR3 frequency.
45		If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
46		omit this field; otherwise, the base station shall set this field
47		as follows:

1		The base station shall set this field to the code channel index
2		(see [2]) that the mobile station is to use on the Dedicated
3		Control Channel on the highest SR3 frequency. If Radio
4		Configuration 6 or 8 is used, the base station shall set this
5		field in the range 1 to 127 inclusive. If Radio Configuration 7
6		or 9 is used, the base station shall set this field in the range 1
7		to 255 inclusive.
8	FUNDICATED_BCMC_IND	- BCMC on fundicated channel Indicator.
9		If the channel assignment in this message contains a
10		Forward Fundicated Channel used for BCMC transmission,
11		the base station shall set this field to '1'; otherwise, the base
12		station shall set this field to '0'.
13	If FUNDICATED_BCMC_IND is set to '1', the base station shall include NUM_PILOT plus 1	
14	occurrences of the following record:	
15	FOR_CPCCH_WALSH	- The Forward Common Power Control Channel Walsh code
16		assignment.
17		The base station shall set this field to the Walsh code
18		assignment for the Forward Common Power Control Channel.
19	FOR_CPCSCH	- The Forward Common Power Control Channel Subchannel.
20		The base station shall set this field to the Forward Common
21		Power Control Channel Subchannel associated with this base
22		station.
23	RESERVED	- Reserved bits.
24		The base station shall add reserved bits as needed in order to
25		make the total length of the fields after the preceding
26		CH_RECORD_LEN field through this RESERVED field equal
27		to an integer number of octets. The base station shall set
28		these bits to '0'.
29	If the CH_IND field is set to '11', the base station shall include the following fields:	
30	FPC_FCH_INIT_SETPT	- Initial Fundamental Channel outer loop $E_b/N_t$ setpoint.
31		The base station shall set this field to initial Fundamental
32		Channel outer loop $E_b/N_t$ setpoint, in units of 0.125 dB.
33	FPC_DCCH_INIT_SETPT	- Initial Dedicated Control Channel outer loop $E_b/N_t$ setpoint.
34		The base station shall set this field to initial Dedicated
35		Control Channel outer loop $E_b/N_t$ setpoint, in units of 0.125
36		dB.
37	FPC_PRI_CHAN	- Power Control Subchannel indicator.
38		The base station shall set this field to '0' if the mobile station
39		is to perform the primary inner loop estimation on the
40		received Forward Fundamental Channel. The base station
41		shall set this field to '1' if the mobile station is to perform the
42		primary inner loop estimation on the received Forward
43		Dedicated Control Channel.

1			If the F-CPCCH is assigned, the base station shall multiplex
2			the Power Control Subchannel on the F-CPCCH; otherwise:
3			If this field is set to '0', the base station shall multiplex the
4			Power Control Subchannel on the Forward Fundamental
5			Channel; otherwise, the base station shall multiplex the
6			Power Control Subchannel on the Forward Dedicated Control
7			Channel.
8	FPC_FCH_FER	-	Fundamental Channel target Frame Error Rate.
9			The base station shall set this field to the target Frame Error
10			Rate on the Forward Fundamental Channel.
11	FPC_FCH_MIN_SETPT	-	Minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
12			The base station shall set this field to minimum Fundamental
13			Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.
14	FPC_FCH_MAX_SETPT	-	Maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
15			The base station shall set this field to maximum
16			Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of
17			0.125 dB.
18	FPC_DCCH_FER	-	Dedicated Control Channel target Frame Error Rate.
19			The base station shall set this field to the target Frame Error
20			Rate on the Dedicated Control Channel.
21	FPC_DCCH_MIN_SETPT	-	Minimum Dedicated Control Channel Outer Loop $E_b/N_t$
22			setpoint.
23			The base station shall set this field to minimum Dedicated
24			Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125
25			dB.
26	FPC_DCCH_MAX_SETPT	-	Maximum Dedicated Control Channel Outer Loop $E_b/N_t$
27			setpoint.
28			The base station shall set this field to maximum Dedicated
29			Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125
30			dB.
31	The base station shall include NUM_PILOTS plus one occurrences of the following three-		
32	field record, one for each member of the mobile station's Active Set on the Traffic Channel.		
33	PILOT_PN	-	Pilot PN sequence offset index.
34			The base station shall set this field to the pilot PN sequence
35			offset for this pilot in units of 64 PN chips.
36	ADD_PILOT_REC_INCL	-	Additional pilot information included indicator.
37			The base station shall set this field to '1' if additional pilot
38			information listed in PILOT_REC_TYPE and RECORD_LEN
39			fields are included. The base station shall set this field to '0'
40			if the corresponding pilot is the common pilot and there is no
41			additional pilot information included.
42	PILOT_REC_TYPE	-	Pilot record type.

1			If ADD_PILOT_REC_INCL is set to '1', the base station shall
2			set this field to the PILOT_REC_TYPE value shown in Table
3			3.7.2.3.2.21-9 corresponding to the type of Pilot Record
4			specified by this record.
5			If ADD_PILOT_REC_INCL is set to '0', the base station shall
6			omit this field.
7	RECORD_LEN	-	Pilot record length.
8			If ADD_PILOT_REC_INCL is set to '1', the base station shall
9			set this field to the number of octets in the type-specific fields
10			of this pilot record.
11			If ADD_PILOT_REC_INCL is set to '0', the base station shall
12			omit this field.
13	Type-specific fields	-	Pilot record type-specific fields.
14			If ADD_PILOT_REC_INCL is set to '1', the base station shall
15			include type-specific fields based on the PILOT_REC_TYPE of
16			this pilot record as described in 3.7.6.1.
17			If ADD_PILOT_REC_INCL is set to '0', the base station shall
18			omit this field.
19	PWR_COMB_IND	-	Power control symbol combining indicator.
20			If this pilot will carry the same closed-loop power control
21			subchannel bits as that of the previous pilot in this message,
22			the base station shall set this field to '1'; otherwise, the base
23			station shall set this field to '0'. The base station shall set
24			this field to '0' in the first record in the pilot list.
25	CODE_CHAN_FCH	-	Code channel index for the Fundamental Channel.
26			If FOR_RC is set to a Radio Configuration associated with
27			Spreading Rate 1, the base station shall set this field to the
28			code channel index (see [2]) that the mobile station is to use
29			on the Forward Channel associated with this pilot. If FOR_RC
30			is set to a Radio Configuration associated with Spreading
31			Rate 3, the base station shall set this field to the code
32			channel index that the mobile station is to use on the
33			Forward Channel on the center SR3 frequency.
34			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
35			station shall set this field in the range 1 to 63 inclusive. If
36			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
37			station shall set this field in the range 1 to 127 inclusive. If
38			Radio Configuration 7 or 9 is used, the base station shall set
39			this field in the range 1 to 255 inclusive.
40	QOF_MASK_ID_FCH	-	Quasi-Orthogonal Function Mask Identifier for the
41			Fundamental Channel.

1			If FOR_RC is set to a Radio Configuration associated with
2			Spreading Rate 1, the base station shall set this field to the
3			quasi-orthogonal function mask identifier (see [2]) that the
4			mobile station is to use on the Forward Fundamental
5			Channel associated with this pilot. If FOR_RC is set to a
6			Radio Configuration associated with Spreading Rate 3, the
7			base station shall set this field to the quasi-orthogonal
8			function mask identifier that the mobile station is to use on
9			the Forward Fundamental Channel on the center SR3
10			frequency.
11	CODE_CHAN_DCCH	-	Code channel index for the Dedicated Control Channel.
12			If FOR_RC is set to a Radio Configuration associated with
13			Spreading Rate 1, the base station shall set this field to the
14			code channel index (see [2]), in the range of 1 to 127
15			inclusive, that the mobile station is to use on the Dedicated
16			Control Channel associated with this pilot. If FOR_RC is set
17			to a Radio Configuration associated with Spreading Rate 3,
18			the base station shall set this field to the code channel index
19			in the range of 1 to 255 inclusive, that the mobile station is to
20			use on the Dedicated Control Channel on the center SR3
21			frequency.
22			If Radio Configuration 3 or 5 (see [2]) is used, the base station
23			shall set this field in the range 1 to 63 inclusive. If Radio
24			Configuration 4, 6 or 8 is used, the base station shall set this
25			field in the range 1 to 127 inclusive. If Radio Configuration 7
26			or 9 is used, the base station shall set this field in the range 1
27			to 255 inclusive.
28	QOF_MASK_ID_DCCH	-	Quasi-Orthogonal Function Mask Identifier for the Dedicated
29			Control Channel.
30			If FOR_RC is set to a Radio Configuration associated with
31			Spreading Rate 1, the base station shall set this field to the
32			quasi-orthogonal function mask identifier (see [2]) that the
33			mobile station is to use on the Forward Dedicated Control
34			Channel associated with this pilot. If FOR_RC is set to a
35			Radio Configuration associated with Spreading Rate 1, the
36			base station shall set this field to the quasi-orthogonal
37			function mask identifier that the mobile station is to use on
38			the Forward Dedicated Control Channel on the center SR3
39			frequency.
40	3X_FCH_INFO_INCL	-	3X Fundamental Channel information included indicator.
41			If the 3X Fundamental Channel information is included, the
42			base station shall set this field to '1'; otherwise, the base
43			station shall set this field to '0'.
44	The base station shall include NUM_PILOTS plus one occurrences of the following record if		
45	3X_FCH_INFO_INCL is set to '1'. The base station shall use the same order for the		
46	following fields as is used for the PILOT_PN fields listed in this message.		
47	3X_FCH_LOW_INCL	-	FCH code channel on the lowest SR3 frequency included
48			indicator.

1		If the Fundamental Channel on the lowest SR3 frequencies
2		has a different code channel than the Fundamental Channel
3		on the center SR3 frequency, the base station shall set this
4		field to '1'; otherwise, the base station shall set this field to
5		'0'.
6	QOF_MASK_ID_FCH_LOW	- QOF index for the Fundamental Channel on the lowest
7		SR3 frequency.
8		If 3X_FCH_LOW_INCL is set to '0', the base station shall omit
9		this field; otherwise, the base station shall set this field as
10		follows:
11		The base station shall set this field to the index of the Quasi-
12		orthogonal function (see [2]) corresponding to the QOF index
13		for the Fundamental Channel on the lowest SR3 frequency.
14	CODE_CHAN_FCH_LOW	- Code channel for the Fundamental Channel on the lowest
15		SR3 frequency.
16		If 3X_FCH_LOW_INCL is set to '0', the base station shall omit
17		this field; otherwise, the base station shall set this field as
18		follows:
19		The base station shall set this field to the code channel index
20		(see [2]) that the mobile station is to use on the Fundamental
21		Channel on the lowest SR3 frequency. If Radio Configuration
22		6 or 8 is used, the base station shall set this field in the range
23		1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
24		base station shall set this field in the range 1 to 255
25		inclusive.
26	3X_FCH_HIGH_INCL	- FCH code channel on the highest SR3 frequency included
27		indicator.
28		If the Fundamental Channel on the highest SR3 frequencies
29		has a different code channel than the Fundamental Channel
30		on the center SR3 frequency, the base station shall set this
31		field to '1'; otherwise, the base station shall set this field to
32		'0'.
33	QOF_MASK_ID_FCH_HIGH	- QOF index for the Fundamental Channel on the highest
34		SR3 frequency.
35		If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
36		this field; otherwise, the base station shall set this field as
37		follows:
38		The base station shall set this field to the index of the Quasi-
39		orthogonal function (see [2]) corresponding to the QOF index
40		for the Fundamental Channel on the highest SR3 frequency.
41	CODE_CHAN_FCH_HIGH	- Code channel for the Fundamental Channel on the
42		highest SR3 frequency.
43		If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
44		this field; otherwise, the base station shall set this field as
45		follows:

1                   The base station shall set this field to the code channel index  
2                   (see [2]) that the mobile station is to use on the Fundamental  
3                   Channel on the highest SR3 frequency. If Radio  
4                   Configuration 6 or 8 is used, the base station shall set this  
5                   field in the range 1 to 127 inclusive. If Radio Configuration 7  
6                   or 9 is used, the base station shall set this field in the range 1  
7                   to 255 inclusive.

8   3X\_DCCH\_INFO\_INCL   -   3X Dedicated Control Channel information included  
9                   indicator.

10                   If the 3X Dedicated Control Channel information is included,  
11                   the base station shall set this field to '1'; otherwise, the base  
12                   station shall set this field to '0'.

13   The base station shall include NUM\_PILOTS plus one occurrences of the following record if  
14   3X\_DCCH\_INFO\_INCL is set to '1'. The base station shall use the same order for the  
15   following fields as is used for the PILOT\_PN fields listed in this message.

16   3X\_DCCH\_LOW\_INCL   -   DCCH code channel on the lowest SR3 frequency included  
17                   indicator.

18                   If the Dedicated Control Channel on the lowest SR3  
19                   frequencies has a different code channel than the Dedicated  
20                   Control Channel on the center SR3 frequency, the base  
21                   station shall set this field to '1'; otherwise, the base station  
22                   shall set this field to '0'.

23   QOF\_MASK\_ID\_DCCH\_LOW - QOF index for the Dedicated Control Channel on the  
24                   lowest SR3 frequency.

25                   If 3X\_DCCH\_LOW\_INCL is set to '0', the base station shall  
26                   omit this field; otherwise, the base station shall set this field  
27                   as follows:

28                   The base station shall set this field to the index of the Quasi-  
29                   orthogonal function (see [2]) corresponding to the QOF index  
30                   for the Dedicated Control Channel on the lowest SR3  
31                   frequency.

32   CODE\_CHAN\_DCCH\_LOW   -   Code channel for the Dedicated Control Channel on the  
33                   lowest SR3 frequency.

34                   If 3X\_DCCH\_LOW\_INCL is set to '0', the base station shall  
35                   omit this field; otherwise, the base station shall set this field  
36                   as follows:

37                   The base station shall set this field to the code channel index  
38                   (see [2]) that the mobile station is to use on the Dedicated  
39                   Control Channel on the lowest SR3 frequency. If Radio  
40                   Configuration 6 or 8 is used, the base station shall set this  
41                   field in the range 1 to 127 inclusive. If Radio Configuration 7  
42                   or 9 is used, the base station shall set this field in the range 1  
43                   to 255 inclusive.

44   3X\_DCCH\_HIGH\_INCL   -   DCCH code channel on the highest SR3 frequency included  
45                   indicator.

1		If the Dedicated Control Channel on the highest SR3
2		frequencies has a different code channel than the Dedicated
3		Control Channel on the center SR3 frequency, the base
4		station shall set this field to '1'; otherwise, the base station
5		shall set this field to '0'.
6	QOF_MASK_ID_DCCH_HIGH-	QOF index for the Dedicated Control Channel on the
7		highest SR3 frequency.
8		If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
9		omit this field; otherwise, the base station shall set this field
10		as follows:
11		The base station shall set this field to the index of the Quasi-
12		orthogonal function (see [2]) corresponding to the QOF index
13		for the Dedicated Control Channel on the highest SR3
14		frequency.
15	CODE_CHAN_DCCH_HIGH	- Code channel for the Dedicated Control Channel on the
16		highest SR3 frequency.
17		If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
18		omit this field; otherwise, the base station shall set this field
19		as follows:
20		The base station shall set this field to the code channel index
21		(see [2]) that the mobile station is to use on the Dedicated
22		Control Channel on the highest SR3 frequency. If Radio
23		Configuration 6 or 8 is used, the base station shall set this
24		field in the range 1 to 127 inclusive. If Radio Configuration 7
25		or 9 is used, the base station shall set this field in the range 1
26		to 255 inclusive.
27	FUNDICATED_BCNC_IND	- BCNC on fundicated channel Indicator.
28		If the channel assignment in this message contains a
29		Forward Fundicated Channel used for BCNC transmission,
30		the base station shall set this field to '1'; otherwise, the base
31		station shall set this field to '0'.
32	REV_FCH_ASSIGNED	- Reverse FCH channel assigned indicator.
33		If the FUNDICATED_BCNC_IND field is set to '0', the base
34		station shall omit this field; otherwise, the base station shall
35		include this field and set it as follows:
36		If the reverse FCH is assigned in this message, the base
37		station shall set this field to '1'; otherwise, the base station
38		shall set this field to '0'.
39	ADD_PLCM_FOR_FCH_INCL	- Additional PLCM for forward FCH included indicator.
40		If the FUNDICATED_BCNC_IND field is set to '0', the base
41		station shall omit this field; otherwise, the base station shall
42		include this field and set it as follows:
43		If the additional PLCM for forward FCH is included in this
44		message, the base station shall set this field to '1'; otherwise,
45		the base station shall set this field to '0'.



1	ADD_PLCM_FOR_FCH_TYPE -	The Additional Public Long Code Mask for forward FCH
2		type indicator.
3		If ADD_PLCM_FOR_FCH_INCL is not included or is included
4		and is set to '0', the base station shall omit this field;
5		otherwise, the base station shall include this field and set it
6		as follows.
7		The base station shall set this field to '1' to indicate PLCM
8		specified by the base station. The field value '0' is reserved.
9	ADD_PLCM_FOR_FCH_39	- The 39 LSB bits of the additional Public Long Code Mask
10		for forward FCH.
11		If ADD_PLCM_FOR_FCH_TYPE field is included and is set to
12		'1', the base station shall include this field and set it to the 39
13		least significant bits of the public long code mask used by the
14		mobile station; otherwise, the base station shall omit this
15		field.
16	FOR_CPCCH_INFO_INCL -	CPCCH information included indicator.
17		If the FUNDICATED_BCNC_IND field is set to '0', the base
18		station shall omit this field; otherwise, the base station shall
19		include this field and set it as follows:
20		If the F-CPCCH information is included in this message, the
21		base station shall set this field to '1'; otherwise, the base
22		station shall set this field to '0'.
23	If FOR_CPCCH_INFO_INCL field is included and is set to '1', the base station shall include	
24	NUM_PILOT plus one occurrences of the following record:	
25	FOR_CPCCH_WALSH	- The Forward Common Power Control Channel Walsh code
26		assignment.
27		The base station shall set this field to the Walsh code
28		assignment for the Forward Common Power Control Channel.
29	FOR_CPCSCH	- The Forward Common Power Control Channel Subchannel.
30		The base station shall set this field to the Forward Common
31		Power Control Channel Subchannel associated with this base
32		station.
33	RESERVED	- Reserved bits.
34		The base station shall add reserved bits as needed in order to
35		make the total length of the fields after the preceding
36		CH_RECORD_LEN field through this RESERVED field equal
37		to an integer number of octets. The base station shall set
38		these bits to '0'.
39	If the ASSIGN_MODE field is set to '101', the base station shall include the following fields:	
40	FREQ_INCL	- Frequency included indicator.
41		If the BAND_CLASS and CDMA_FREQ fields are included in
42		this assignment record, the base station shall set this bit to
43		'1'. If the BAND_CLASS and CDMA_FREQ fields are not
44		included in this assignment record, the base station shall set
45		this bit to '0'.

1	BAND_CLASS	-	Band class.
2			If the FREQ_INCL bit is set to '1', the base station shall set
3			this field to the CDMA band class, as specified in [30],
4			corresponding to the CDMA frequency assignment for the
5			CDMA Channel containing the Forward Traffic Channel(s) the
6			mobile station is to use. If the FREQ_INCL bit is set to '0', the
7			base station shall omit this field.
8	CDMA_FREQ	-	Frequency assignment.
9			If the FREQ_INCL bit is set to '0', the base station shall omit
10			this field; otherwise, the base station shall set this field as
11			follows:
12			If the FREQ_INCL bit is set to '1', the base station shall set
13			this field to the CDMA Channel number, in the specified
14			CDMA band class, corresponding to the CDMA frequency
15			assignment for the CDMA Channel containing the Forward
16			Traffic Channel(s) the mobile station is to use.
17	BYPASS_ALERT_ANSWER	-	Bypass alert indicator.
18			If the mobile station is to bypass the <i>Waiting for Order</i>
19			<i>Substate</i> and the <i>Waiting for Mobile Station Answer Substate</i> ,
20			the base station shall set this field to '1'; otherwise, the base
21			station shall set this field to '0'.
22	GRANTED_MODE	-	Granted mode.
23			The base station shall set this field to '01' to indicate that the
24			mobile station is to use an initial service configuration
25			consisting of the default multiplex option that is derived from
26			the radio configuration corresponding to Table 3.7.2.3.2.21-3,
27			and to indicate that service negotiation may take place before
28			the base station sends one of the following messages: <i>Service</i>
29			<i>Connect Message</i> , <i>General Handoff Direction Message</i> (with
30			SCR) or <i>Universal Handoff Direction Message</i> (with SCR).
31			The base station shall set this field to '10' to indicate that the
32			mobile station is to use an initial service configuration
33			consisting of the default multiplex option that is derived from
34			the radio configuration corresponding to Table 3.7.2.3.2.21-3,
35			and to indicate that service negotiation is not to take place
36			before the base station sends one of the following messages:
37			<i>Service Connect Message</i> , <i>General Handoff Direction Message</i>
38			(with SCR) or <i>Universal Handoff Direction Message</i> (with
39			SCR).
40			The base station shall set this field to '11' to instruct the
41			mobile station to use the stored service configuration (that is,
42			both the <i>Service Configuration</i> information record and the
43			<i>Non-negotiable Service Configuration</i> information record)
44			The base station shall not set this field to '00'.

1	SR_ID_RESTORE	-	Service reference identifier to be restored.
2			If the GRANTED_MODE field is not set to '11', the base
3			station shall omit this field; otherwise, the base station shall
4			include this field and set it as follows:
5		o	If the mobile station is to restore all the service option
6			connections from the stored service configuration, the
7			base station shall set this field to '111'.
8		o	If the mobile station is to restore more than one but not
9			all the service option connections from the stored service
10			configuration, the base station shall set this field to '000'.
11		o	Otherwise, the base station shall set this field to the
12			service reference identifier corresponding to the service
13			option connection to be restored.
14	SR_ID_RESTORE_BITMAP	-	Bitmap of service reference identifiers to be restored.
15			If the SR_ID_RESTORE field is included and set to '000', the
16			base station shall include this field and set it as follows;
17			otherwise, the base station shall omit this field.
18			This field consists of the subfields defined in Table
19			3.7.2.3.2.21-6. The base station shall set a subfield to '1' to
20			indicate that the mobile station is to restore the service
21			option connection of the corresponding service reference
22			identifier; otherwise, the base station shall set the subfield to
23			'0'.
24	FRAME_OFFSET	-	Frame offset.
25			The Forward and Reverse Traffic Channel frames are delayed
26			FRAME_OFFSET $\times$ 1.25 ms relative to system timing (see [2]).
27			The base station shall set this field to the Forward and
28			Reverse Traffic Channel frame offset (the frame offset does not
29			apply to the F-PDCH).
30	ENCRYPT_MODE	-	Message encryption mode.
31			The base station shall set this field to the ENCRYPT_MODE
32			value shown in Table 3.7.2.3.2.8-2 corresponding to the
33			encrypting mode that is to be used for signaling messages, as
34			specified in 2.3.12.2.
35	D_SIG_ENCRYPT_MODE	-	Dedicated channel encryption mode indicator.
36			If ENCRYPT_MODE is set to '11', the base station shall include
37			this field and shall set it to the dedicated channel signaling
38			message mode, as shown in Table 3.7.4.5-1; otherwise the base
39			station shall omit this field.
40	ENC_KEY_SIZE	-	Encryption key size indication.

1			If ENCRYPT_MODE is set to '10' or '11', the base station shall
2			include this field and shall set it to the encryption key size, as
3			shown in Table 3.7.4.5-2; otherwise, the base station shall omit
4			this field.
5	C_SIG_ENCRYPT_MODE_INCL	-	Common channel signaling encryption mode included
6			indicator.
7			If common channel signaling encryption information is
8			included in this message, the base station shall set this field
9			to '1'; otherwise, the base station shall set this field to '0'.
10	C_SIG_ENCRYPT_MODE	-	Common channel signaling encryption mode indicator.
11			If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
12			shall include this field and shall set it to the common
13			channel signaling encryption mode, as shown in Table
14			3.7.4.5-1; otherwise, the base station shall omit this field.
15	MSG_INT_INFO_INCL	-	Message integrity information included indicator
16			The base station shall set this field to '1' if the base station
17			supports message integrity; otherwise, the base station shall
18			set this field to '0'. If this message is to include a MACI in the
19			LAC Layer, the base station shall set this field to '1'.
20	CHANGE_KEYS	-	Change keys indicator
21			If MSG_INT_INFO_INCL is set to '0', the base station shall
22			omit this field; otherwise, the base station shall include this
23			field and set it as follows:
24			The base station shall set this field to '0' to command the
25			mobile station not to update the encryption key and integrity
26			key. The base station shall set this field to '1' to command the
27			mobile station to update the encryption key and integrity key
28			to the latest being generated.
29	USE_UAK	-	Use UAK indicator
30			If MSG_INT_INFO_INCL is set to '0', the base station shall
31			omit this field; otherwise, the base station shall include this
32			field and set it as follows:
33			If the base station receives an authentication vector with a
34			UAK, the base station shall set this field to '1' to indicate that
35			the mobile station is to use UMAC; otherwise, the base
36			station shall set this field to '0' to indicate that the mobile
37			station is to use MAC-I.
38	PLCM_TYPE_INCL	-	The Public Long Code Mask type included indicator.
39			The base station shall set this field to '1' if the base station
40			include PLCM_TYPE in the message; otherwise, the base
41			station shall set this field to '0'.
42	PLCM_TYPE	-	The Public Long Code Mask type indicator.
43			If PLCM_TYPE_INCL is set to '0', the base station shall omit
44			this field; otherwise, the base station shall include this field
45			and set it as follows.

1			The base station shall set this field to the corresponding
2			Public Long Code Mask type as specified in Table
3			3.7.2.3.2.21-5.
4			PLCM_TYPE '0010' shall not be used when the mobile station
5			is not in its home country (i.e., the MCC of the mobile station
6			is different from the MCC of this base station).
7			PLCM_TYPE '0011' shall not be used when the mobile station
8			is not in its home network (i.e., the MCC or MNC of the
9			mobile station is different from the MCC or MNC of this base
10			station).
11	PLCM_39	-	The 39 LSB bits of the Public Long Code Mask.
12			If PLCM_TYPE is not set to '0001', the base station shall omit
13			this field; otherwise, the base station shall include this field
14			and set it to the 39 least significant bits of the public long
15			code mask as defined in 3.6.4.1.10.
16	RLGAIN_ADJ	-	Reverse Traffic Channel power .
17			If DIRECT_CH_ASSIGN_IND field is set to '0', the base station
18			shall set this field to adjust the initial Traffic Channel
19			transmission power relative to the Access Channel or
20			Enhanced Access Channel transmission power. The base
21			station shall set this field as a two's complement signed
22			binary number, in units of 1 dB.
23			If DIRECT_CH_ASSIGN_IND field is set to '1', the base station
24			shall set this field to adjust the initial Traffic Channel
25			transmission power. The base station shall set this field as a
26			two's complement signed binary number, in units of 1 dB.
27	NUM_PILOTS	-	Number of pilots in the Active Set.
28			The base station shall set this field to number of pilots that
29			are to be in the mobile station's Active Set on the Traffic
30			Channel minus one. The base station shall set this field to
31			the value in the range 0 to $N_{6m}-1$ inclusive.
32	EXT_CH_IND	-	Extended Channel Indicator.
33			The base station shall set this field as shown in
34			Table 2.7.1.3.2.4-11.
35	FPC_SUBCHAN_GAIN	-	Forward Power Control Subchannel relative gain.
36			If EXT_CH_IND signals the allocation of a F-FCH, or a F-
37			DCCH, the base station shall include this field and shall set it
38			as follows; otherwise, the base station shall omit this field.
39			The base station shall set this field to the power level of the
40			forward link power control subchannel relative to the power
41			level of 20 ms frames at a 9600 bps or 14400 bps rate on the
42			Forward Fundamental Channel or the Forward Dedicated
43			Control Channel indicated by FPC_PRI_CHAN <sub>s</sub> .
44			The base station shall set the value in units of 0.25 dB.
45	REV_FCH_GATING_MODE	-	Reverse eighth gating mode indicator.

1		If EXT_CH_IND signals the allocation of R-FCH, the base
2		station shall include this field and shall set it as follows;
3		otherwise, the base station shall omit this field.
4		The base station shall set this field to '1' if the mobile station
5		is allowed to perform the reverse eighth gating mode where
6		the 1/8 <sup>th</sup> rate frames on the Reverse Fundamental Channel
7		are gated off for 10 ms per frame (see [2]); otherwise, the base
8		station shall set this field to '0'.
9		The base station shall not set this field to '1' if
10		REV_FCH_GATING_REQ included in the <i>Origination Message</i>
11		or <i>Page Response Message</i> is set to '0'.
12	REV_PWR_CNTL_DELAY_INCL	- Reverse power control delay included indicator.
13		If REV_FCH_GATING_MODE is not included, or is included
14		and set to '0', then the base station shall omit this field;
15		otherwise, the base station shall include this field and set it
16		as follows.
17		The base station shall set this field to '1' if
18		REV_PWR_CNTL_DELAY is included in this message;
19		otherwise, the base station shall set this field to '0'.
20		If the REV_FCH_GATING_MODE field in this message is set to
21		'1' and the REV_PWR_CNTL_INCL field in the <i>Extended</i>
22		<i>System Parameters Message</i> is set to '0', the base station
23		shall set this field to '1'.
24	REV_PWR_CNTL_DELAY	- The reverse power control delay.
25		If REV_PWR_CNTL_DELAY_INCL is not included, or is
26		included and set to '0', then the base station shall omit this
27		field; otherwise, the base station shall include this field and
28		set it as follows:
29		The base station shall set this field to the closed-loop reverse
30		power control delay minus one (the closed-loop reverse power
31		control delay is the time between the end of a gated-on
32		reverse PCG and the beginning of the reverse PCG where the
33		corresponding feedback is sent on the Forward Power Control
34		Subchannel, see [2]), in units of 1.25 ms.
35	FULL_CI_FEEDBACK_IND	- Full C/I feedback rate indicator.
36		If the mobile station is to send full C/I feedback every 1.25
37		ms, the base station shall set this field to '1'. If the mobile
38		station is to transmit full C/I feedback every 20 ms, the base
39		station shall set this field to '0'.
40	FOR_CPCCH_RATE	- The Forward Common Power Control Channel Rate.
41		If EXT_CH_IND equals '01000', the base station shall include
42		this field and shall set it as follows; otherwise, the base
43		station shall omit this field.
44		The base station shall set this field to the rate of the Forward
45		Common Power Control Channel as specified in Table
46		3.7.2.3.2.21-12.

**Table 3.7.2.3.2.21-12 Rate of the Forward Common Power Control Channel.**

<b>FOR_CPCCH_RATE (binary)</b>	<b>Rate of the F-CPCCH (Hz)</b>
00	800
01	400
10	200
11	Reserved

**FOR\_CPCCH\_UPDATE\_RATE** - Forward Common Power Control update rate.

If EXT\_CH\_IND equals '01000', the base station shall include this field and shall set it as follows; otherwise, the base station shall omit this field.

The base station shall set this field to the update rate of the Forward Common Power Control as specified in Table 3.7.2.3.2.21-13 (see [2]).

**Table 3.7.2.3.2.21-13 CPCCH/RCCH Update rate.**

<b>Encoded update rate (binary)</b>	<b>CPCCH/RCCH Update rate (Hz)</b>
00	800
01	400
10	200
11	Reserved

**REV\_CQICH\_FRAME\_OFFSET** - Reverse Channel Quality Indicator Channel Frame Offset.

The C/I feedback reports on the Reverse Channel Quality Indicator Channel are delayed REV\_CQICH\_FRAME\_OFFSET × 1.25 ms relative to system timing (see [2]).

The base station shall set this field to the Reverse Channel Quality Indicator Channel frame offset.

**REV\_CQICH\_REPS** - Reverse Channel Quality Indicator Channel repetition factor.

The base station shall set this field according to Table 3.7.3.3.2.49-1.

**REV\_ACKCH\_REPS** - Reverse Acknowledgment Channel repetition factor.

The base station shall set this field according to Table 3.7.3.3.2.49-2.

**FOR\_PDCH\_RC** - Forward Packet Data Channel radio configuration.

1			The base station shall set this field to the radio configuration
2			(see Table 3.7.2.3.2.21-4) to be used by the mobile station on
3			the Forward Packet Data Channel.
4	REV_PDCH_RC	-	Reverse Packet Data Channel radio configuration.
5			If EXT_CH_IND signals the allocation of a R-PDCH, the base
6			station shall include this field and shall set it as follows;
7			otherwise, the base station shall omit this field.
8			The base station shall set this field to the radio configuration
9			(see Table 3.7.2.3.2.21-4) to be used by the mobile station on
10			the Reverse Packet Data Channel.
11	FOR_FCH_DCCH_RC	-	Forward Fundamental Channel or Forward Dedicated Control
12			Channel radio configuration.
13			If EXT_CH_IND signals the allocation of a F-FCH, or a F-
14			DCCH, the base station shall include this field and shall set it
15			as follows; otherwise, the base station shall omit this field.
16			The base station shall set this field to the radio configuration
17			(see Table 3.7.2.3.2.21-4) to be used by the mobile station on
18			the Forward Fundamental Channel, or on the Forward
19			Dedicated Control Channel, or on both.
20			The initial service configuration consisting of the default
21			multiplex option that is to be used by the mobile station is
22			derived from the radio configuration corresponding to Table
23			3.7.2.3.2.21-3.
24	REV_FCH_DCCH_RC	-	Reverse Fundamental Channel or Reverse Dedicated Control
25			Channel radio configuration.
26			If EXT_CH_IND signals the allocation of a R-FCH, or a R-
27			DCCH, the base station shall include this field and shall set it
28			as follows; otherwise, the base station shall omit this field.
29			The base station shall set this field to the radio configuration
30			(see Table 3.7.2.3.2.21-4) to be used by the mobile station on
31			the Reverse Fundamental Channel, or on the Reverse
32			Dedicated Control Channel, or on both.
33			The initial service configuration consisting of the default
34			multiplex option that is to be used by the mobile station is
35			derived from the radio configuration corresponding to Table
36			3.7.2.3.2.21-3.
37	FPC_PRI_CHAN	-	Power Control Subchannel indicator.
38			If EXT_CH_IND signals the allocation of a F-FCH and a F-
39			DCCH, the base station shall set this field as follows;
40			otherwise, the base station shall omit this field.
41			The base station shall set this field to '0' if the mobile station
42			is to perform the primary inner loop estimation on the
43			received Forward Fundamental Channel. The base station
44			shall set this field to '1' if the mobile station is to perform the
45			primary inner loop estimation on the received Forward
46			Dedicated Control Channel.



1			If the F-CPCCH is assigned, the base station shall multiplex
2			the Power Control Subchannel on the F-CPCCH; otherwise:
3			If this field is set to '0', the base station shall multiplex the
4			Power Control Subchannel on the Forward Fundamental
5			Channel; otherwise, the base station shall multiplex the
6			Power Control Subchannel on the Forward Dedicated Control
7			Channel.
8	FPC_FCH_INIT_SETPT	-	Initial Fundamental Channel outer loop $E_b/N_t$ setpoint.
9			If EXT_CH_IND signals the allocation of a F-FCH, the base
10			station shall include this field and shall set it as follows;
11			otherwise, the base station shall omit this field.
12			The base station shall set this field to initial Fundamental
13			Channel outer loop $E_b/N_t$ setpoint, in units of 0.125 dB.
14	FPC_FCH_FER	-	Fundamental Channel target Frame Error Rate.
15			If EXT_CH_IND signals the allocation of a F-FCH, the base
16			station shall include this field and shall set it as follows;
17			otherwise it shall be omitted.
18			The base station shall set this field to the target Frame Error
19			Rate on the Forward Fundamental Channel, as specified in
20			Table 3.7.3.3.2.25-2.
21	FPC_FCH_MIN_SETPT	-	Minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
22			If EXT_CH_IND signals the allocation of a F-FCH, the base
23			station shall include this field and shall set it as follows;
24			otherwise it shall be omitted.
25			The base station shall set this field to minimum Fundamental
26			Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.
27	FPC_FCH_MAX_SETPT	-	Maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.
28			If EXT_CH_IND signals the allocation of a F-FCH, the base
29			station shall include this field and shall set it as follows;
30			otherwise it shall be omitted.
31			The base station shall set this field to maximum
32			Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of
33			0.125 dB.
34	FPC_DCCH_INIT_SETPT	-	Initial Dedicated Control Channel outer loop $E_b/N_t$ setpoint.
35			If EXT_CH_IND signals the allocation of a F-DCCH, the base
36			station shall include this field and shall set it as follows;
37			otherwise it shall be omitted.
38			The base station shall set this field to initial Dedicated
39			Control Channel outer loop $E_b/N_t$ setpoint, in units of 0.125
40			dB.
41	FPC_DCCH_FER	-	Dedicated Control Channel target Frame Error Rate.

1		If EXT_CH_IND signals the allocation of a F-DCCH, the base
2		station shall include this field and shall set it as follows;
3		otherwise it shall be omitted.
4		The base station shall set this field to the target Frame Error
5		Rate on the Dedicated Control Channel, as specified in Table
6		3.7.3.3.2.25-2.
7	FPC_DCCH_MIN_SETPT -	Minimum Dedicated Control Channel Outer Loop $E_b/N_t$
8		setpoint.
9		If EXT_CH_IND signals the allocation of a F-DCCH, the base
10		station shall include this field and shall set it as follows;
11		otherwise it shall be omitted.
12		The base station shall set this field to minimum Dedicated
13		Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125
14		dB.
15	FPC_DCCH_MAX_SETPT -	Maximum Dedicated Control Channel Outer Loop $E_b/N_t$
16		setpoint.
17		If EXT_CH_IND signals the allocation of a F-DCCH, the base
18		station shall include this field and shall set it as follows;
19		otherwise it shall be omitted.
20		The base station shall set this field to maximum Dedicated
21		Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125
22		dB.
23	PDCH_GROUP_IND_INCL	- Packet Data Channel Group Indicator included flag.
24		The base station shall set this field to '1' if the
25		PDCH_GROUP_IND fields are included; otherwise, the base
26		station shall set this field to '0'.
27		If this field is set to '0', the mobile station is to use
28		PWR_COMB_IND to determine whether the softer or soft
29		reselection parameters are used when re-pointing between
30		pilots in its Active Set (see [3]).
31	FOR_PDCH_PARMS_INCL	- Indicator of the inclusion of Forward Packet Data Channel
32		configuration fields.
33		The base station shall set this field to '1' if the Forward
34		Packet Data Channel configuration fields are included;
35		otherwise, the base station shall set this field to '0'.
36	FOR_PDCH_RLGAIN_INCL	- Forward Packet Data Channel parameters related to
37		reverse link adjustment gains included indicator.
38		If FOR_PDCH_PARMS_INCL is omitted, or if it is included and
39		set to '0', the base station shall omit this field; otherwise, the
40		base station shall include this field, and set it as follows.
41		The base station shall set this field to '1' if the following F-
42		PDCH gain related fields are included in this message;
43		otherwise, the base station shall set this field to '0'.
44	RLGAIN_ACKCH_PILOT -	Reverse Acknowledgment Channel to pilot adjustment gain.

1 If FOR\_PDCH\_RLGAIN\_INCL is omitted, or if it is included  
2 and set to '0', the base station shall omit this field; otherwise,  
3 the base station shall include this field, and set it as follows.

4 The base station shall set this field to the Reverse  
5 Acknowledgment Channel to pilot adjustment gain expressed  
6 as a two's complement value in units of 0.125 dB (see [2]).

7 RLGAIN\_CQICH\_PILOT - Reverse Channel Quality Indicator Channel to pilot  
8 adjustment gain.

9 If FOR\_PDCH\_RLGAIN\_INCL is omitted, or if it is included  
10 and set to '0', the base station shall omit this field; otherwise,  
11 the base station shall include this field, and set it as follows.

12 The base station shall set this field to the Reverse Channel  
13 Quality Indicator Channel to pilot adjustment gain expressed  
14 as a two's complement value in units of 0.125 dB (see [2]).

15 NUM\_SOFT\_SWITCHING\_FRAMES - Number of frames for R-CQICH soft switching.

16 If FOR\_PDCH\_PARMS\_INCL is equal to '0', the base station  
17 shall omit this field; otherwise, the base station shall include  
18 this field and set it as follows:

19 The base station shall set this field to the duration of the cell  
20 switching period, in units of 20 ms, minus one, during which  
21 the mobile station is to transmit the cell switch sequence on  
22 the R-CQICH channel when it switches between two pilots  
23 which are in different groups.

24 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
25 indicated by PDCH\_GROUP\_IND; otherwise, they are  
26 indicated by PWR\_COMB\_IND.

27 NUM\_SOFTER\_SWITCHING\_FRAMES - Number of frames for R-CQICH softer  
28 switching.

29 If FOR\_PDCH\_PARMS\_INCL is equal to '0', the base station  
30 shall omit this field; otherwise, the base station shall include  
31 this field and set it as follows:

32 The base station shall set this field to the duration of the cell  
33 switching period, in units of 20 ms, minus one, during which  
34 the mobile station is to transmit the cell switch sequence on  
35 the R-CQICH channel when it switches between two pilots  
36 which are in the same group.

37 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
38 indicated by PDCH\_GROUP\_IND; otherwise, they are  
39 indicated by PWR\_COMB\_IND.

40 NUM\_SOFT\_SWITCHING\_SLOTS - Number of slots per frame for R-CQICH soft  
41 switching.

42 If FOR\_PDCH\_PARMS\_INCL is equal to '0', the base station  
43 shall omit this field; otherwise, the base station shall include  
44 this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are indicated by PDCH\_GROUP\_IND; otherwise, they are indicated by PWR\_COMB\_IND.

**Table 3.7.2.3.2.21-10 Number of slots per frame for R-CQICH switching.**

<b>NUM_SOFT/SOFTER _SWITCHING_SLOTS (binary)</b>	<b>Number of slots per frame for R-CQICH switching.</b>
00	2
01	4
10	7
11	Reserved

NUM\_SOFTER\_SWITCHING\_SLOTS - Number of slots per frame for R-CQICH softer switching.

If FOR\_PDCH\_PARMES\_INCL is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are indicated by PDCH\_GROUP\_IND; otherwise, they are indicated by PWR\_COMB\_IND.

CHM\_SWITCHING\_PARMES\_INCL - Control Hold Mode fields included indicator.

If FOR\_PDCH\_PARMES\_INCL is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to '1' if the switching parameters for Control Hold Mode are included; otherwise, the base station shall set this field to '0'.

1 NUM\_SOFT\_SWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH soft  
2 switching while in Control Hold.

3 If CHM\_SWITCHING\_PARMS\_INCL is omitted or equal to '0',  
4 the base station shall omit this field; otherwise, the base  
5 station shall include this field and set it as follows:

6 The base station shall set this field to the duration of the cell  
7 switching period, in units of 20 ms, minus one, during which  
8 the mobile station, while in Control Hold, is to transmit the  
9 cell switch sequence on the R-CQICH when it switches  
10 between two pilots which are in different groups.

11 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
12 indicated by PDCH\_GROUP\_IND; otherwise, they are  
13 indicated by PWR\_COMB\_IND.

14 NUM\_SOFT\_SWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH  
15 softer switching while in Control Hold.

16 If CHM\_SWITCHING\_PARMS\_INCL is omitted or equal to '0',  
17 the base station shall omit this field; otherwise, the base  
18 station shall include this field and set it as follows:

19 The base station shall set this field to the duration of the cell  
20 switching period, in units of 20 ms, minus one, during which  
21 the mobile station, while in Control Hold, is to transmit the  
22 cell switch sequence on the R-CQICH when it switches  
23 between two pilots which are in the same group.

24 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
25 indicated by PDCH\_GROUP\_IND; otherwise, they are  
26 indicated by PWR\_COMB\_IND.

27 NUM\_SOFT\_SWITCHING\_SLOTS\_CHM - Number of slots per frame for R-CQICH soft  
28 switching while in Control Hold.

29 If CHM\_SWITCHING\_PARMS\_INCL is omitted or equal to '0',  
30 the base station shall omit this field; otherwise, the base  
31 station shall include this field and set it as follows:

32 The base station shall set this field to the duration of the cell  
33 switching slots within a switching frame, in units of 1.25 ms  
34 as specified in Table 3.7.2.3.2.21-10, during which the mobile  
35 station, while in Control Hold, is to transmit the cell switch  
36 indication by using Walsh cover of target on the R-CQICH  
37 when it switches between two pilots which are in different  
38 groups.

39 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
40 indicated by PDCH\_GROUP\_IND; otherwise, they are  
41 indicated by PWR\_COMB\_IND.

42 NUM\_SOFT\_SWITCHING\_SLOTS\_CHM - Number of slots per frame for R-CQICH  
43 softer switching while in Control Hold.

44 If CHM\_SWITCHING\_PARMS\_INCL is omitted or equal to '0',  
45 the base station shall omit this field; otherwise, the base  
46 station shall include this field and set it as follows:

1		The base station shall set this field to the duration of the cell
2		switching slots within a switching frame, in units of 1.25 ms
3		as specified in Table 3.7.2.3.2.21-10, during which the mobile
4		station, while in Control Hold, is to transmit the cell switch
5		indication by using Walsh cover of target on the R-CQICH
6		when it switches between two pilots which are in the same
7		group.
8		If PDCH_GROUP_IND_INCL is set to '1', these groups are
9		indicated by PDCH_GROUP_IND; otherwise, they are
10		indicated by PWR_COMB_IND.
11	PDCH_SOFT_SWITCHING_DELAY	- F-PDCH Soft Switching Delay.
12		If FOR_PDCH_PARMS_INCL is equal to '0', the base station
13		shall omit this field; otherwise, the base station shall include
14		this field and set it as follows:
15		The base station shall set this field to the minimum
16		interruption seen by the mobile station, in units of 10 ms,
17		minus one, when the mobile station is to transmit the cell
18		switch sequence on the R-CQICH when it switches between
19		two pilots which are in different groups.
20		If PDCH_GROUP_IND_INCL is set to '1', these groups are
21		indicated by PDCH_GROUP_IND; otherwise, they are
22		indicated by PWR_COMB_IND.
23	PDCH_SOFTER_SWITCHING_DELAY	- F-PDCH Soft Switching Delay.
24		If FOR_PDCH_PARMS_INCL is equal to '0', the base station
25		shall omit this field; otherwise, the base station shall include
26		this field and set it as follows:
27		The base station shall set this field to the minimum
28		interruption seen by the mobile station, in units of 10 ms,
29		minus one, when the mobile station is to transmit the cell
30		switch sequence on the R-CQICH when it switches between
31		two pilots which are in the same group.
32		If PDCH_GROUP_IND_INCL is set to '1', these groups are
33		indicated by PDCH_GROUP_IND; otherwise, they are
34		indicated by PWR_COMB_IND.
35	TX_DISABLED_TIMER_INCL	- Transmitter disabled timer included flag.
36		The base station shall set this field to '1' if the following
37		TX_DISABLED_TIMER field is included; otherwise, the base
38		station shall set this field to '0'.
39	TX_DISABLED_TIMER	- Transmitter disabled timer.
40		If TX_DISABLED_TIMER_INCL is equal to '0', the base station
41		shall omit this field; otherwise, the base station shall include
42		this field and set it as follows:

1		The base station shall set this field to the maximum time, in
2		units of 20ms, the mobile station's transmitter can be
3		disabled before the MAC Layer is to perform Forward Packet
4		Data Channel initialization.(See [3])
5	FOR_GCH_ASSIGNED	- Forward Grant Channel assignment indicator.
6		If EXT_CH_IND signals the allocation of a R-PDCH, the base
7		station shall include this field and shall set it as follows;
8		otherwise, the base station shall omit this field.
9		The base station shall set this field to '1' if the mobile station
10		is to listen to grants on the Forward Grant Channel;
11		otherwise, the base station shall set this field to '0' (see [3]).
12	FOR_RCCH_ASSIGNED	- Forward Rate Control Channel assignment indicator.
13		If EXT_CH_IND signals the allocation of a R-PDCH, the base
14		station shall include this field and shall set it as follows;
15		otherwise, the base station shall omit this field.
16		The base station shall set this field to '1' if the mobile station
17		is to follow rate control indicators on the Forward Rate
18		Control Channel; otherwise, the base station shall set this
19		field to '0' (see [3]).
20	FOR_RCCH_DRC_MODE	- Forward Rate Control Channel Dedicated Rate Control
21		Mode Indicator.
22		If FOR_RCCH_ASSIGNED is omitted, or if it is included and
23		set to '0', the base station shall omit this field; otherwise, the
24		base station shall include this field and set it as follows.
25		The base station shall set this field to '1' if the dedicated rate
26		control mode is being used on the Forward Rate Control
27		Channel; otherwise, the base station shall set this field to '0'
28		if the common rate control mode is being used (see [3]).
29	FOR_RCCH_REPETITION	- Forward Rate Control Subchannel repetition factor.
30		If FOR_RCCH_ASSIGNED is omitted, or if it is included and
31		set to '0', the base station shall omit this field; otherwise, the
32		base station shall include this field and set it as follows.
33		The base station shall set this field to the subchannel
34		repetition factor of the Rate Control Subchannel on all pilots.
35		as specified in Table 3.7.2.3.2.21-11. See [2].

1

**Table 3.7.2.3.2.21-11 Repetition factor for the F-RCCH.**

<b>FOR_RCCH_ REPETITION (binary)</b>	<b>Repetition factor for the F-RCCH.</b>
00	2
01	4
10	8
11	Reserved

2    **FOR\_RCCH\_UPDATE\_RATE**       -    Forward Rate Control Subchannel update rate.

3                                        If FOR\_RCCH\_ASSIGNED is omitted, or if it is included and

4                                        set to '0', the base station shall omit this field; otherwise, the

5                                        base station shall include this field and set it as follows.

6                                        The base station shall set this field to the update rate of the

7                                        Rate Control Subchannel on all pilots as specified in Table

8                                        3.7.2.3.2.21-13. See [2].

9    **FOR\_ACKCH\_ASSIGNED** -    Forward Acknowledgment Channel assignment indicator.

10                                       If EXT\_CH\_IND signals the allocation of a R-PDCH, the base

11                                       station shall include this field and shall set it as follows;

12                                       otherwise, the base station shall omit this field.

13                                       The base station shall set this field to '1' if the mobile station

14                                       is to listen to acknowledgments on the Forward

15                                       Acknowledgment Channel; otherwise, the base station shall

16                                       set this field to '0' (see [2] and [3]).

17    **FOR\_ACKCH\_MODE**       -    Forward Acknowledgment Channel Mode.

18                                       If FOR\_ACKCH\_ASSIGNED is omitted, or if it is included and

19                                       set to '0', the base station shall omit this field; otherwise, the

20                                       base station shall include this field and set it as follows.

21                                       The base station shall set this field to the Acknowledgment

22                                       Channel operation mode identifier that governs how the

23                                       Acknowledgment channel is demodulated. See [2] and [3] for

24                                       the details.

25                                       The base station shall set this field to '00' if the mobile

26                                       station is to attempt the reception of the Forward

27                                       Acknowledgment Channel from all members of the reduced

28                                       active set of the Forward Packet Data Channel, and is not to

29                                       softer combine acknowledgments.

30                                       The base station shall set this field to '01' if the mobile

31                                       station is to attempt reception of the Forward

32                                       Acknowledgment Channel from all members of the reduced

33                                       active set, and is to combine the acknowledgments from all

34                                       sectors in the same combining indicator set.



1		The base station shall set this field to '10' if the mobile
2		station is to attempt reception of the Forward
3		Acknowledgment Channel from the serving sector only.
4		The base station shall set this field to '11' if the mobile
5		station is to combine the Forward Acknowledgment Channel
6		from all sectors in the same combining indicator set as the
7		serving sector.
8	FOR_ACKCH_COMB_SEL	- Forward Acknowledgment Channel Combining method
9		selector.
10		If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
11		set to '0', or if FOR_ACKCH_MODE is omitted, or if it is
12		included and set to '00' or '10', or if PDCH_GROUP_IND_INCL
13		is set to '0', the base station shall omit this field; otherwise, it
14		shall include it and set it as follows.
15		The base station shall set this field to '0' if the mobile station
16		is to use PWR_COMB_IND as a combining indicator when
17		receiving the Forward Acknowledgment Channel; otherwise, it
18		shall set it to '1' if the mobile station is to use
19		PDCH_GROUP_IND as the indicator for combining sectors.
20	REV_PDCH_PARMS_INCL	- Reverse Packet Data Channel related parameters included
21		indicator.
22		If EXT_CH_IND signals the allocation of a R-PDCH, the base
23		station shall include this field and shall set it as follows;
24		otherwise, the base station shall omit this field.
25		The base station shall set this field to '1' if the following R-
26		PDCH parameters are included in this message; otherwise,
27		the base station shall set this field to '0'.
28	REV_PDCH_RLGAIN_INCL	- Reverse Packet Data Channel parameters related to
29		reverse link adjustment gains included indicator.
30		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
31		set to '0', the base station shall omit this field; otherwise, the
32		base station shall include this field, and set it as follows.
33		The base station shall set this field to '1' if the following R-
34		PDCH gain related fields are included in this message;
35		otherwise, the base station shall set this field to '0'.
36	RLGAIN_SPICH_PILOT	- Reverse Secondary Pilot Channel to pilot adjustment gain.
37		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
38		and set to '0', the base station shall omit this field; otherwise,
39		the base station shall include this field, and set it as follows.
40		The base station shall set this field to the Reverse Secondary
41		Pilot Channel to pilot adjustment gain expressed as a two's
42		complement value in units of 0.125 dB (see [2]).
43	RLGAIN_REQCH_PILOT	- Reverse Request Channel to pilot adjustment gain.
44		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
45		and set to '0', the base station shall omit this field; otherwise,
46		the base station shall include this field, and set it as follows.

1		The base station shall set this field to the Reverse Request
2		Channel to pilot adjustment gain expressed as a two's
3		complement value in units of 0.125 dB (see [2]).
4	RLGAIN_PDCCH_PILOT -	Reverse Packet Data Control Channel to pilot adjustment
5		gain.
6		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
7		and set to '0', the base station shall omit this field; otherwise,
8		the base station shall include this field, and set it as follows.
9		The base station shall set this field to the Reverse Packet
10		Data Channel to pilot adjustment gain expressed as a two's
11		complement value in units of 0.125 dB (see [2]).
12	REV_PDCH_PARMS_1_INCL -	Reverse Packet Data Channel parameters subset included
13		indicator.
14		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
15		set to '0', the base station shall omit this field; otherwise, the
16		base station shall include this field, and set it as follows.
17		The base station shall set this field to '1' if the following R-
18		PDCH parameters are included in this message; otherwise,
19		the base station shall set this field to '0'.
20	REV_PDCH_TABLE_SEL -	Reverse Packet Data Channel Table selector.
21		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
22		and set to '0', the base station shall omit this field; otherwise,
23		the base station shall include this field, and set it as follows.
24		The base station shall set this field to the Reverse Packet
25		Data Channel Table selector (see [2]).
26	REV_PDCH_MAX_AUTO_TPR -	Reverse Packet Data Channel maximum traffic to
27		pilot ratio for autonomous transmission.
28		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
29		and set to '0', the base station shall omit this field; otherwise,
30		the base station shall include this field and set it as follows.
31		The base station shall set this field to the maximum traffic to
32		pilot ratio for autonomous transmission on the Reverse
33		Packet Data Channel (see [2] and [3]).
34		The base station shall set this field to a value in the range 0
35		to 18 dB inclusive in units of 0.125 dB.
36	The base station shall include NUM_PILOTS plus one occurrences of the following record,	
37	one for each member of the mobile station's Active Set on the Traffic Channel.	
38	PILOT_PN -	Pilot PN sequence offset index.
39		The base station shall set this field to the pilot PN sequence
40		offset for this pilot in units of 64 PN chips.
41	ADD_PILOT_REC_INCL -	Additional pilot information included indicator.

1			The base station shall set this field to '1' if additional pilot
2			information listed in PILOT_REC_TYPE and RECORD_LEN
3			fields are included. The base station shall set this field to '0'
4			if the corresponding pilot is the common pilot and there is no
5			additional pilot information included.
6	PILOT_REC_TYPE	-	Pilot record type.
7			If ADD_PILOT_REC_INCL is set to '1', the base station shall
8			set this field to the PILOT_REC_TYPE value shown in Table
9			3.7.2.3.2.21-9 corresponding to the type of Pilot Record
10			specified by this record.
11			If ADD_PILOT_REC_INCL is set to '0', the base station shall
12			omit this field.
13	RECORD_LEN	-	Pilot record length.
14			If ADD_PILOT_REC_INCL is set to '1', the base station shall
15			set this field to the number of octets in the type-specific fields
16			of this pilot record.
17			If ADD_PILOT_REC_INCL is set to '0', the base station shall
18			omit this field.
19	Type-specific fields	-	Pilot record type-specific fields.
20			If ADD_PILOT_REC_INCL is set to '1', the base station shall
21			include type-specific fields based on the PILOT_REC_TYPE of
22			this pilot record as described in 3.7.6.1.
23			If ADD_PILOT_REC_INCL is set to '0', the base station shall
24			omit this field.
25	FOR_PDCH_INCL	-	Forward Packet Data Channel assignment included indicator.
26			The base station shall set this field to '1' if the MS is assigned
27			resources on the F-PDCH channel; otherwise, the base
28			station shall set this field to '0'. This field shall be set to '1' for
29			at least one of the pilots included in this message.
30	WALSH_TABLE_ID	-	The index of the Walsh Table used.
31			If FOR_PDCH_PARMS_INCL is set to '1', and
32			FOR_PDCH_INCL is set to '1', the base station shall include
33			this field and set it as follows; otherwise, the base station
34			shall omit this field.
35			The base station shall set this field to the index of the Walsh
36			Table being used by the Packet Data Channel. (See [3]).
37	NUM_PDCCH	-	The number of Packet Data Control Channels supported.
38			If FOR_PDCH_PARMS_INCL is set to '1', and
39			FOR_PDCH_INCL is set to '1', the base station shall include
40			this field and set it as follows; otherwise, the base station
41			shall omit this field.
42			The base station shall set this field to '000' if the pilot
43			supports one Packet Data Control Channel. The base station

1 shall set this field to '001' if the pilot supports two Packet  
2 Data Control Channels. The base station shall not set this  
3 field to any other value.

4 The base station shall include *NUM\_PDCCH+1* occurrences of the following one-field  
5 record:

6 FOR\_PDCCH\_WALSH - Forward Packet Data Control Channel Walsh code  
7 assignment.

8 If FOR\_PDCH\_PARMS\_INCL is set to '1', and  
9 FOR\_PDCH\_INCL is set to '1', the base station shall include  
10 this field and set it as follows; otherwise, the base station  
11 shall omit this field.

12 The base station shall set this field to the Walsh code  
13 assignment for the Forward Packet Data Control Channel.

14 If NUM\_PDCCH is set to '001', the Walsh code of PDCCH0  
15 shall be included first, followed by the Walsh code for  
16 PDCCH1

17 MAC\_ID - Medium Access Control index.

18 If FOR\_PDCH\_INCL is set to '0', the base station shall omit  
19 this field; otherwise, the base station shall include this field  
20 and set it as follows:

21 The base station shall set this field to the MAC index  
22 assigned to the mobile station by this pilot.

23 The base station shall set this field to an integer value larger  
24 than 63.

25 REV\_CQICH\_COVER - Reverse Channel Quality Indicator Channel cover.

26 If FOR\_PDCH\_INCL is set to '0', the base station shall omit  
27 this field; otherwise, the base station shall include this field  
28 and set it as follows:

29 The base station shall set this field to the index of the R-  
30 CQICH cover associated with this pilot (See [2]).

31 FOR\_CPCCH\_WALSH - The Forward Common Power Control Channel Walsh code  
32 assignment.

33 If EXT\_CH\_IND signals the allocation of a F-CPCCH, and  
34 either of the following conditions is true:

35 - EXT\_CH\_IND signals the allocation of a F-FCH or a F-  
36 DCCH

37 - all of the following conditions are true:

38 + FOR\_PDCH\_INCL is set to '1'

39 + EXT\_CH\_IND does not signal allocation of a F-FCH

40 + EXT\_CH\_IND does not signal allocation of a F-DCCH

1		the base station shall include this field and shall set it as
2		follows; otherwise, the base station shall omit this field
3		The base station shall set this field to the Walsh code
4		assignment for the Forward Common Power Control Channel.
5	FOR_CPCSCH	- The Forward Common Power Control Channel Subchannel.
6		If EXT_CH_IND signals the allocation of a F-CPCCH, and
7		either of the following conditions is true:
8		- EXT_CH_IND signals the allocation of a F-FCH or a F-
9		DCCH
10		- all of the following conditions are true:
11		+ FOR_PDCH_INCL is set to '1'
12		+ EXT_CH_IND does not signal allocation of a F-FCH
13		+ EXT_CH_IND does not signal allocation of a F-DCCH
14		the base station shall include this field and shall set it as
15		follows; otherwise, the base station shall omit this field.
16		The base station shall set this field to the Forward Common
17		Power Control Channel Subchannel associated with this base
18		station.
19		If FOR_CPCCH_RATE is omitted, or if it is included and set to
20		'00', the base station shall set this field to a value in the
21		range 0 to 23 inclusive. If FOR_CPCCH_RATE is included and
22		set set to '01', the base station shall set this field to a value in
23		the range 0 to 47 inclusive. If FOR_CPCCH_RATE is included
24		and set set to '10', the base station shall set this field to a
25		value in the range 0 to 95 inclusive.
26	PWR_COMB_IND	- Power control symbol combining indicator.
27		If this pilot will carry the same closed-loop power control
28		subchannel bits as that of the previous pilot in this message,
29		the base station shall set this field to '1'; otherwise, the base
30		station shall set this field to '0'. The base station shall set
31		this field to '0' in the first record in the pilot list.
32	PDCH_GROUP_IND	- Packet Data Channel Group Indicator.
33		If PDCH_GROUP_IND_INCL is set to '0', the base station shall
34		omit this field; otherwise, the base station shall include this
35		field and set it as follows.
36		If the mobile station is to use the softer reselection
37		parameters when re-pointing between this pilot and the
38		previous pilot that has a F-PDCH assigned to this mobile
39		station in this message (i.e. FOR_PDCH_INCL is set to '1'), the
40		base station shall set this field to '1' (see [3]).
41		If the mobile station is to use the soft reselection parameters
42		when re-pointing between this pilot and the previous pilot in
43		this message that has a F-PDCH assigned to this mobile
44		station (i.e. FOR_PDCH_INCL is set to '1'), the base station
45		shall set this field to '0' (see [3]).

1			The base station shall set this field to '0' in the first record in
2			the pilot list that has a F-PDCH assigned to this mobile
3			station (i.e. FOR_PDCH_INCL is set to '1').
4	CODE_CHAN_FCH	-	Code channel on the Fundamental Channel.
5			If EXT_CH_IND signals the allocation of a F-FCH, the base
6			station shall include this field and shall set it as follows;
7			otherwise it shall be omitted.
8			The base station shall set this field to the code channel index
9			(see [2]) that the mobile station is to use on the Fundamental
10			Channel of the Forward Traffic Channel.
11			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
12			station shall set this field in the range 1 to 63 inclusive. If
13			Radio Configuration 4, 11, or 12 is used, the base station
14			shall set this field in the range 1 to 127 inclusive.
15	QOF_MASK_ID_FCH	-	Quasi-orthogonal function index on the Fundamental
16			Channel.
17			If EXT_CH_IND signals the allocation of a F-FCH, the base
18			station shall include this field and shall set it as follows;
19			otherwise it shall be omitted.
20			The base station shall set this field to the index of the Quasi-
21			orthogonal function (see [2]).
22	CODE_CHAN_DCCH	-	Code channel on the Dedicated Control Channel.
23			If EXT_CH_IND signals the allocation of a F-DCCH, the base
24			station shall include this field and shall set it as follows;
25			otherwise it shall be omitted.
26			The base station shall set this field to the code channel index
27			(see [2]), in the range of 1 to 127 inclusive, that the mobile
28			station is to use on the Dedicated Control Channel of the
29			Forward Traffic Channel.
30			If Radio Configuration 3 or 5 (see [2]) is used, the base station
31			shall set this field in the range 1 to 63 inclusive. If Radio
32			Configuration 4 is used, the base station shall set this field in
33			the range 1 to 127 inclusive.
34	QOF_MASK_ID_DCCH	-	Quasi-orthogonal function index on the Dedicated Control
35			Channel.
36			If EXT_CH_IND signals the allocation of a F-DCCH, the base
37			station shall include this field and shall set it as follows;
38			otherwise it shall be omitted.
39			The base station shall set this field to the index of the Quasi-
40			orthogonal function (see [2]).
41	FOR_ACKCH_WALSH_INDEX	-	Walsh Code for the Forward Acknowledgment
42			Channel.

1		If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
2		set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND
3		does not signal the allocation of a R-PDCH, the base station
4		shall omit this field; otherwise, it shall include it and set it as
5		follows.
6		The base station shall set this field to the Walsh code of the
7		Forward Acknowledgment Channel (see [2]).
8	FOR_ACKSCH_INDEX	- Forward Acknowledgment Subchannel Index.
9		If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
10		set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND
11		does not signal the allocation of a R-PDCH, the base station
12		shall omit this field; otherwise, it shall include it and set it as
13		follows.
14		The base station shall set this field to the subchannel index
15		of the Forward Acknowledgment Channel (see [2]). The base
16		station should not use FOR_ACKSCH_INDEX = 0, 1, 2, 96, 97,
17		or 98.
18	FOR_RCCH_INCL	- Forward Rate Control Subchannel included flag.
19		If FOR_PDCH_INCL is set to '0', or if FOR_RCCH_ASSIGNED
20		is omitted, or if it is included and set to '0', the base station
21		shall omit this field; otherwise, the base station shall include
22		this field and set it as follows.
23		The base station shall set this field to '1' if a Forward Rate
24		Control Channel Subchannel is allocated on this pilot (see
25		[2]); otherwise, the base station shall set this field to '0'.
26		The base station shall set this field to a non zero value for at
27		least one pilot in this message.
28	FOR_RCCH_WALSH_INDEX	- Walsh Code for the Forward Rate Control Channel
29		Subchannel.
30		If FOR_RCCH_INCL is omitted, or if it is included and set to
31		'0', the base station shall omit this field; otherwise, the base
32		station shall include this field and set it as follows.
33		The base station shall set this field to the Walsh code of the
34		Forward Rate Control Channel Subchannel (see [2]).
35	FOR_RCSCH_INDEX	- Forward Rate Control Subchannel.
36		If FOR_RCCH_INCL is omitted, or if it is included and set to
37		'0', the base station shall omit this field; otherwise, the base
38		station shall include this field and set it as follows.
39		The base station shall set this field to the subchannel index
40		of the Rate Control Subchannel on this pilot (see [2]).
41		If FOR_RCCH_REPETITION is set to '00', the base station
42		shall set this field to a value in the range 0 to 95 inclusive. If
43		FOR_RCCH_REPETITION is set to '01', the base station shall
44		set this field to a value in the range 0 to 47 inclusive. If
45		FOR_RCCH_REPETITION is set to '10', the base station shall
46		set this field to a value in the range 0 to 23 inclusive.

1		The base station shall set this field to the subchannel offset
2		of the Rate Control Subchannel on this pilot.
3	NUM_FOR_GCH	- Number of Forward Grant Channels
4		If FOR_PDCH_INCL is set to '0', or if FOR_GCH_ASSIGNED is
5		omitted, or if it is included and set to '0', the base station
6		shall omit this field; otherwise, the base station shall include
7		this field and set it as follows.
8		The base station shall set this field to the number of assigned
9		Forward Grant Channels on this pilot. The base station shall
10		set this field to 0, 1, or 2.
11		The base station shall set this field to a non zero value for at
12		least one pilot in this message.
13	If FOR_PDCH_INCL is set to '1', and if FOR_GCH_ASSIGNED is included and set to '1', the	
14	base station shall include NUM_FOR_GCH occurrences of the field	
15	FOR_GCH_WALSH_INDEX:	
16	FOR_GCH_WALSH_INDEX	- Walsh Code for the Forward Grant Channel.
17		The base station shall set this field to the Walsh code of the
18		Forward Grant Channels (see [2]).
19	SYNC_ID_INCL	- Service Configuration synchronization identifier included
20		indicator.
21		The base station shall omit this field if the GRANTED_MODE
22		field is not set to '11'; otherwise, the base station shall
23		include this field and set it as follows:
24		If the mobile station is to use a stored service configuration
25		corresponding to SYNC_ID field included in this message, the
26		base station shall set this field to '1', otherwise, the base
27		station shall set this field to '0'.
28	SYNC_ID_LEN	- Service Configuration synchronization identifier length
29		indicator.
30		If the SYNC_ID_INCL field is not included or is included and
31		is set to '0', the base station shall omit this field; otherwise
32		the base station shall include this field and set it as follows:
33		The base station shall set this field to the length of the
34		SYNC_ID field included in this message.
35	SYNC_ID	- Service Configuration synchronization identifier.
36		If the SYNC_ID_INCL field is not included or is included and
37		is set to '0', the base station shall omit this field; otherwise,
38		the base station shall include this field and set it as follows:
39		The base station shall set this field to the Service
40		Configuration synchronization identifier corresponding to the
41		stored service configuration that the mobile station is to use.
42	CONFIG_MSG_SEQ	- Configuration message sequence number.



1			If the DIRECT_CH_ASSIGN_IND is set to '0', the base station
2			shall omit this field; otherwise the base station shall include
3			this field and set it as follows:
4			The base station shall set this field to CONFIG_SEQ
5			(see 3.6.2.2).
6	RTC_NOM_PWR	-	Reverse Traffic Channel Nominal Power.
7			If DIRECT_CH_ASSIGN_IND is set to '0', the base station shall
8			omit this field; otherwise, the base station shall include this
9			field and set it as follows:
10			The base station shall set this field to the value of the
11			nominal power correction to be used by the mobile station
12			when transmitting on the Reverse Traffic Channel after the
13			Direct Channel Assignment call setup procedure. The base
14			station shall set this field as a two's complement signed
15			binary number, in units of 1 dB.
16	RESPOND_IND	-	Response requested indicator.
17			If DIRECT_CH_ASSIGN_IND is set to '0', the base station shall
18			omit this field; otherwise, the base station shall include this
19			field and set it as follows:
20			The base station shall set this field to '1' if the mobile station
21			is to respond to the <i>Extended Channel Assignment Message</i>
22			with a <i>Page Response Message</i> or <i>Reconnect Message</i> in
23			unassured mode on the r-csch; otherwise, the base station
24			shall set this field to '0' to indicate that the mobile station is
25			not to respond on the r-csch.
26	DIRECT_CH_ASSIGN_RECOVER_IND	-	Direct Channel Assignment Recover Indicator.
27			If DIRECT_CH_ASSIGN_IND is set to '0', the base station shall
28			omit this field; otherwise, the base station shall include this
29			field and set it as follows:
30			The base station shall set this field to '1' if the mobile station
31			is to transmit a <i>Page Response Message</i> or a <i>Reconnect</i>
32			<i>Message</i> after failing to acquire the forward traffic channel
33			assigned in this message; otherwise, the base station shall
34			set this field to '0'.
35	EARLY_RL_TRANSMIT_IND	-	Early Reverse Link Transmission indicator.
36			If FOR_CPCCH_RATE is included and not set to '00', the base
37			station shall omit this field; otherwise, the base station shall
38			include this field and set it as follows.
39			The base station shall set this field to '1' if, upon channel
40			assignment, the mobile station is to enable the transmitter
41			prior to receiving sufficient signal quality on the forward link;
42			otherwise, the base station shall set this field to '0'.

1	FUNDICATED_BCMC_IND	- BCMC on fundicated channel Indicator.
2		If the channel assignment in this message contains a
3		Forward Fundicated Channel used for BCMC transmission,
4		the base station shall set this field to '1'; otherwise, the base
5		station shall set this field to '0'.
6	ADD_PLCM_FOR_FCH_INCL	- Additional PLCM for forward FCH included indicator.
7		If the FUNDICATED_BCMC_IND field is set to '0', the base
8		station shall omit this field; otherwise, the base station shall
9		include this field and set it as follows:
10		If the additional PLCM for forward FCH is included in this
11		message, the base station shall set this field to '1'; otherwise,
12		the base station shall set this field to '0'.
13	ADD_PLCM_FOR_FCH_TYPE	- The Additional Public Long Code Mask for forward FCH
14		type indicator.
15		If ADD_PLCM_FOR_FCH_INCL is not included or is included
16		and is set to '0', the base station shall omit this field;
17		otherwise, the base station shall include this field and set it
18		as follows.
19		The base station shall set this field to '1' to indicate PLCM
20		specified by the base station. The field value '0' is reserved.
21	ADD_PLCM_FOR_FCH_39	- The 39 LSB bits of the additional Public Long Code Mask
22		for forward FCH.
23		If ADD_PLCM_FOR_FCH_TYPE field is included and is set to
24		'1', the base station shall include this field and set it to the 39
25		least significant bits of the public long code mask used by the
26		mobile station; otherwise, the base station shall omit this
27		field.
28	FIXED_PREAMBLE_TRANSMIT_IND	- Fixed Number of Preambles Transmission
29		Indicator.
30		If GRANTED_MODE is not set to '11', the base station shall
31		omit this field; otherwise, the base station shall include this
32		field and set it as follows:
33		The base station shall set this field to '1' to indicate if the
34		mobile station is allowed to enter <i>Traffic Channel Substate</i> of
35		the <i>Mobile Station Control on the Traffic Channel State</i> after
36		sending the number of preambles specified in this message;
37		otherwise the base station shall set this field to '0'.
38		If any channel assigned by this message is to use Radio
39		Configuration 1 or 2 (see [2]), then the base station shall set
40		this field to '0'.
41	FIXED_NUM_PREAMBLE	- Traffic Channel preamble length.

1			If <code>FIXED_PREAMBLE_TRANSMIT_IND</code> is not included, or is
2			included and set to '0', the base station shall omit this field;
3			otherwise, the base station shall include this field and set it
4			to the minimum length of Traffic Channel preamble that the
5			mobile station is to transmit, before entering the <i>Traffic</i>
6			<i>Channel Substate</i> of the <i>Mobile Station Control on the Traffic</i>
7			<i>Channel State</i> without having received a <i>forward dedicated</i>
8			<i>channel acquired</i> indication from Layer 2 (see [4]).
9			The base station shall set <code>FIXED_NUM_PREAMBLE</code> to the
10			value shown in Table 3.7.2.3.2.21-13 corresponding to the
11			Traffic Channel preamble length in ms.
12	<code>TX_PWR_LIMIT_INCL</code>	-	Transmit Power Limit inclusion for the current base station
13			If the transmit power limit field is included in this message,
14			the base station shall set this field to '1'; otherwise, the base
15			station shall set this field to '0'.
16	<code>TX_PWR_LIMIT</code>	-	Transmit Power Limit for the current base station
17			If <code>TX_PWR_LIMIT_INCL</code> is set to '0', the base station shall
18			omit this field; otherwise, the base station shall include this
19			field and set to as follows.
20			The base station shall set this field to thirty dB more than
21			transmit power limit in dBm EIRP, in steps of 1 dB. This field
22			can take the values 30 to 53 corresponding to maximum
23			transmit power values 0 dBm to 23 dBm.
24			

## 1 3.7.2.3.2.22 General Neighbor List Message

## 2 MSG\_TAG: GNLM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
PILOT_INC	4
NGHBR_SRCH_MODE	2
NGHBR_CONFIG_PN_INCL	1
FREQ_FIELDS_INCL	1
USE_TIMING	1
GLOBAL_TIMING_INCL	0 or 1
GLOBAL_TX_DURATION	0 or 4
GLOBAL_TX_PERIOD	0 or 7
NUM_NGHBR	6

NUM\_NGHBR occurrences of the following record:

{ (NUM\_NGHBR)

NGHBR_CONFIG	0 or 3
NGHBR_PN	0 or 9
SEARCH_PRIORITY	0 or 2
SRCH_WIN_NGHBR	0 or 4
FREQ_INCL	0 or 1
NGHBR_BAND	0 or 5
NGHBR_FREQ	0 or 11
TIMING_INCL	0 or 1
NGHBR_TX_OFFSET	0 or 7
NGHBR_TX_DURATION	0 or 4
NGHBR_TX_PERIOD	0 or 7

} (NUM\_NGHBR)

NUM_ANALOG_NGHBR	3
------------------	---

NUM\_ANALOG\_NGHBR occurrences of the following record:

{ (NUM\_ANALOG\_NGHBR)

(continues on next page)

<b>Field</b>	<b>Length (bits)</b>
BAND_CLASS	5
SYS_A_B	2

} (NUM\_ANALOG\_NGHR)

SRCH_OFFSET_INCL	1
------------------	---

NUM\_NGHR occurrences of the following record:

{ (NUM\_NGHR)

ADD_PILOT_REC_INCL	1
NGHR_PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$
SRCH_OFFSET_NGHR	0 or 3

} (NUM\_NGHR)

BCCH_IND_INCL	1
---------------	---

If BCCH\_IND\_INCL is set to '1', NUM\_NGHR occurrences of the following record:

{ (NUM\_NGHR)

BCCH_SUPPORT	0 or 1
--------------	--------

} (NUM\_NGHR)

RESQ_ENABLED	1
RESQ_DELAY_TIME	0 or 6
RESQ_ALLOWED_TIME	0 or 6
RESQ_ATTEMPT_TIME	0 or 6
RESQ_CODE_CHAN	0 or 11
RESQ_QOF	0 or 2
RESQ_MIN_PERIOD_INCL	0 or 1
RESQ_MIN_PERIOD	0 or 5
RESQ_NUM_TOT_TRANS_INCL	0 or 1
RESQ_NUM_TOT_TRANS_20MS	0 or 4
RESQ_NUM_TOT_TRANS_5MS	0 or 4

(continues on next page)

Field	Length (bits)
RESQ_NUM_PREAMBLE_RC1_RC2	0 or 3
RESQ_NUM_PREAMBLE	0 or 3
RESQ_POWER_DELTA	0 or 3

If RESQ\_ENABLED is set to '1', NUM\_NGHBR occurrences of the following one-field record:

{ (NUM\_NGHBR)

NGHBR_RESQ_CONFIGURED	1
-----------------------	---

} (NUM\_NGHBR)

{ (NUM\_NGHBR)

NGHBR_PDCH_SUPPORTED	1
----------------------	---

} (NUM\_NGHBR)

HRPD_NGHBR_INCL	1
NUM_HRPD_NGHBR	0 or 6

NUM\_HRPD\_NGHBR occurrences of the following subrecord:

{ (NUM\_HRPD\_NGHBR)

HRPD_NGHBR_REC_LEN	8
NGHBR_PN	9
NGHBR_FREQ_INCL	1
NGHBR_BAND	0 or 5
NGHBR_FREQ	0 or 11
PN_ASSOCIATION_IND	1
DATA_ASSOCIATION_IND	1
HRPD_NGHBR_REC_RESERVED	0-7 (as needed)

} (NUM\_HRPD\_NGHBR)

- 1
- 2           PILOT\_PN   -   Pilot PN sequence offset index.
- 3                       The base station shall set this field to the pilot PN sequence
- 4                       offset for this base station, in units of 64 PN chips.
- 5   CONFIG\_MSG\_SEQ   -   Configuration message sequence number.
- 6                       The base station shall set this field to CONFIG\_SEQ
- 7                       (see 3.6.2.2).
- 8           PILOT\_INC   -   Pilot PN sequence offset index increment.
- 9                       A mobile station searches for Remaining Set pilots at pilot PN
- 10                      sequence index values that are multiples of this value.

- 1 The base station shall set this field to the pilot PN sequence  
 2 increment, in units of 64 PN chips, that mobile stations are to  
 3 use for searching the Remaining Set. The base station  
 4 should set this field to the largest increment such that the  
 5 pilot PN sequence offsets of all its neighbor base stations are  
 6 integer multiples of that increment.
- 7 The base station shall set this field to a value in the range 1  
 8 to 15 inclusive.
- 9 NGHBR\_SRCH\_MODE - Search mode.
- 10 The base station shall set this field to the value shown in  
 11 Table 3.7.2.3.2.22-1 corresponding to the search mode.

12

**Table 3.7.2.3.2.22-1. Search Mode Field**

<b>Value (binary)</b>	<b>Description</b>
00	No search priorities or search windows
01	Search priorities
10	Search windows
11	Search windows and search priorities

13

- 14 NGHBR\_CONFIG\_PN\_INCL - Neighbor configuration and PN offset included.  
 15 If neighbor configuration and PN offset fields are included in  
 16 this message, the base station shall set this field to '1';  
 17 otherwise, the base station shall set this field to '0'.
- 18 FREQ\_FIELDS\_INCL - Frequency fields included.  
 19 If frequency fields are included in this message, the base  
 20 station shall set this field to '1'; otherwise, the base station  
 21 shall set this field to '0'.
- 22 USE\_TIMING - Use timing indicator.  
 23 If base station timing information is included for neighbor  
 24 base stations, the base station shall set this field to '1';  
 25 otherwise, the base station shall set this field to '0'.
- 26 GLOBAL\_TIMING\_INCL - Global timing included.  
 27 If USE\_TIMING is set to '1', the base station shall include the  
 28 field GLOBAL\_TIMING\_INCL and set this field as described  
 29 below; otherwise, the base station shall omit this field.
- 30 If base station timing information is included globally for all  
 31 neighbor base stations with TIMING\_INCL equal to '1', the  
 32 base station shall set this field to '1'; otherwise, the base  
 33 station shall set this field to '0'.
- 34 GLOBAL\_TX\_DURATION - Global neighbor transmit time duration.

1 If GLOBAL\_TIMING\_INCL is included and is set to '1', the  
2 base station shall include the field GLOBAL\_TX\_DURATION  
3 and shall set this field as described below; otherwise, the  
4 base station shall omit this field.

5 The base station shall set this field to the duration of the  
6 base station transmit window, during each period, in units of  
7 80 ms. The base station should set this field to a value of 3  
8 or greater.

9 GLOBAL\_TX\_PERIOD - Global neighbor transmit time period.

10 If GLOBAL\_TIMING\_INCL is included and is set to '1', the  
11 base station shall include the field GLOBAL\_TX\_PERIOD and  
12 shall set this field as described below; otherwise, the base  
13 station shall omit this field.

14 The base station shall set this field to duration of the period,  
15 in units of 80 ms.

16 NUM\_NGHR - Number of neighbor pilot PN sequences.

17 The base station shall set this field to the number of  
18 neighbors included in the message.

19 The base station shall include one occurrence of the following record for each pilot that a  
20 mobile station is to place in its Neighbor Set. The base station shall use the same order for  
21 the following record in this message as is used for pilots which are listed in the *Neighbor*  
22 *List Message* or *Extended Neighbor List Message*. Specifically, the  $i^{th}$  occurrence of the  
23 following record shall correspond the  $i^{th}$  pilot in the *Neighbor List Message* or in the  
24 *Extended Neighbor List Message*.

25

26 NGHBR\_CONFIG - Neighbor configuration.

27 If NGHBR\_CONFIG\_PN\_INCL = '1', the base station shall set  
28 this field to the value shown in Table 3.7.2.3.2.22-2  
29 corresponding to the configuration of this neighbor;  
30 otherwise, the base station shall omit this field.

31



1

**Table 3.7.2.3.2.22-2. Neighbor Configuration Field**

<b>Value (binary)</b>	<b>Neighbor Configuration</b>
000	<p>The neighbor base station has the same number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment corresponding to this current CDMA frequency assignment with the same number of Paging Channels, and the neighbor CDMA frequency is given as follows:</p> <ul style="list-style-type: none"> <li>• If <b>FREQ_INCL</b> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</li> <li>• If <b>FREQ_INCL</b> equals '1' for this record, this corresponding CDMA frequency assignment is given by <b>NGHBR_BAND</b> and <b>NGHBR_FREQ</b>.</li> </ul> <p>The position of the neighbor CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p>
001	<p>The neighbor base station has the same number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment corresponding to this current CDMA frequency assignment but possibly with a different number of Paging Channels, and the neighbor CDMA frequency is given as follows:</p> <ul style="list-style-type: none"> <li>• If <b>FREQ_INCL</b> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</li> <li>• If <b>FREQ_INCL</b> equals '1' for this record, this corresponding CDMA frequency assignment is given by <b>NGHBR_BAND</b> and <b>NGHBR_FREQ</b>.</li> </ul> <p>The position of the neighbor CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p> <p>This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel.</p>

010	<p>The neighbor base station may have a different number of frequencies having Paging Channels as the current base station.</p> <p>The neighbor base station has a Primary Paging Channel on the following CDMA frequency:</p> <ul style="list-style-type: none"> <li>• If <b>FREQ_INCL</b> equals '0' for this record, the neighbor base station has a Primary Paging Channel on the first CDMA Channel listed in the <i>CDMA Channel List Message</i> or the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</li> <li>• If <b>FREQ_INCL</b> equals '1' for this record, the neighbor base station has a Primary Paging Channel on the CDMA frequency assignment given by <b>NGHBR_BAND</b> and <b>NGHBR_FREQ</b>.</li> </ul>
011	<p>The neighbor base station configuration is unknown but the neighbor base station has a Pilot Channel on the following frequency:</p> <ul style="list-style-type: none"> <li>• If <b>FREQ_INCL</b> equals '0' for this record, the neighbor CDMA frequency assignment is the same as the current CDMA frequency assignment and has a Pilot Channel.</li> <li>• If <b>FREQ_INCL</b> equals '1' for this record, the CDMA frequency assignment given by <b>NGHBR_BAND</b> and <b>NGHBR_FREQ</b> has a Pilot Channel.</li> </ul>
100-111	Reserved.

1

2           **NGHBR\_PN**     -   Neighbor pilot PN sequence offset index.

3                               If **NGHBR\_CONFIG\_PN\_INCL** = '1', the base station shall set  
4                               this field to the pilot PN sequence offset for this neighbor, in  
5                               units of 64 PN chips; otherwise, the base station shall omit  
6                               this field.

7           **SEARCH\_PRIORITY**   -   Pilot Channel search priority.

8                               If **NGHBR\_SRCH\_MODE** = '01' or **NGHBR\_SRCH\_MODE** =  
9                               '11', then the base station shall set this field to the search  
10                              priority for the Pilot Channel corresponding to **NGHBR\_PN**.  
11                              The base station shall set the search priority as shown in  
12                              Table 3.7.2.3.2.22-3. If **NGHBR\_SRCH\_MODE** is set to any  
13                              other value, the base station shall omit this field.  
14

1

**Table 3.7.2.3.2.22-3. Search Priority Field**

<b>Value (binary)</b>	<b>Search Priority</b>
00	Low
01	Medium
10	High
11	Very High

2

3

**SRCH\_WIN\_NGHBR** - Neighbor pilot channel search window size.

4

5

6

7

8

If **NGHBR\_SRCH\_MODE** = '10' or '11', then the base station shall set this field to the value shown in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for this neighbor. If **NGHBR\_SRCH\_MODE** is set to any other value, the base station shall omit this field.

9

**FREQ\_INCL** - Frequency included indicator.

10

11

12

If **FREQ\_FIELDS\_INCL** is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

13

14

15

16

17

If the **NGHBR\_BAND** and **NGHBR\_FREQ** fields are included for this neighbor base station, the base station shall set this bit to '1'. If the **NGHBR\_BAND** and **NGHBR\_FREQ** fields are not included in this assignment record, the base station shall set this bit to '0'.

18

**NGHBR\_BAND** - Neighbor band class.

19

20

21

22

23

24

25

If the **FREQ\_INCL** bit is included and is set to '1', the base station shall set this field to the CDMA band class, as specified in [30], corresponding to the CDMA frequency assignment for the CDMA Channel containing the Paging Channel the mobile station is to search. If the **FREQ\_INCL** bit is omitted or is set to '0', the base station shall omit this field.

26

**NGHBR\_FREQ** - Neighbor frequency assignment.

27

28

If the **FREQ\_INCL** bit is omitted or is set to '0', the base station shall omit this field.

29

30

31

32

33

34

35

If the **FREQ\_INCL** bit is included and is set to '1' and the corresponding neighbor has a 1X neighbor pilot record type, the base station shall set this field to the CDMA Channel number, in the specified CDMA band class, corresponding to the CDMA frequency assignment for the CDMA Channel containing the Paging Channel the mobile station is to search.

1			If the <code>FREQ_INCL</code> bit is included and is set to '1' and the
2			corresponding neighbor has a 3X neighbor pilot record type,
3			the base station shall set this field to the CDMA Channel
4			number, in the specified CDMA band class, corresponding to
5			the center SR3 frequency assignment containing the Paging
6			Channel the mobile station is to search.
7	<code>TIMING_INCL</code>	-	Timing included indicator.
8			If <code>USE_TIMING</code> is set to '1', the base station shall include the
9			field <code>TIMING_INCL</code> and set this field as described below;
10			otherwise, the base station shall omit this field.
11			If base station timing information is included for this
12			neighbor base station, the base station shall set this field to
13			'1'; otherwise, the base station shall set this field to '0'.
14	<code>NGHBR_TX_OFFSET</code>	-	Neighbor transmit time offset.
15			If <code>TIMING_INCL</code> is included and is set to '1', the base station
16			shall include the field <code>NGHBR_TX_OFFSET</code> and set this field
17			as described below; otherwise, the base station shall omit
18			this field.
19			The base station shall set this field to the time offset, in units
20			of 80 ms, from the beginning of the neighbor timing period to
21			the beginning of the first base station transmit window within
22			the period. The beginning of the neighbor timing period
23			occurs when $\lfloor t/4 \rfloor \bmod (16384) = 0$ .
24	<code>NGHBR_TX_DURATION</code>	-	Neighbor transmit time duration.
25			If <code>TIMING_INCL</code> is included and is set to '1' and
26			<code>GLOBAL_TIMING_INCL</code> is set to '0', the base station shall
27			include the field <code>NGHBR_TX_DURATION</code> and set this field as
28			described below; otherwise, the base station shall omit this
29			field.
30			The base station shall set this field to duration of the base
31			station transmit window, during each period, in units of
32			80 ms. The base station should set this field to a value of 3
33			or greater.
34	<code>NGHBR_TX_PERIOD</code>	-	Neighbor transmit time period.
35			If <code>TIMING_INCL</code> is included and is set to '1' and
36			<code>GLOBAL_TIMING_INCL</code> is set to '0', the base station shall
37			include the field <code>NGHBR_TX_PERIOD</code> and set this field as
38			described below; otherwise, the base station shall omit this
39			field.
40			The base station shall set this field to duration of the period,
41			in units of 80 ms.
42	<code>NUM_ANALOG_NGHBR</code>	-	Number of neighboring analog systems.
43			The base station shall set this field to the number of
44			neighboring analog systems included in the message. The
45			base station shall set this field to '000'.
46			

The base station shall include one occurrence of the following record for each neighboring analog system included in the message:

**BAND\_CLASS** - Band class.

The base station shall set this field to the CDMA band class, as specified in [30].

**SYS\_A\_B** - System A/B.

If **BAND\_CLASS** is set to '00000' or to '00011', the base station shall set this field to the value shown in Table 3.7.2.3.2.22-4 corresponding to the availability of neighboring analog systems; otherwise, the base station shall set this field to '00'.

**Table 3.7.2.3.2.22-4. Cellular System A/B**

Cellular System A/B	Value
RESERVED	00
System A	01
System B	10
System A and B	11

**SRCH\_OFFSET\_INCL** - Neighbor pilot channel search window offset included.

If **NGHBR\_SRCH\_MODE** = '10' or '11' and if the **SRCH\_OFFSET\_NGHR** field is included in the following records, the base station shall set this bit to '1'; otherwise, the base station shall set this bit to '0'.

The base station shall include one occurrence of the following record for each pilot that a mobile station is to place in its Neighbor Set. The base station shall use the same order for the following record in this message as is used for pilots which are listed in the *Neighbor List Message* or *Extended Neighbor List Message*. Specifically, the  $i^{th}$  occurrence of the following record shall correspond the  $i^{th}$  pilot in the *Neighbor List Message* or in the *Extended Neighbor List Message*.

**ADD\_PILOT\_REC\_INCL** - Additional pilot information included indicator.

The base station shall set this field to '1' if additional pilot information listed in the **NGHBR\_PILOT\_REC\_TYPE** and **RECORD\_LEN** fields are included. The base station shall set this field to '0' if the corresponding pilot is the common pilot and there is no additional pilot information included.

**NGHBR\_PILOT\_REC\_TYPE** - Neighbor Pilot record type

If **ADD\_PILOT\_REC\_INCL** is set to '1', the base station shall set this field to the **NGHBR\_PILOT\_REC\_TYPE** value shown in Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record specified by this record.

1

**Table 3.7.2.3.2.22-5. Neighbor Pilot Record Types**

<b>Description</b>	<b>NGHBR_PILOT_REC_TYPE (binary)</b>
1X Common Pilot with Transmit Diversity	000
1X Auxiliary Pilot	001
1X Auxiliary Pilot with Transmit Diversity	010
3X Common Pilot	011
3X Auxiliary Pilot	100
All other NGHBR_PILOT_REC_TYPE values are reserved	

2

3

4

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

5

RECORD\_LEN - Pilot record length.

6

If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

7

8

9

10

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

11

Type-specific fields - Pilot record type-specific fields.

12

If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall include type-specific fields based on the NGHBR\_PILOT\_REC\_TYPE of this pilot record.

13

14

15

16

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

17

18

If NGHBR\_PILOT\_REC\_TYPE is equal to '000', the base station shall include the following fields:

19

20

<b>Field</b>	<b>Length (bits)</b>
TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	4

21

22

TD\_POWER\_LEVEL - TD Transmit Power Level.

- 1 The base station shall set this field to the TD transmit power  
 2 level relative to that of the Forward Pilot Channel as specified  
 3 in Table 3.7.2.3.2.26-4.
- 4 **TD\_MODE** - Transmit Diversity mode.
- 5 The base station shall set this field to the Transmit Diversity  
 6 mode, as specified in Table 3.7.2.3.2.26-3.
- 7 **RESERVED** - Reserved bits.
- 8 The base station shall set this field to '0000'.
- 9 If NGHBR\_PILOT\_REC\_TYPE is equal to '001', the base station shall include the following  
 10 fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

- 11
- 12 **QOF** - Quasi-orthogonal function index.
- 13 The base station shall set this field to the index of the Quasi-  
 14 orthogonal function (see [2]).
- 15 **WALSH\_LENGTH** - Length of the Walsh Code.
- 16 The base station shall set this field to the WALSH\_LENGTH  
 17 value shown in Table 3.7.2.3.2.22-6 corresponding to the  
 18 length of the Walsh code for the pilot that is used in as the  
 19 Auxiliary pilot.

**Table 3.7.2.3.2.22-6. Walsh Code Length**

WALSH_LENGTH (binary)	Length of the Walsh Code
'000'	64
'001'	128
'010'	256
'011'	512
'100' – '111'	Reserved

- 21
- 22 **AUX\_PILOT\_WALSH** - Walsh Code for the Auxiliary Pilot.
- 23 The base station shall set this field to the Walsh code  
 24 corresponding to the Auxiliary pilot.
- 25 **RESERVED** - Reserved bits.

1 The base station shall set all the bits of this field to '0' to  
2 make the entire record octet-aligned.

3 If NGHBR\_PILOT\_REC\_TYPE is equal to '010', the base station shall include the following  
4 fields:

5

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_WALSH	WALSH_LENGTH+6
AUX_TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	0 to 7 (as needed)

6

7 QOF - Quasi-orthogonal function index for the Auxiliary Transmit  
8 Diversity Pilot.

9 The base station shall set this field to the index of the Quasi-  
10 orthogonal function (see [2]).

11 WALSH\_LENGTH - Length of the Walsh Code.

12 The base station shall set this field to the WALSH\_LENGTH  
13 value shown in 3.7.2.3.2.22-6 corresponding to the length of  
14 the Walsh code for the pilots that are used as Auxiliary pilot  
15 in the transmit diversity mode.

16 AUX\_WALSH - Walsh Code for the Auxiliary Pilot.

17 The base station shall set this field to the Walsh code  
18 corresponding to the Auxiliary Pilot.

19 AUX\_TD\_POWER\_LEVEL - Auxiliary Transmit Diversity Pilot Power Level.

20 The base station shall set this field to the Auxiliary Transmit  
21 Diversity Pilot transmit power level relative to that of the  
22 Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.



**Table 3.7.2.3.2.22-7. Auxiliary Transmit Diversity Pilot  
Transmit Power Level**

<b>AUX_TD_POWER_LEVEL</b>	<b>Transmit Power Level</b>
00	9 dB below the Auxiliary Pilot Channel transmit power
01	6 dB below the Auxiliary Pilot Channel transmit power
10	3 dB below the Auxiliary Pilot Channel transmit power
11	Same as the Auxiliary Pilot Channel transmit power

**TD\_MODE** - Transmit Diversity mode.

The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.

**RESERVED** - Reserved bits.

The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.

If NGHBR\_PILOT\_REC\_TYPE is equal to '011', the base station shall include the following fields:

<b>Field</b>	<b>Length (bits)</b>
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

**SR3\_PRIMARY\_PILOT** - Primary SR3 pilot.

The base station shall set this field to the value shown in Table 3.7.2.3.2.26-5 corresponding to the position of the primary SR3 pilot.

**SR3\_PILOT\_POWER1** - The primary SR3 pilot power level relative to that of the pilot on the lower frequency of the two remaining SR3 frequencies.

The base station shall set this field to the value shown in Table 3.7.2.3.2.26-6 corresponding to the power level of the primary pilot with respect to the pilot on the lower frequency of the two remaining SR3 frequencies.

**SR3\_PILOT\_POWER2** - The primary SR3 pilot power level relative to that of the pilot on the higher frequency of the two remaining SR3 frequencies.

The base station shall set this field to the value shown in Table 3.7.2.3.2.26-6 corresponding to the power level of the primary pilot with respect to the pilot on the higher frequency of the two remaining SR3 frequencies.

- 1 If NGHBR\_PILOT\_REC\_TYPE is equal to '100', the base station shall include the following  
 2 fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
ADD_INFO_INCL1	1
QOF1	0 or 2
WALSH_LENGTH1	0 or 3
AUX_PILOT_WALSH1	0 or WALSH_LENGTH1+6
ADD_INFO_INCL2	1
QOF2	0 or 2
WALSH_LENGTH2	0 or 3
AUX_PILOT_WALSH2	0 or WALSH_LENGTH2+6
RESERVED	0 – 7 (as needed)

- 3 SR3\_PRIMARY\_PILOT – Primary SR3 pilot.  
 4 The base station shall set this field to the value shown in  
 5 Table 3.7.2.3.2.26-5 corresponding to the position of the  
 6 primary SR3 pilot.
- 7 SR3\_PILOT\_POWER1 – The primary SR3 pilot power level relative to that of the pilot  
 8 on the lower frequency of the two remaining SR3 frequencies.  
 9 The base station shall set this field to the value shown in  
 10 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 11 primary pilot with respect to the pilot on the lower frequency  
 12 of the two remaining SR3 frequencies.
- 13 SR3\_PILOT\_POWER2 – The primary SR3 pilot power level relative to that of the pilot  
 14 on the higher frequency of the two remaining SR3  
 15 frequencies.  
 16 The base station shall set this field to the value shown in  
 17 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 18 primary pilot with respect to the pilot on the higher frequency  
 19 of the two remaining SR3 frequencies.
- 20 QOF – Quasi-orthogonal function index.

1		The base station shall set this field to the index of the Quasi-
2		orthogonal function (see [2]) on the frequency of the primary
3		pilot.
4	WALSH_LENGTH	- Length of the Walsh Code.
5		The base station shall set this field to the WALSH_LENGTH
6		value shown in Table 3.7.2.3.2.22-6 corresponding to the
7		length of the Walsh code for the pilot that is used as the
8		Auxiliary pilot on the frequency of the primary pilot.
9	AUX_PILOT_WALSH	- Walsh Code for the Auxiliary Pilot.
10		The base station shall set this field to the Walsh code
11		corresponding to the Auxiliary pilot on the frequency of the
12		primary pilot.
13	ADD_INFO_INCL1	- Additional information included for the pilot on the lower
14		frequency of the two remaining SR3 frequencies.
15		If the additional information for the pilot on the lower
16		frequencies of the two remaining SR3 frequencies is the same
17		as pilot on the primary frequency, the base station shall set
18		this field to '0'; otherwise, the base station shall set this field
19		to '1'.
20	QOF1	- Quasi-orthogonal function index for the pilot on the lower
21		frequency of the two remaining SR3 frequencies.
22		If ADD_INFO_INCL1 is set to '0', the base station shall omit
23		this field; otherwise, the base station shall set this field as
24		follows:
25		The base station shall set this field to the index of the Quasi-
26		orthogonal function (see [2]) on the lower frequency of the two
27		remaining SR3 frequencies.
28	WALSH_LENGTH1	- Length of the Walsh Code for the pilot on the lower frequency
29		of the two remaining SR3 frequencies.
30		If ADD_INFO_INCL1 is set to '0', the base station shall omit
31		this field; otherwise, the base station shall set this field as
32		follows:
33		The base station shall set this field to the WALSH_LENGTH
34		value shown in Table 3.7.2.3.2.22-6 corresponding to the
35		length of the Walsh code for the pilot that is used as the
36		Auxiliary pilot on the lower frequency of the two remaining
37		SR3 frequencies.
38	AUX_PILOT_WALSH1	- Walsh Code for the Auxiliary Pilot on the lower frequency of
39		the two remaining SR3 frequencies.
40		If ADD_INFO_INCL1 is set to '0', the base station shall omit
41		this field; otherwise, the base station shall set this field as
42		follows:
43		The base station shall set this field to the Walsh code
44		corresponding to the Auxiliary pilot on the lower frequency of
45		the two remaining SR3 frequencies.

1	ADD_INFO_INCL2	-	Additional information included for the pilot on the higher frequency of the two remaining SR3 frequencies.
2			
3			If the additional information for the pilot on the higher frequencies of the two remaining SR3 frequencies is the same as pilot on the primary frequency, the base station shall set this field to '0'; otherwise, the base station shall set this field to '1'.
4			
5			
6			
7			
8	QOF2	-	Quasi-orthogonal function index for the pilot on the higher frequency of the two remaining SR3 frequencies.
9			
10			If ADD_INFO_INCL2 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
11			
12			
13			The base station shall set this field to the index of the Quasi-orthogonal function (see [2]) on the higher frequency of the two remaining SR3 frequencies.
14			
15			
16	WALSH_LENGTH2	-	Length of the Walsh Code for the pilot on the higher frequency of the two remaining SR3 frequencies.
17			
18			If ADD_INFO_INCL2 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
19			
20			
21			The base station shall set this field to the WALSH_LENGTH value shown in Table 3.7.2.3.2.22-6 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot on the higher frequency of the two remaining SR3 frequencies.
22			
23			
24			
25			
26	AUX_PILOT_WALSH2	-	Walsh Code for the Auxiliary Pilot on the higher frequency of the two remaining SR3 frequencies.
27			
28			If ADD_INFO_INCL2 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
29			
30			
31			The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the higher frequency of the two remaining SR3 frequencies.
32			
33			
34	RESERVED	-	Reserved bits.
35			The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.
36			
37	SRCH_OFFSET_NGHBR	-	Neighbor pilot channel search window size offset.
38			If SRCH_OFFSET_INCL equals to '1', then the base station shall set this field to the value shown in Table 2.6.6.2.1-2 corresponding to the search window offset to be used by mobile stations for this neighbor; otherwise, the base station shall omit this field.
39			
40			
41			
42			
43	BCCH_IND_INCL	-	BCCH support included indicator.
44			If the BCCH_SUPPORT field is included in the following records, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
45			
46			

If BCCH\_IND\_INCL is set to '1', the base station shall include one occurrence of the following field for each pilot that a mobile station is to place in its Neighbor Set. The base station shall use the same order for the following record in this message as is used for pilots which are listed in the *Neighbor List Message* or *Extended Neighbor List Message*. Specifically, the  $i^{th}$  occurrence of the following record shall correspond the  $i^{th}$  pilot in the *Neighbor List Message* or in the *Extended Neighbor List Message*.

BCCH\_SUPPORT - BCCH support indicator.

If this neighbor base station supports Broadcast Control Channel, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

RESQ\_ENABLED - Call rescue feature enabled indicator.

The base station shall set this field to '1' if the call rescue feature is enabled and there is at least one occurrence of NGHBR\_RESQ\_CONFIGURED set to '1' in this message; otherwise, the base station shall set this field to '0'.

RESQ\_DELAY\_TIME - Call rescue delay timer value.

If RESQ\_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the call rescue delay timer to be used by the mobile station, in units of 80 ms.

RESQ\_ALLOWED\_TIME - Call rescue allowed timer value.

If RESQ\_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the call rescue allowed timer to be used by the mobile station, in units of 80 ms.

RESQ\_ATTEMPT\_TIME - Call rescue attempt timer value.

If RESQ\_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the call rescue attempt timer to be used by the mobile station, in units of 40 ms.

RESQ\_CODE\_CHAN - Code channel index for the Rescue Channel.

If RESQ\_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

1			The base station shall set this field to the code channel index
2			(see [2]) that the mobile station is to use on the Forward
3			Fundamental Channel when attempting Call Rescue Soft
4			Handoff with the associated neighbor pilot.
5			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
6			station shall set this field in the range 1 to 63 inclusive. If
7			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
8			station shall set this field in the range 1 to 127 inclusive. If
9			Radio Configuration 7 or 9 is used, the base station shall set
10			this field in the range 1 to 255 inclusive.
11	RESQ_QOF	-	Quasi-Orthogonal Function mask identifier for the Rescue
12			Channel.
13			If RESQ_ENABLED is set to '0', the base station shall omit
14			this field; otherwise, the base station shall include this field
15			and set it as follows:
16			The base station shall set this field to the quasi-orthogonal
17			function mask identifier (see [2]) that the mobile station is to
18			use on the Forward Fundamental Channel when attempting
19			Call Rescue Soft Handoff with the associated neighbor pilot.
20	RESQ_MIN_PERIOD_INCL	-	Minimum time between consecutive rescues included
21			indicator.
22			If RESQ_ENABLED is set to '0', the base station shall omit
23			this field; otherwise, the base station shall include this field
24			and set it as follows:
25			The base station shall set this field to '1' if the
26			RESQ_MIN_PERIOD field is included in this message;
27			otherwise, the base station shall set this field to '0'.
28			This field is set to '0' if there is no minimum time restriction
29			between consecutive rescues.
30	RESQ_MIN_PERIOD	-	Minimum time between consecutive rescues.
31			If RESQ_MIN_PERIOD_INCL is not included, or is included
32			and set to '0', the base station shall omit this field; otherwise,
33			the base station shall include this field and set it as follows:
34			The base station shall set this field to one less than the
35			minimum time after a successful call rescue (i.e. receipt of
36			N <sub>3m</sub> good frames by the mobile station after the rescue
37			attempt timer is enabled) before any subsequent call rescue
38			attempts can be initiated, in units of 2 seconds.
39	RESQ_NUM_TOT_TRANS_INCL	-	The required number of transmissions before
40			declaring L2 Acknowledgment Failure when Call Rescue is
41			enabled included indicator.
42			If RESQ_ENABLED is set to '0', the base station shall omit
43			this field; otherwise, the base station shall include this field
44			and set it as follows:

1 If the required number of transmissions of a regular PDU and  
2 mini PDU before declaring L2 Acknowledgment Failure when  
3 Call Rescue is enabled is included in this message, the base  
4 station shall set this field to '1'; otherwise, the base station  
5 shall set this field to '0'.

6 RESQ\_NUM\_TOT\_TRANS\_20MS – The required number of transmissions of a regular  
7 PDU before declaring L2 Acknowledgment Failure when Call  
8 Rescue is enabled.

9 If RESQ\_NUM\_TOT\_TRANS\_INCL field is not included or is  
10 included and is set to '0', the base station shall omit this  
11 field; otherwise, the base station shall include this field and  
12 set it as follows:

13 The base station shall set this field to the required number of  
14 transmissions of a regular PDU before declaring L2  
15 Acknowledgment Failure when Call Rescue is enabled.

16 The base station shall not set this field to a value greater  
17 than  $N_{1m}$ .

18 RESQ\_NUM\_TOT\_TRANS\_5MS – The required number of transmissions of a mini PDU  
19 before declaring L2 Acknowledgment Failure when Call  
20 Rescue is enabled.

21 If RESQ\_NUM\_TOT\_TRANS\_INCL field is not included or is  
22 included and is set to '0', the base station shall omit this  
23 field; otherwise, the base station shall include this field and  
24 set it as follows:

25 The base station shall set this field to the required number of  
26 transmissions of a mini PDU before declaring L2  
27 Acknowledgment Failure when Call Rescue is enabled.

28 The base station shall not set this field to a value greater  
29 than  $N_{15m}$ .

30 RESQ\_NUM\_PREAMBLE\_RC1\_RC2 – The Traffic Channel preamble length for Call  
31 Rescue Soft Handoff when operating in Radio Configuration 1  
32 or 2.

33 If RESQ\_ENABLED is set to '0', the base station shall omit  
34 this field; otherwise, the base station shall include this field  
35 and set it to the length of Traffic Channel preamble, in 20 ms  
36 units, that the mobile station is to send when performing a  
37 call rescue soft handoff.

38 RESQ\_NUM\_PREAMBLE – The Traffic Channel preamble Length for Call Rescue Soft  
39 Handoff when operating in Radio Configuration greater than  
40 2.

41 If RESQ\_ENABLED is set to '0', the base station shall omit  
42 this field; otherwise, the base station shall include this field  
43 and set it to the length of Traffic Channel preamble that the  
44 mobile station is to send when performing a call rescue soft  
45 handoff, as follows:

1                   The base station shall set this field to the value shown in  
2                   Table 3.7.3.3.2.17-1 corresponding to the Traffic Channel  
3                   preamble length in 1.25 ms units.

4   RESQ\_POWER\_DELTA   -   The power level adjustment to be applied to the last closed-  
5                   loop power level when re-enabling the transmitter for call  
6                   rescue soft handoff.

7                   If RESQ\_ENABLED is set to '0', the base station shall omit  
8                   this field; otherwise, the base station shall set this field to a  
9                   value by which mobile stations are to adjust the last closed-  
10                  loop power level when re-enabling the transmitter for call  
11                  rescue, expressed as a two's complement value in units of  
12                  1 dB.

13   The base station shall include NUM\_NGHBR occurrences of the following one-field record  
14   if RESQ\_ENABLED is set to '1'. The base station shall use the same order for the following  
15   field as is used for the NGHBR\_PN fields listed in this message.

16   NGHBR\_RESQ\_CONFIGURED   -   Neighbor Rescue Channel configured indicator.

17                   The base station shall set this field to '1' if a Rescue Channel  
18                   is configured for this neighbor pilot; otherwise, the base  
19                   station shall set this field to '0'.

20   The base station shall include NUM\_NGHBR occurrences of the following variable length  
21   record. The base station shall use the same order for the following field as is used for the  
22   NGHBR\_PN fields listed in this message.

23   NGHBR\_PDCH\_SUPPORTED-   Neighbor PDCH supported indicator.

24                   The base station shall set this field to '1' if PDCH is  
25                   configured for this neighbor pilot; otherwise, the base station  
26                   shall set this field to '0'.

27   HRPD\_NGHBR\_INCL   -   HRPD neighbor information included indicator.

28                   If this message contains information on HRPD neighbors, the  
29                   base station shall set this field to '1'; otherwise, the base  
30                   station shall set this field to '0'.

31   NUM\_HRPD\_NGHBR   -   Number of HRPD neighbor pilot PN sequences.

32                   If the HRPD\_NGHBR\_INCL field is set to '0', the base station  
33                   shall omit this field; otherwise, the base station shall include  
34                   this field and set it to the number of HRPD neighbors  
35                   included in the message.

36   The base station shall include one occurrence of the following subrecord for each pilot  
37   that a mobile station is to place in its HRPD Neighbor Set.

38   HRPD\_NGHBR\_REC\_LEN -   HRPD neighbor record length

39                   The base station shall set this field to one less than the  
40                   number of octets included in this HRPD neighbor record  
41                   including this field.



1	NGHBR_PN	- Neighbor pilot PN sequence offset index.
2		The base station shall set this field to the pilot PN sequence
3		offset for this neighbor, in units of 64 PN chips.
4	NGHBR_FREQ_INCL	- Neighbor frequency information included indicator.
5		The base station shall set this field to '1' if the neighbor
6		frequency information is included in this message; otherwise,
7		the base station shall set this field to '0'.
8	NGHBR_BAND	- Neighbor band class.
9		If the NGHBR_FREQ_INCL field is set to '0', the base station
10		shall omit this field; otherwise, the base station shall include
11		this field and set it as follows:
12		The base station shall set this field to the CDMA band class,
13		as specified in [30], corresponding to the CDMA frequency
14		assignment for the CDMA Channel containing this neighbor.
15	NGHBR_FREQ	- Neighbor frequency assignment.
16		If the NGHBR_FREQ_INCL field is set to '0', the base station
17		shall omit this field; otherwise, the base station shall include
18		this field and set it as follows:
19		The base station shall set this field to the CDMA Channel
20		number, in the specified CDMA band class, corresponding to
21		the CDMA frequency assignment for this neighbor.
22	PN_ASSOCIATION_IND	- Neighbor PN association indicator.
23		The base station shall set this field to '1' if the system
24		identified by this system record has the same PN assignment
25		as the MC system to which this BS belongs; otherwise, the
26		base station shall set this field to '0'.
27	DATA_ASSOCIATION_IND	- Neighbor data association indicator.
28		The base station shall set this field to '1' if the system
29		identified by this system record can reach the same set of
30		PDSNs as the MC system to which this BS belongs;
31		otherwise, the base station shall set this field to '0'.
32	HRPD_NGHBR_REC_RESERVED	- HRPD neighbor record reserved bits.
33		The base station shall add reserved bits as needed in order to
34		make the length of this record equal to an integer number of
35		octets. The base station shall set these bits to '0'.
36		

## 1 3.7.2.3.2.23 User Zone Identification Message

2 MSG\_TAG: UZIM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
UZ_EXIT	4
NUM_UZID	4

NUM\_UZID occurrences of the following record:

{ (NUM\_UZID)

UZID	16
UZ_REV	4
TEMP_SUB	1

} (NUM\_UZID)

- 3
- 4           PILOT\_PN   -   Pilot PN sequence offset index.
- 5                       The base station shall set this field to the pilot PN sequence
- 6                       offset for this base station, in units of 64 PN chips.
- 7           CONFIG\_MSG\_SEQ   -   Configuration message sequence number.
- 8                       The base station shall set this field to CONFIG\_SEQ
- 9                       (see 3.6.2.2).
- 10           UZ\_EXIT   -   User Zone Exit parameter.
- 11                       The base station shall set this field to the User Zone exit
- 12                       parameter (see 2.6.9.2.1). The base station shall set this field
- 13                       to a value (in dB) in the range 0 to 15.
- 14           NUM\_UZID   -   Number of User Zone identifiers.
- 15                       The base station shall set this field to the number of user
- 16                       zone identifiers included in this message.
- 17   The base station shall include NUM\_UZID occurrences of the following record.
- 18           UZID   -   User Zone identifier.
- 19                       The base station shall set this field to the User Zone identifier
- 20                       (see 3.6.7) supported by the base station.
- 21           UZ\_REV   -   User Zone update revision number.
- 22                       The base station shall set this field to the User Zone update
- 23                       revision number.
- 24           TEMP\_SUB   -   Temporary subscription flag.

1  
2  
3  
4

If the corresponding User Zone allows for temporary subscription, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

## 1 3.7.2.3.2.24 Private Neighbor List Message

2 MSG\_TAG: PNLM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
NUM_RADIO_INTERFACE	4

NUM\_RADIO\_INTERFACE occurrences of the following record:

{ (NUM\_RADIO\_INTERFACE)

RADIO_INTERFACE_TYPE	4
RADIO_INTERFACE_LEN	8
Radio Interface Type-specific fields	8× RADIO_INTERFACE_LEN

} (NUM\_RADIO\_INTERFACE)

3

4 PILOT\_PN - Pilot PN sequence offset index.

5 The base station shall set this field to the pilot PN sequence  
6 offset for this base station, in units of 64 PN chips.

7 CONFIG\_MSG\_SEQ - Configuration message sequence number.

8 The base station shall set this field to CONFIG\_SEQ  
9 (see 3.6.2.2).

10 NUM\_RADIO\_INTERFACE - Number of interface types.

11 The base station shall set this field to the number of radio  
12 interface types for which private neighbors are included in  
13 this message.

14 The base station shall include NUM\_RADIO\_INTERFACE occurrences of the following  
15 record, one occurrence for each radio interface for which private neighbors are included in  
16 this message.

17 RADIO\_INTERFACE\_TYPE - The radio interface type.

18 The base station shall set this field to the radio interface type  
19 of this record as specified in Table 3.7.2.3.2.24-1.

1

**Table 3.7.2.3.2.24-1. Radio Interface Type**

<b>RADIO_INTERFACE_TYPE</b> <b>(binary)</b>	<b>Descriptions</b>
0000	MC system
0001-1111	Reserved

2 RADIO\_INTERFACE\_LEN - The length of the Radio Interface Type-specific fields.  
3 The base station shall set this field to the number of octets in  
4 the Radio Interface Type-specific fields of this record.  
5 If RADIO\_INTERFACE\_TYPE is equal to '0000', the base station shall set the radio interface  
6 type-specific fields as follows:  
7

1

Field	Length (bits)
COMMON_INCL	1
COMMON_BAND_CLASS	0 or 5
COMMON_NGHBR_FREQ	0 or 11
SRCH_WIN_PN	4
NUM_PRI_NGHBR	6

NUM\_PRI\_NGHBR occurrences of the following record:

{ (NUM\_PRI\_NGHBR)

SID	15
NID	16
PRI_NGHBR_PN	9
ADD_PILOT_REC_INCL	1
NGHBR_PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or 8× RECORD_LEN
BAND_CLASS	0 or 5
NGHBR_FREQ	0 or 11
UZID_INCL	1
NUM_UZID	0 or 4

(continues on next page)

2  
3

1

Field	Length (bits)
-------	---------------

NUM\_UZID occurrences of the following subrecord:

{ ( NUM\_UZID or 0)

UZID	0 or 16
UZ_REV	0 or 4
TEMP_SUB	0 or 1

} ( NUM\_UZID or 0)

} (NUM\_PRI\_NGHBR)

RESERVED	0 - 7 (as needed)
----------	-------------------

2

3           COMMON\_INCL   -   Common configuration included indicator.

4                               If all private neighbor base stations included in this message  
5                               are on the same CDMA band class and CDMA Channel  
6                               number as specified in the COMMON\_BAND\_CLASS and  
7                               COMMON\_NGHBR\_FREQ fields, the base station shall set  
8                               this field to '1'; otherwise, the base station shall set this field  
9                               to '0'.

10       COMMON\_BAND\_CLASS - Neighbor band class.

11                            If COMMON\_INCL is set to '1', the base station shall set this  
12                            field to the CDMA band class as specified in [30]  
13                            corresponding to the CDMA frequency assignment for the  
14                            CDMA Channel containing the Paging Channel or the  
15                            Forward Common Control Channel for all private neighbors;  
16                            otherwise, the base station shall omit this field.

17       COMMON\_NGHBR\_FREQ - Neighbor frequency assignment.

18                            If the COMMON\_INCL bit is set to '1', the base station shall  
19                            set this field to the CDMA Channel number, in the specified  
20                            CDMA band class, corresponding to the CDMA frequency  
21                            assignment for the CDMA Channel containing the Paging  
22                            Channel or the Forward Common Control Channel for all  
23                            private neighbor base station; otherwise, the base station  
24                            shall omit this field.

25           SRCH\_WIN\_N    -   Search window size for the Private Neighbor Set.

26                            The base station shall set this field to the value shown in  
27                            Table 2.6.6.2.1-1 corresponding to the search window size to  
28                            be used by mobile stations for the Private Neighbor Set.

29       NUM\_PRI\_NGHBR    -   Number of private neighbor pilot PN sequences.

30                            The base station shall set this field to the number of private  
31                            neighbors included in the message.

32

1 The base station shall include NUM\_PRI\_NGHR occurrences of the following record.

2                   SID    -   System Identification.

3                            The base station shall set this field to the system

4                            identification number for this private neighbor system (see

5                            2.6.5.2).

6                   NID    -   Network Identification.

7                            This field serves as a sub-identifier of a system as defined by

8                            the owner of the SID.

9                            The base station shall set this field to the system

10                           identification number for this private neighbor network (see

11                            2.6.5.2).

12           PRI\_NGHR\_PN   -   Private neighbor pilot PN sequence offset index.

13                            The base station shall set this field to the pilot PN sequence

14                            offset for this private neighbor, in units of 64 PN chips.

15   ADD\_PILOT\_REC\_INCL   -   Additional pilot information included indicator.

16                            The base station shall set this field to '1' if additional pilot

17                            information listed in the NGHR\_PILOT\_REC\_TYPE and

18                            RECORD\_LEN fields are included. The base station shall set

19                            this field to '0' if the corresponding pilot is the common pilot

20                            and there is no additional pilot information included.

21   NGHR\_PILOT\_REC\_TYPE - Neighbor Pilot record type

22                            If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall

23                            set this field to the NGHR\_PILOT\_REC\_TYPE value shown in

24                            Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record

25                            specified by this record.

26                            If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall

27                            omit this field.

28           RECORD\_LEN   -   Pilot record length.

29                            If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall

30                            set this field to the number of octets in the type-specific fields

31                            of this pilot record.

32                            If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall

33                            omit this field.

34   Type-specific fields   -   Pilot record type-specific fields.

35                            If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall

36                            include type-specific fields based on the

37                            NGHR\_PILOT\_REC\_TYPE of this pilot record.

38                            If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall

39                            omit this field.

40   If NGHR\_PILOT\_REC\_TYPE is equal to '000', the base station shall include the following

41   fields:

42



Field	Length (bits)
TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	4

**1**

2 TD\_POWER\_LEVEL - TD Transmit Power Level.

3 The base station shall set this field to the TD transmit power  
4 level relative to that of the Forward Pilot Channel as specified  
5 in Table 3.7.2.3.2.26-4.

6 TD\_MODE - Transmit Diversity mode.

7 The base station shall set this field to the Transmit Diversity  
8 mode, as specified in Table 3.7.2.3.2.26-3.

9 RESERVED - Reserved bits.

10	The base station shall set this field to '0000'.
----	--

11 If NGHBR\_PILOT\_REC\_TYPE is equal to '001', the base station shall include the following  
12 fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

13

14 QOF - Quasi-orthogonal function index.

15                   The base station shall set this field to the index of the Quasi-  
16                   orthogonal function (see [2]).

17      WALSH\_LENGTH      -      Length of the Walsh Code.

18                   The base station shall set this field to the WALSH\_LENGTH  
19                   value shown in Table 3.7.2.3.2.22-6 corresponding to the  
20                   length of the Walsh code for the pilot that is used in as the  
21                   Auxiliary pilot.

22      AUX\_PILOT\_WALSH      -      Walsh Code for the Auxiliary Pilot.

23                   The base station shall set this field to the Walsh code  
24                   corresponding to the Auxiliary pilot.

25                      RESERVED        -    Reserved bits.

26                   The base station shall set all the bits of this field to '0' to  
27                   make the entire record octet-aligned.

28 If NGHBR\_PILOT\_REC\_TYPE is equal to '010', the base station shall include the following  
29 fields;

1

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_WALSH	WALSH_LENGTH+6
AUX_TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	0 to 7 (as needed)

2

3 QOF - Quasi-orthogonal function index for the Auxiliary Transmit  
4 Diversity Pilot.

5 The base station shall set this field to the index of the Quasi-  
6 orthogonal function (see [2]).

7 WALSH\_LENGTH - Length of the Walsh Code.

8 The base station shall set this field to the WALSH\_LENGTH  
9 value shown in 3.7.2.3.2.22-6 corresponding to the length of  
10 the Walsh code for the pilots that are used as Auxiliary pilot  
11 in the transmit diversity mode.

12 AUX\_WALSH - Walsh Code for the Auxiliary Pilot.

13 The base station shall set this field to the Walsh code  
14 corresponding to the Auxiliary Pilot.

15 AUX\_TD\_POWER\_LEVEL - Auxiliary Transmit Diversity Pilot Power Level.

16 The base station shall set this field to the Auxiliary Transmit  
17 Diversity Pilot transmit power level relative to that of the  
18 Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.

19 TD\_MODE - Transmit Diversity mode.

20 The base station shall set this field to the Transmit Diversity  
21 mode, as specified in Table 3.7.2.3.2.26-3.

22 RESERVED - Reserved bits.

23 The base station shall set all the bits of this field to '0' to  
24 make the entire record octet-aligned.

25 If NGHBR\_PILOT\_REC\_TYPE is equal to '011', the base station shall include the following  
26 fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

27

28 SR3\_PRIMARY\_PILOT - Primary SR3 pilot.

1 The base station shall set this field to the value shown in  
 2 Table 3.7.2.3.2.26-5 corresponding to the position of the  
 3 primary SR3 pilot.

4 SR3\_PILOT\_POWER1 – The primary SR3 pilot power level relative to that of the pilot  
 5 on the lower frequency of the two remaining SR3 frequencies.

6 The base station shall set this field to the value shown in  
 7 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 8 primary pilot with respect to the pilot on the lower frequency  
 9 of the two remaining SR3 frequencies.

10 SR3\_PILOT\_POWER2 – The primary SR3 pilot power level relative to that of the pilot  
 11 on the higher frequency of the two remaining SR3  
 12 frequencies.

13 The base station shall set this field to the value shown in  
 14 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 15 primary pilot with respect to the pilot on the higher frequency  
 16 of the two remaining SR3 frequencies.

17

18 If NGHBR\_PILOT\_REC\_TYPE is equal to '100', the base station shall include the following  
 19 fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
ADD_INFO_INCL1	1
QOF1	0 or 2
WALSH_LENGTH1	0 or 3
AUX_PILOT_WALSH1	0 or WALSH_LENGTH1+6
ADD_INFO_INCL2	1
QOF2	0 or 2
WALSH_LENGTH2	0 or 3
AUX_PILOT_WALSH2	0 or WALSH_LENGTH2+6
RESERVED	0 – 7 (as needed)

20

21

1	SR3_PRIMARY_PILOT	-	Primary SR3 pilot.
2			The base station shall set this field to the value shown in
3			Table 3.7.2.3.2.26-5 corresponding to the position of the
4			primary SR3 pilot.
5	SR3_PILOT_POWER1	-	The primary SR3 pilot power level relative to that of the pilot
6			on the lower frequency of the two remaining SR3 frequencies.
7			The base station shall set this field to the value shown in
8			Table 3.7.2.3.2.26-6 corresponding to the power level of the
9			primary pilot with respect to the pilot on the lower frequency
10			of the two remaining SR3 frequencies.
11	SR3_PILOT_POWER2	-	The primary SR3 pilot power level relative to that of the pilot
12			on the higher frequency of the two remaining SR3
13			frequencies.
14			The base station shall set this field to the value shown in
15			Table 3.7.2.3.2.26-6 corresponding to the power level of the
16			primary pilot with respect to the pilot on the higher frequency
17			of the two remaining SR3 frequencies.
18	QOF	-	Quasi-orthogonal function index.
19			The base station shall set this field to the index of the Quasi-
20			orthogonal function (see [2]) on the frequency of the primary
21			pilot.
22	WALSH_LENGTH	-	Length of the Walsh Code.
23			The base station shall set this field to the WALSH_LENGTH
24			value shown in Table 3.7.2.3.2.22-6 corresponding to the
25			length of the Walsh code for the pilot that is used as the
26			Auxiliary pilot on the frequency of the primary pilot.
27	AUX_PILOT_WALSH	-	Walsh Code for the Auxiliary Pilot.
28			The base station shall set this field to the Walsh code
29			corresponding to the Auxiliary pilot on the frequency of the
30			primary pilot.
31	ADD_INFO_INCL1	-	Additional information included for the pilot on the lower
32			frequency of the two remaining SR3 frequencies.
33			If the additional information for the pilot on the lower
34			frequencies of the two remaining SR3 frequencies is the same
35			as pilot on the primary frequency, the base station shall set
36			this field to '0'; otherwise, the base station shall set this field
37			to '1'.
38	QOF1	-	Quasi-orthogonal function index for the pilot on the lower
39			frequency of the two remaining SR3 frequencies.
40			If ADD_INFO_INCL1 is set to '0', the base station shall omit
41			this field; otherwise, the base station shall set this field as
42			follows:
43			The base station shall set this field to the index of the Quasi-
44			orthogonal function (see [2]) on the lower frequency of the two
45			remaining SR3 frequencies.

1	WALSH_LENGTH1	-	Length of the Walsh Code for the pilot on the lower frequency
2			of the two remaining SR3 frequencies.
3			If ADD_INFO_INCL1 is set to '0', the base station shall omit
4			this field; otherwise, the base station shall set this field as
5			follows:
6			The base station shall set this field to the WALSH_LENGTH
7			value shown in Table 3.7.2.3.2.22-6 corresponding to the
8			length of the Walsh code for the pilot that is used as the
9			Auxiliary pilot on the lower frequency of the two remaining
10			SR3 frequencies.
11	AUX_PILOT_WALSH1	-	Walsh Code for the Auxiliary Pilot on the lower frequency of
12			the two remaining SR3 frequencies.
13			If ADD_INFO_INCL1 is set to '0', the base station shall omit
14			this field; otherwise, the base station shall set this field as
15			follows:
16			The base station shall set this field to the Walsh code
17			corresponding to the Auxiliary pilot on the lower frequency of
18			the two remaining SR3 frequencies.
19	ADD_INFO_INCL2	-	Additional information included for the pilot on the higher
20			frequency of the two remaining SR3 frequencies.
21			If the additional information for the pilot on the higher
22			frequencies of the two remaining SR3 frequencies is the same
23			as pilot on the primary frequency, the base station shall set
24			this field to '0'; otherwise, the base station shall set this field
25			to '1'.
26	QOF2	-	Quasi-orthogonal function index for the pilot on the higher
27			frequency of the two remaining SR3 frequencies.
28			If ADD_INFO_INCL2 is set to '0', the base station shall omit
29			this field; otherwise, the base station shall set this field as
30			follows:
31			The base station shall set this field to the index of the Quasi-
32			orthogonal function (see [2]) on the higher frequency of the
33			two remaining SR3 frequencies.
34	WALSH_LENGTH2	-	Length of the Walsh Code for the pilot on the higher
35			frequency of the two remaining SR3 frequencies.
36			If ADD_INFO_INCL2 is set to '0', the base station shall omit
37			this field; otherwise, the base station shall set this field as
38			follows:
39			The base station shall set this field to the WALSH_LENGTH
40			value shown in Table 3.7.2.3.2.22-6 corresponding to the
41			length of the Walsh code for the pilot that is used as the
42			Auxiliary pilot on the higher frequency of the two remaining
43			SR3 frequencies.
44	AUX_PILOT_WALSH2	-	Walsh Code for the Auxiliary Pilot on the higher frequency of
45			the two remaining SR3 frequencies.

1			If ADD_INFO_INCL2 is set to '0', the base station shall omit
2			this field; otherwise, the base station shall set this field as
3			follows:
4			The base station shall set this field to the Walsh code
5			corresponding to the Auxiliary pilot on the higher frequency
6			of the two remaining SR3 frequencies.
7	RESERVED	-	Reserved bits.
8			The base station shall set all the bits of this field to '0' to
9			make the entire record octet-aligned.
10	BAND_CLASS	-	Neighbor band class.
11			If COMMON_INCL is set to '0', the base station shall set this
12			field to the CDMA band class as specified in [30]
13			corresponding to the CDMA frequency assignment for the
14			CDMA Channel containing the Paging Channel for the private
15			neighbor; otherwise, the base station shall omit this field.
16	NGHBR_FREQ	-	Neighbor frequency assignment.
17			If the COMMON_INCL bit is set to '0', the base station shall
18			set this field to the CDMA Channel number, in the specified
19			CDMA band class, corresponding to the CDMA frequency
20			assignment for the CDMA Channel containing the Paging
21			Channel for the private neighbor base station; otherwise, the
22			base station shall omit this field.
23	UZID_INCL	-	User Zone identifier included indicator.
24			If the UZID information is included, the base station shall set
25			this field to '1'; otherwise, the base station shall set this field
26			to '0'.
27	NUM_UZID	-	Number of User Zone identifiers.
28			If UZID_INCL is set to '1', the base station shall set this field
29			to the number of occurrences of UZID supported by the
30			private neighbor base station; otherwise, the base station
31			shall omit this field.
32	If UZID_INCL is set to '1', the base station shall include NUM_UZID occurrences of the		
33	following three-field subrecord; otherwise, the base station shall omit this subrecord.		
34	UZID	-	User Zone identifiers.
35			The base station shall set this field to the User Zone identifier
36			supported by the private neighbor base station.
37	UZ_REV	-	User Zone update revision number.
38			The base station shall set this field to the User Zone update
39			revision number.
40	TEMP_SUB	-	Temporary subscription flag.
41			If the corresponding User Zone allows for temporary
42			subscription, the base station shall set this field to '1';
43			otherwise, the base station shall set this field to '0'.
44	RESERVED	-	Reserved bits.

1 The base station shall add reserved bits as needed in order to  
2 make the length of the entire record equal to an integer  
3 number of octets. The base station shall set these bits to '0'.  
4  
5

1 3.7.2.3.2.25 Reserved  
2



## 1 3.7.2.3.2.26 Sync Channel Message

2 MSG\_TAG: SCHM

3

Field	Length (bits)
P_REV	8
MIN_P_REV	8
SID	15
NID	16
PILOT_PN	9
LC_STATE	42
SYS_TIME	36
LP_SEC	8
LTM_OFF	6
DAYLT	1
PRAT	2
CDMA_FREQ	11
EXT_CDMA_FREQ	11
SR1_BCCH_NON_TD_INCL	1
SR1_NON_TD_FREQ_INCL	0 or 1
SR1_CDMA_FREQ_NON_TD	0 or 11
SR1_BRAT_NON_TD	0 or 2
SR1_CRAT_NON_TD	0 or 1
SR1_BCCH_CODE_CHAN_NON_TD	0 or 6
SR1_TD_INCL	1
SR1_CDMA_FREQ_TD	0 or 11
SR1_BRAT_TD	0 or 2
SR1_CRAT_TD	0 or 1
SR1_BCCH_CODE_CHAN_TD	0 or 6

(continues on next page)

4

Field	Length (bits)
SR1_TD_MODE	0 or 2
SR1_TD_POWER_LEVEL	0 or 2
SR3_INCL	1
SR3_CENTER_FREQ_INCL	0 or 1
SR3_CENTER_FREQ	0 or 11
SR3_BRAT	0 or 2
SR3_BCCH_CODE_CHAN	0 or 7
SR3_PRIMARY_PILOT	0 or 2
SR3_PILOT_POWER1	0 or 3
SR3_PILOT_POWER2	0 or 3
DS_INCL	1
DS_BLOB	0 or 24

- 1
- 2                   P\_REV   -   Protocol revision level.
- 3                               The base station shall set this field to '00001100'.
- 4                   MIN\_P\_REV   -   Minimum protocol revision level.
- 5                               The base station sets this field to prevent mobile stations
- 6                               which cannot be supported by the base station from
- 7                               accessing the system.
- 8                               The base station shall set this field to the minimum protocol
- 9                               revision level that it supports.
- 10                   SID   -   System identification.
- 11                               The base station shall set this field to the system
- 12                               identification number for this system (see 2.6.5.2).
- 13                   NID   -   Network identification.
- 14                               This field serves as a sub-identifier of a system as defined by
- 15                               the owner of the SID.
- 16                               The base station shall set this field to the network
- 17                               identification number for this network (see 2.6.5.2).
- 18                   PILOT\_PN   -   Pilot PN sequence offset index.
- 19                               The base station shall set this field to the pilot PN sequence
- 20                               offset for this base station, in units of 64 PN chips.
- 21                   LC\_STATE   -   Long code state.
- 22                               The base station shall set this field to the long code state at
- 23                               the time given by the SYS\_TIME field of this message.
- 24                   SYS\_TIME   -   System time.

- 1 The base station shall set this field to the System Time as of  
 2 four Sync Channel superframes (320 ms) after the end of the  
 3 last superframe containing any part of this *Sync Channel*  
 4 *Message*, minus the pilot PN sequence offset, in units of 80  
 5 ms (see [2]).
- 6 LP\_SEC - The number of leap seconds that have occurred since the  
 7 start of System Time.
- 8 The base station shall set this field to the number of leap  
 9 seconds that have occurred since the start of System Time, as  
 10 of the time given by the SYS\_TIME field of this message.
- 11 LTM\_OFF - Offset of local time from System Time.
- 12 The base station shall set this field to the two's complement  
 13 offset of local time from System Time, in units of 30 minutes.
- 14 The local time of day, in units of 80 ms, as of four Sync  
 15 Channel superframes (320 ms) after the end of the last  
 16 superframe containing any part of this *Sync Channel*  
 17 *Message*, minus the pilot PN sequence offset, is equal to  
 18  $\text{SYS\_TIME} - (\text{LP\_SEC} \times 12.5) + (\text{LTM\_OFF} \times 22500)$ .
- 19 DAYLT - Daylight savings time indicator.
- 20 If daylight savings time is in effect, the base station shall set  
 21 this field to '1'; otherwise, the base station shall set this field  
 22 to '0'.
- 23 PRAT - Paging Channel data rate.
- 24 The base station shall set this field to the PRAT field value  
 25 shown in Table 3.7.2.3.2.26-1 corresponding to the data rate  
 26 used by the Paging Channels in the system.

**Table 3.7.2.3.2.26-1. Paging Channel Data Rate**

PRAT Field (binary)	Paging Channel data rate
00	9600 bps
01	4800 bps
10	Reserved
11	Reserved

- 28
- 29 CDMA\_FREQ - Frequency assignment.

1		The base station shall set this field to the CDMA Channel
2		number corresponding to the CDMA frequency assignment
3		for the CDMA Channel containing a Primary Paging
4		Channel. <sup>11</sup>
5	EXT_CDMA_FREQ	- Extended frequency assignment.
6		The base station shall set this field to the CDMA Channel
7		number corresponding to the CDMA frequency assignment
8		for the CDMA Channel containing a Primary Paging Channel
9		that a mobile station capable of Radio Configurations greater
10		than 2 or capable of supporting Quick Paging Channel will
11		use.
12	SR1_BCCH_NON_TD_INCL	- Common Channel in non TD mode on Spreading Rate 1
13		information included indicator.
14		The base station shall set this field to '1' if the base station
15		includes common channels (BCCH/F-CCCH/EACH)
16		information in non TD mode; otherwise, the base station
17		shall set this field to '0'.
18	SR1_NON_TD_FREQ_INCL	- Non Transmit Diversity frequency included indicator.
19		If SR1_BCCH_NON_TD_INCL is set to '0', the base station
20		shall omit this field; otherwise, the base station shall set this
21		field as follows:
22		The base station shall set this field to '1' if
23		SR1_CDMA_FREQ_NON_TD is included in the message. The
24		base station shall set this field to '0' if the frequency specified
25		by the EXT_CDMA_FREQ field is used for BCCH frequency
26		assignment.
27	SR1_CDMA_FREQ_NON_TD	- Frequency assignment for non-transmit diversity
28		operation.
29		If SR1_NON_TD_FREQ_INCL is not included, or is included
30		and set to '0', the base station shall omit this field; otherwise,
31		the base station shall set this field as follows:
32		The base station shall set this field to the CDMA Channel
33		number corresponding to the CDMA frequency assignment
34		for the CDMA Channel containing a Broadcast Control
35		Channel that does not support the TD operation.
36	SR1_BRAT_NON_TD	- BCCH data rate in non-TD mode for Spreading Rate 1.
37		If SR1_BCCH_NON_TD_INCL is set to '0', the base station
38		shall omit this field; otherwise, the base station shall set this
39		field as follows:

---

<sup>11</sup> If compatibility with IS-95-A mobile stations is desired in a Band Class 0 system, the CDMA\_FREQ field is set to the CDMA frequency assignment containing this Sync Channel.

The base station shall set this field to the BRAT field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel in the system.

**Table 3.7.2.3.2.26-2. Broadcast Control Channel Data Rate**

<b>BRAT Field (binary)</b>	<b>Broadcast Control Channel data rate</b>
00	4800 bps
01	9600 bps
10	19200bps
11	Reserved

**SR1\_CRAT\_NON\_TD** - BCCH code rate in non Transmit Diversity mode for Spreading Rate 1.

If SR1\_BCCH\_NON\_TD\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to '0' if the BCCH Code Rate is 1/4 (see [2]). The base station shall set this field to '1' if the BCCH code rate is 1/2 (see [2]).

**SR1\_BCCH\_CODE\_CHAN\_NON\_TD** - Walsh code for the Spreading Rate 1 BCCH in non Transmit Diversity mode.

If SR1\_BCCH\_NON\_TD\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the Walsh code corresponding to the Spreading Rate 1 BCCH in non Transmit Diversity mode.

**SR1\_TD\_INCL** - Spreading Rate 1 Transmit Diversity frequency information included indicator.

The base station shall set this field to '1' if SR1\_CDMA\_FREQ\_TD, SR1\_BRAT\_TD, SR1\_CRAT\_TD, SR1\_TD\_MODE, and SR1\_TD\_POWER\_LEVEL are included in the message; otherwise, the base station shall set this field to '0'.

**SR1\_CDMA\_FREQ\_TD** - Spreading Rate 1 frequency assignment for Transmit Diversity operation.

If SR1\_TD\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the CDMA Channel number corresponding to the CDMA frequency assignment for the CDMA Channel containing a BCCH Channel that supports the TD operation.

SR1_BRAT_TD	<p>- BCCH data rate in Transmit Diversity mode for Spreading Rate 1.</p> <p>If SR1_TD_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:</p> <p>The base station shall set this field to the BRAT field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel in the system.</p>
SR1_CRAT_TD	<p>- BCCH code rate in Transmit Diversity mode for Spreading Rate 1.</p> <p>If SR1_TD_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:</p> <p>The base station shall set this field to '0' if the BCCH Code Rate is 1/4 (see [2]). The base station shall set this field to '1' if the BCCH Code Rate is 1/2 (see [2]).</p>
SR1_BCCH_CODE_CHAN_TD	<p>- Walsh code for the Spreading Rate 1 BCCH in Transmit Diversity mode.</p> <p>If SR1_TD_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:</p> <p>The base station shall set this field to the Walsh code corresponding to the Spreading Rate 1 BCCH in Transmit Diversity mode.</p>
SR1_TD_MODE	<p>- Spreading Rate 1 Transmit Diversity Mode.</p> <p>If SR1_TD_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:</p> <p>The base station shall set this field corresponding to Table 3.7.2.3.2.26-3.</p>

**Table 3.7.2.3.2.26-3. TD Mode**

<b>TD_MODE</b>	<b>Descriptions</b>
<b>00</b>	OTD (Orthogonal Transmit Diversity) mode
<b>01</b>	STS (Space Time Spreading) mode
<b>10-11</b>	Reserved

SR1\_TD\_POWER\_LEVEL - Spreading Rate 1 TD transmit power level.

If SR1\_TD\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the TD transmit power level relative to that of the Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.

1

**Table 3.7.2.3.2.26-4. TD Transmit Power Level**

<b>TD_POWER_LEVEL</b>	<b>Transmit Power Level</b>
00	9 dB below the Forward Pilot Channel transmit power
01	6 dB below the Forward Pilot Channel transmit power
10	3 dB below the Forward Pilot Channel transmit power
11	Same as the Forward Pilot Channel transmit power

2

3

SR3\_INCL - Spreading Rate 3 information included indicator.

4

5

6

The base station shall set this field to '1' if the Spreading Rate 3 information is included in this message; otherwise, the base station shall set this field to '0'.

7

SR3\_CENTER\_FREQ\_INCL - Center SR3 frequency assignment included.

8

9

If SR3\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

10

11

12

13

14

The base station shall set this field to '1', if the CDMA Channel number corresponding to the SR3 center frequency assignment for the CDMA Channel containing a Broadcast Control Channel is different to EXT\_CDMA\_FREQ. Otherwise, the base station shall set this field to '0'.

15

SR3\_CENTER\_FREQ - Center SR3 frequency assignment.

16

17

18

If SR3\_CENTER\_FREQ\_INCL is not included or is included but is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

19

20

21

22

The base station shall set this field to the CDMA Channel number corresponding to the SR3 center frequency assignment for the CDMA Channel containing a Broadcast Control Channel.

23

SR3\_BRAT - Spreading Rate 3 BCCH data rate.

24

25

If SR3\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

26

27

28

29

The base station shall set this field to the BCCH rate field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel in the system.

30

SR3\_BCCH\_CODE\_CHAN - Spreading Rate 3 BCCH Walsh code.

31

32

If SR3\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the Walsh code corresponding to the Spreading Rate 3 BCCH.

**SR3\_PRIMARY\_PILOT** – Primary SR3 pilot.

If SR3\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the value shown in Table 3.7.2.3.2.26-5 corresponding to the position of the primary SR3 pilot.

**Table 3.7.2.3.2.26-5. The Position of the Primary SR3 Pilot**

<b>SR3_PRIMARY_PILOT (Binary)</b>	<b>Position</b>
00	The primary pilot is on the lowest SR3 frequency
01	The primary pilot is on the center SR3 frequency
10	The primary pilot is on the highest SR3 frequency
11	Reserved

**SR3\_PILOT\_POWER1** – The primary SR3 pilot power level relative to that of the pilot on the lower frequency of the two remaining SR3 frequencies.

If SR3\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field to the value shown in Table 3.7.2.3.2.26-6 corresponding to the power level of the primary pilot with respect to the pilot on the lower frequency of the two remaining SR3 frequencies.



**Table 3.7.2.3.2.26-6. Pilot Transmission Power**

<b>SR3_PILOT_POWER1, SR3_PILOT_POWER2 (Binary)</b>	<b>Relative Transmission Power</b>
000	0dB
001	1dB
010	2dB
011	3dB
100	4dB
101	5dB
110	6dB
111	7dB

SR3\_PILOT\_POWER2 – The primary SR3 pilot power level relative to that of the pilot on the higher frequency of the two remaining SR3 frequencies.

If SR3\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field to the value shown in Table 3.7.2.3.2.26-6 corresponding to the power level of the primary pilot with respect to the pilot on the higher frequency of the two remaining SR3 frequencies.

6

7

8

9

10

1

**DS\_INCL** - Direct Spread (DS) System and Information Available.

13

14

15

16

DS\_BLOB - Access Information about a Direct Spread (DS) System.

18

If DS\_INCL is set to '1', the base station shall include this field and set it as described in [32].

If DS INCL is set to '0', the base station shall omit this field.

21

## 1 3.7.2.3.2.27 Extended Global Service Redirection Message

2 MSG\_TAG: EGSRDM

3

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
REDIRECT_ACCOLC	16
RETURN_IF_FAIL	1
DELETE_TMSI	1
REDIRECT_P_REV_INCL	1
EXCL P_REV_IND	0 or 1
REDIRECT_P_MIN	0 or 8
REDIRECT_P_MAX	0 or 8
RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	$8 \times \text{RECORD\_LEN}$
LAST_SEARCH_RECORD_IND	1
NUM_ADD_RECORD	3

{(NUM\_ADD\_RECORD)}

ADD_REDIRECT_ACCOLC	16
ADD_DELETE_TMSI	1
ADD_REDIRECT_P_REV_INCL	1
ADD_EXCL P_REV_IND	0 or 1
ADD_REDIRECT_P_MIN	0 or 8
ADD_REDIRECT_P_MAX	0 or 8
ADD_RECORD_TYPE	8
ADD_RECORD_LEN	8
Type-specific fields	$8 \times \text{ADD\_RECORD\_LEN}$
ADD_LAST_SEARCH_RECORD_IND	1

{(NUM\_ADD\_RECORD)}

4

5

PILOT\_PN - Pilot PN sequence offset index.

1			The base station shall set this field to the pilot PN sequence
2			offset for this base station, in units of 64 PN chips.
3	CONFIG_MSG_SEQ	-	Configuration message sequence number.
4			The base station shall set this field to CONFIG_SEQ
5			(see 3.6.2.2).
6	REDIRECT_ACCOLC	-	Redirected access overload classes.
7			See REDIRECT_ACCOLC field defined in 3.7.2.3.2.18.
8			The base station shall set the subfields corresponding to the
9			access overload classes of mobile stations which are to be
10			redirected to '1', and shall set the remaining subfields to '0'.

1	RETURN_IF_FAIL	-	Return if fail indicator.
2			The base station shall set this field to '1' if the mobile station
3			is required to return to the system from which it is being
4			redirected upon failure to obtain service after attempting all
5			qualified redirection records in this message; otherwise, the
6			base station shall set this field to '0'.
7	DELETE_TMSI	-	Delete TMSI indicator.
8			The base station shall set this field to '1' if the mobile station
9			is required to delete the TMSI assigned to the mobile station;
10			otherwise, the base station shall set this field to '0'.
11	REDIRECT_P_REV_INCL	-	Redirection mobile protocol revision included.
12			If the redirection specified in this message applies to the
13			mobile stations of some specific protocol revisions, the base
14			station shall set this field to '1'; otherwise, if this redirection
15			applies to all mobile stations, the base station shall set this
16			field to '0'.
17	EXCL_P_REV_IND	-	Excluding mobile protocol revision indicator.
18			If the REDIRECT_P_REV_INCL is set to '1', the base station
19			shall include this field and set this field as described below;
20			otherwise, the base station shall omit this field.
21			If mobile stations with MOB_P_REV in the range between
22			REDIRECT_P_MIN and REDIRECT_P_MAX inclusive are
23			excluded from this Global Service Redirection, the base
24			station shall set this field to '1'. Otherwise, if the mobile
25			stations with MOB_P_REV in the protocol revision range
26			specified in REDIRECT_P_MIN and REDIRECT_P_MAX are
27			subjected to the redirection, the base station shall set this
28			field to '0'.
29	REDIRECT_P_MIN	-	Minimum redirection protocol revision.
30			If REDIRECT_P_REV_INCL is set to '0', the base station shall
31			omit this field; otherwise, the base station shall include this
32			field and set it as follows.
33			The base station shall set this field to the minimum protocol
34			revision of which mobile stations are subjected to as specified
35			by the action contained in EXCL_P_REV_IND (i.e., to be
36			redirected or excluded from redirection). The base station
37			shall set this field to a protocol revision equal to or greater
38			than six.
39	REDIRECT_P_MAX	-	Maximum redirection protocol revision.
40			If REDIRECT_P_REV_INCL is set to '0', the base station shall
41			omit this field; otherwise, the base station shall include this
42			field and set it as follows.

1			The base station shall set this field to the maximum protocol
2			revision of which mobile stations are subjected to as specified
3			by the action contained in EXCL_P_REV_IND (i.e., to be
4			redirected or excluded from redirection). The base station
5			shall set this field to a protocol revision equal to or greater
6			than six.
7	RECORD_TYPE	-	Redirection record type.
8			The base station shall set this field to the RECORD_TYPE
9			value shown in Table 3.7.2.3.2.16-2 corresponding to the
10			type of redirection specified by this record.
11	RECORD_LEN	-	Redirection record length.
12			The base station shall set this field to the number of octets in
13			the type-specific fields of this redirection record.
14	Type-specific fields	-	Redirection record type-specific fields.
15			The base station shall include type-specific fields based on
16			the RECORD_TYPE of this redirection record, as specified
17			below.
18	LAST_SEARCH_RECORD_IND	-	Last search record indicator.
19			The base station shall set this field to '0' if the mobile station
20			is to attempt redirection per the next qualified redirection
21			record in the message following failure to acquire the target
22			system for the current redirection record; otherwise, the base
23			station shall set this field to '1'.
24	NUM_ADD_RECORD	-	Number of additional redirection records.
25			The base station shall set this field to the number of
26			additional redirection records.
27	The base station shall include NUM_ADD_RECORD occurrences of the following variable		
28	length additional redirection record.		
29	ADD_REDIRECT_ACCOLC	-	Additional redirected access overload classes.
30			See REDIRECT_ACCOLC field defined in 3.7.2.3.2.18.
31			The base station shall set the subfields corresponding to the
32			access overload classes of mobile stations which are to be
33			redirected to '1' and shall set the remaining subfields to '0'.
34	ADD_DELETE_TMSI	-	Additional delete TMSI indicator.
35			The base station shall set this field to '1' if the mobile station
36			is required to delete the TMSI assigned to the mobile station;
37			otherwise, the base station shall set this field to '0'.
38	ADD_REDIRECT_P_REV_INCL	-	Additional redirection mobile protocol revision
39			included.
40			If the redirection specified in this message applies to the
41			mobile stations of some specific protocol revisions, the base
42			station shall set this field to '1'; otherwise, if this redirection
43			applies to all mobile stations, the base station shall set this
44			field to '0'.

1	ADD_EXCL_P_REV_IND	-	Additional excluding mobile protocol revision indicator.
2			If the ADD_REDIRECT_P_REV_INCL is set to '1', the base
3			station shall include this field and set this field as described
4			below; otherwise, the base station shall omit this field.
5			If mobile stations with MOB_P_REV in the range between
6			ADD_REDIRECT_P_MIN and ADD_REDIRECT_P_MAX
7			inclusive are excluded from this global service redirection, the
8			base station shall set this field to '1'. Otherwise, if the mobile
9			stations with MOB_P_REV in the protocol revision range
10			specified in ADD_REDIRECT_P_MIN and
11			ADD_REDIRECT_P_MAX are subjected to the redirection, the
12			base station shall set this field to '0'.
13	ADD_REDIRECT_P_MIN	-	Additional minimum redirection protocol revision.
14			If ADD_REDIRECT_P_REV_INCL is set to '0', the base station
15			shall omit this field; otherwise, the base station shall include
16			this field and set it as follows.
17			The base station shall set this field to the minimum protocol
18			revision of which mobile stations are subjected to as specified
19			by the action contained in ADD_EXCL_P_REV_IND (i.e., to be
20			redirected or excluded from redirection). The base station
21			shall set this field to a protocol revision equal to or greater
22			than six.
23	ADD_REDIRECT_P_MAX	-	Additional maximum redirection protocol revision.
24			If ADD_REDIRECT_P_REV_INCL is set to '0', the base station
25			shall omit this field; otherwise, the base station shall include
26			this field and set it as follows.
27			The base station shall set this field to the maximum protocol
28			revision of which mobile stations are subjected to as specified
29			by the action contained in ADD_EXCL_P_REV_IND (i.e., to be
30			redirected or excluded from redirection). The base station
31			shall set this field to a protocol revision equal to or greater
32			than six.
33	ADD_RECORD_TYPE	-	Additional redirection record type.
34			The base station shall set this field to the RECORD_TYPE
35			value shown in Table 3.7.2.3.2.16-2 corresponding to the
36			type of redirection specified by this record.
37	ADD_RECORD_LEN	-	Additional redirection record length.
38			The base station shall set this field to the number of octets in
39			the type-specific fields of this redirection record.
40	Type-specific fields	-	Redirection record type-specific fields.
41			The base station shall include type-specific fields based on
42			the ADD_RECORD_TYPE of this redirection record, as
43			specified below.

1 ADD\_LAST\_SEARCH\_RECORD\_IND - Additional last search record indicator.

2 The base station shall set this field to '0' if the mobile station  
3 is to attempt redirection per the next qualified redirection  
4 record in the message following failure to acquire the target  
5 system for the current redirection record; otherwise, the base  
6 station shall set this field to '1'.

7

8 If RECORD\_TYPE or ADD\_RECORD\_TYPE is equal to '00000010', the base station shall  
9 include the following type specific fields:

10

Subfield	Length (bits)
BAND_CLASS	5
EXPECTED_SID	15
EXPECTED_NID	16
RESERVED	4
NUM_CHANS	4

NUM\_CHANS occurrences of the following field:

{ (NUM\_CHANS)

CDMA_CHAN	11
-----------	----

} (NUM\_CHANS)

SUBCLASS_INFO_INCL	1
SUBCLASS_REC_LEN	0 or 5

SUBCLASS\_REC\_LEN + 1 occurrences of the following  
subrecord:

{ (SUBCLASS\_REC\_LEN + 1)

REDIRECT_SUBCLASS	1
-------------------	---

} (SUBCLASS\_REC\_LEN + 1)

RESERVED	0 - 7 (as needed)
----------	-------------------

11

12 BAND\_CLASS - Band class.

13 The base station shall set this field to the CDMA band class,  
14 as specified in [30].

15 EXPECTED\_SID - Expected SID.

16 If the base station is redirecting the mobile station to a  
17 specific system, the base station shall set this field to the SID  
18 of that system; otherwise, the base station shall set this field  
19 to '0'.

20 EXPECTED\_NID - Expected NID.

1			If the base station is redirecting the mobile station to a
2			specific network, the base station shall set this field to the
3			NID of that network; otherwise, the base station shall set this
4			field to 65535.
5	RESERVED	-	Reserved bits.
6			The base station shall set this field to '0'
7	NUM_CHANS	-	Number of CDMA Channels.
8			The base station shall set this field to the number of
9			occurrences of the CDMA_CHAN field in this record.
10	CDMA_CHAN	-	CDMA Channel number.
11			For each CDMA Channel on which the mobile station is to
12			attempt to acquire a CDMA system, the base station shall
13			include one occurrence of this field specifying the associated
14			CDMA Channel number.
15	SUBCLASS_INFO_INCL	-	Band subclass information included
16			The base station shall set this field to '0' when band subclass
17			information is not included for the redirection record;
18			otherwise, the base station shall set this field to '1'.
19	SUBCLASS_REC_LEN	-	Band subclass subrecord length
20			If SUBCLASS_INFO_INCL is set to '0', the base station shall
21			omit this field; otherwise, the base station shall set this field
22			as follows:
23			The base station shall set this field to the number of
24			redirection band subclass indicator fields included in the
25			subrecord minus one. The number of redirection band
26			subclass indicator fields included is limited to the highest
27			band subclass associated with this redirection record (i.e. if
28			the highest band subclass is K, then SUBCLASS_REC_LEN =
29			K).
30			If the SUBCLASS_REC_LEN field is included, the base station shall include
31			SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included
32			corresponds to band subclass '0' and the N <sup>th</sup> field included corresponds to band subclass
33			'N-1'.
34	REDIRECT_SUBCLASS	-	Redirection band subclass indicator
35			The base station shall set this field to '1' if the corresponding
36			band subclass is associated with this redirection record;
37			otherwise, the base station shall set this field to '0'.
38	RESERVED	-	Reserved bits.
39			The base station shall add reserved bits as needed in order to
40			make the length of the entire record equal to an integer
41			number of octets. The base station shall set these bits to '0'.
42			
43			



## 1 3.7.2.3.2.28 Extended CDMA Channel List Message

2 MSG\_TAG: ECCLM

3

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
NUM_FREQ	4

NUM\_FREQ occurrences of the following field:

{ (NUM\_FREQ)

CDMA_FREQ	11
-----------	----

} (NUM\_FREQ)

RC_QPCH_SEL_INCL	1
------------------	---

If RC\_QPCH\_SEL\_INCL is equal to '1', include NUM\_FREQ occurrences of the following field:

{ (NUM\_FREQ)

RC_QPCH_HASH_IND	1
------------------	---

} (NUM\_FREQ)

TD_SEL_INCL	1
-------------	---

TD_MODE	0 or 2
---------	--------

If TD\_SEL\_INCL is equal to '1', include NUM\_FREQ occurrences of the following fields:

{ (NUM\_FREQ)

TD_HASH_IND	1
-------------	---

TD_POWER_LEVEL	0 or 2
----------------	--------

} (NUM\_FREQ)

CDMA_BAND	5
-----------	---

SUBCLASS_INFO_INCL	1
--------------------	---

SUBCLASS_REC_LEN	0 or 5
------------------	--------

SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord:

{ (SUBCLASS\_REC\_LEN + 1)

CDMA_SUBCLASS	1
---------------	---

} (SUBCLASS\_REC\_LEN + 1)

CDMA_FREQ_WEIGHT_INCL	1
-----------------------	---

4

1

If CDMA\_FREQ\_WEIGHT\_INCL is equal to '1', include NUM\_FREQ occurrences of the following field:

{ (NUM\_FREQ)

CDMA_FREQ_WEIGHT	3
------------------	---

} (NUM\_FREQ)

NUM_BAND	3
----------	---

{ (NUM\_BAND)

ADD_CDMA_BAND	5
ADD_SUBCLASS_INFO_INCL	1
ADD_SUBCLASS_REC_LEN	0 or 5

ADD\_SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord:

{ (ADD\_SUBCLASS\_REC\_LEN + 1)

ADD_CDMA_SUBCLASS	1
-------------------	---

} (ADD\_SUBCLASS\_REC\_LEN + 1)

ADD_TD_MODE	0 or 2
BYPASS_SYS_DET_IND	1
NUM_ADD_FREQ	4

NUM\_ADD\_FREQ occurrences of the following field:

{ (NUM\_ADD\_FREQ)

ADD_CDMA_FREQ	11
ADD_RC_QPCH_HASH_IND	0 or 1
ADD_TD_HASH_IND	0 or 1
ADD_TD_POWER_LEVEL	0 or 2
ADD_CDMA_FREQ_WEIGHT	0 or 3

} (NUM\_ADD\_FREQ)

} (NUM\_BAND)

2

3

PILOT\_PN - Pilot PN sequence offset index.

4

The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.

5

6

CONFIG\_MSG\_SEQ - Configuration message sequence number.

7

The base station shall set this field to CONFIG\_SEQ (see 3.6.2.2).

8

9

NUM\_FREQ - Number of CDMA Frequencies

1                   The base station shall set this field to the number of  
2 occurrences of the CDMA\_FREQ field included in this  
3 message.

4                   The base station shall not set this field to '0000'.

5   The base station shall include NUM\_FREQ occurrences of the following one-field record:

6                   CDMA\_FREQ     -   CDMA Channel frequency assignment.

7                   If this message is sent on the Paging Channel:

8                   The base station shall set this field to the CDMA channel  
9 number corresponding to the CDMA frequency  
10 assignment for a CDMA Channel containing a Paging  
11 Channel (see [2]).

12                   This CDMA channel shall reside in the same band class  
13 as the band class where this message is being  
14 transmitted. If SUBCLASS\_INFO\_INCL is equal to '1', this  
15 CDMA channel shall also reside in at least one supported  
16 CDMA\_SUBCLASS included in the message.

17                   If this message is sent on the Primary Broadcast Control  
18 Channel:

19                   The base station shall set this field to the CDMA Channel  
20 number corresponding to the CDMA frequency  
21 assignment for a CDMA Channel containing a Primary  
22 Broadcast Control Channel and Forward Common Control  
23 Channel (see [2]).

24                   This CDMA channel shall reside in the same band class  
25 as the band class where this message is being  
26 transmitted. If SUBCLASS\_INFO\_INCL is equal to '1', this  
27 CDMA channel shall also reside in at least one supported  
28 CDMA\_SUBCLASS included in the message.

29                   If the base station supports a CDMA frequency  
30 assignment without transmit diversity, the base station  
31 should not set the first occurrence of this field to a CDMA  
32 channel number corresponding to a transmit diversity  
33 frequency assignment.

34   RC\_QPCH\_SEL\_INCL     -   RC and QPCH Selection included indicator

35                   The base station shall set this field to '1', if NUM\_FREQ  
36 occurrences of RC\_QPCH\_HASH\_IND are included; otherwise,  
37 it shall set this field to '0'.

38   If the base station sets this field to '1', the base station shall set the RC\_QPCH\_HASH\_IND  
39 field to '1' in at least one of the following one-field records:

40   RC\_QPCH\_HASH\_IND     -   RC\_QPCH channel hashing indicator

41                   If RC\_QPCH\_SEL\_INCL is set to '1', the base station shall  
42 include NUM\_FREQ occurrences of this field and set this field  
43 as follow; otherwise, the base station shall omit this field.

1			The base station shall set this field to '1', if the corresponding
2			CDMA channel is to be selected for channel hashing by
3			mobile stations capable of Radio Configurations greater than
4			two or capable of supporting Quick Paging Channel.
5	TD_SEL_INCL	-	Transmit diversity selection indicator included.
6			The base station shall set this field to '1', if the base station
7			includes transmit diversity selection information in this
8			message; otherwise, the base station shall set this field to '0'.
9			When the <i>Extended CDMA Channel List Message</i> is sent on
10			the Paging Channel, the base station shall set this field to '0'.
11	TD_MODE	-	Transmit diversity mode.
12			If TD_SEL_INCL is set to '0', the base station shall omit this
13			field; otherwise, the base station shall include this field and
14			set it as follows:
15			The base station shall set this field to the Transmit Diversity
16			mode used on the band class where this message is being
17			transmitted, as specified in Table 3.7.2.3.2.26-3.
18	If TD_SEL_INCL is set to '1', the base station shall include NUM_FREQ occurrences of the		
19	following two-field record, and shall set the TD_HASH_IND field to '1' in at least one of the		
20	records:		
21	TD_HASH_IND	-	Transmit diversity hash indicator.
22			If the associated CDMA_FREQ is to be selected for CDMA
23			channel hashing by mobile stations capable of supporting
24			transmit diversity [TD_MODE], the base station shall set the
25			field to '1'; otherwise, the base station shall set this field to
26			'0'.
27	TD_POWER_LEVEL	-	Transmit diversity power level.
28			If TD_HASH_IND is set to '0', the base station shall omit this
29			field; otherwise, the base station shall include this field and
30			set it to the transmit diversity transmission power level
31			relative to that of the Forward Pilot Channel, as specified in
32			Table 3.7.2.3.2.26-4.
33	CDMA_BAND	-	Current band class.
34			The base station shall set this field to the CDMA band class
35			(see [30]) corresponding to the CDMA frequency assignment
36			for the CDMA Channel where this message is being
37			transmitted.
38	SUBCLASS_INFO_INCL	-	Band subclass information included
39			The base station shall set this field to '0' when no band
40			subclasses are associated with the listed CDMA_FREQ
41			channels or when band subclasses are not to be factored into
42			the mobile station's hashing algorithm; otherwise, the base
43			station shall set this field to '1'.

1	SUBCLASS_REC_LEN	- Band subclass subrecord length
2		If SUBCLASS_INFO_INCL is set to '0', the base station shall
3		omit this field; otherwise, the base station shall set this field
4		as follows:
5		The base station shall set this field to the number of band
6		subclass indicator fields included in the subrecord minus
7		one. The number of band subclass indicator fields included
8		is limited to the highest band subclass supported on any of
9		the CDMA_FREQ channels listed above for the current band
10		(i.e. if the highest band subclass is K, then
11		SUBCLASS_REC_LEN = K).
12	If the SUBCLASS_REC_LEN field is included, the base station shall include	
13	SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included	
14	corresponds to band subclass '0' and the N <sup>th</sup> field included corresponds to band subclass	
15	'N-1'.	
16	CDMA_SUBCLASS	- Band subclass indicator
17		The base station shall set this field to '1' if the corresponding
18		band subclass is supported on any of the CDMA_FREQ
19		channels listed above; otherwise, the base station shall set
20		this field to '0'.
21	CDMA_FREQ_WEIGHT_INCL	- CDMA frequency weight included indicator
22		The base station shall set this field to '1' if the
23		CDMA_FREQ_WEIGHT fields are included in this message;
24		otherwise, it shall set this field to '0'.
25	If CDMA_FREQ_WEIGHT_INCL is included and set to '1', the base station shall include	
26	NUM_FREQ occurrences of the following one-field record:	
27	CDMA_FREQ_WEIGHT	- CDMA frequency weight
28		The base station shall set this field to one less than the
29		weight for this CDMA channel to be used in channel hashing
30		by the mobile station.
31	NUM_BAND	- Number of CDMA Bands
32		The base station shall set this field to the number of
33		additional bands listed in this message.
34	The base station shall include NUM_BAND occurrences of the following record:	
35	ADD_CDMA_BAND	- Band class.
36		The base station shall set this field to the CDMA band class,
37		as specified in [30], corresponding to the additional CDMA
38		frequencies (ADD_CDMA_FREQ) included in this record.
39	ADD_SUBCLASS_INFO_INCL	- Band subclass information included
40		The base station shall set this field to '0' when no band
41		subclasses are associated with the listed band or when band
42		subclasses are not to be factored into the mobile station's
43		hashing algorithm; otherwise, the base station shall set this
44		field to '1'.

1	ADD_SUBCLASS_REC_LEN	-	Band subclass subrecord length
2			If ADD_SUBCLASS_INFO_INCL is set to '0', the base station
3			shall omit this field; otherwise, the base station shall set this
4			field as follows:
5			The base station shall set this field to the number of band
6			subclass indicator fields included in the subrecord minus
7			one. The number of band subclass indicator fields included
8			is limited to the highest band subclass supported on the
9			band listed above (i.e. if the highest band subclass is K, then
10			ADD_SUBCLASS_REC_LEN = K).
11	If the ADD_SUBCLASS_REC_LEN field is included, the base station shall include		
12	ADD_SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field		
13	included corresponds to band subclass '0' and the N <sup>th</sup> field included corresponds to band		
14	subclass 'N-1'.		
15	ADD_CDMA_SUBCLASS	-	Band subclass indicator
16			The base station shall set this field to '1' if the corresponding
17			band subclass is supported on the band listed above;
18			otherwise, the base station shall set this field to '0'.
19	ADD_TD_MODE	-	Transmit diversity mode.
20			If TD_SEL_INCL is set to '0', the base station shall omit this
21			field; otherwise, the base station shall include this field and
22			set it as follows:
23			The base station shall set this field to the Transmit Diversity
24			mode on the ADD_CDMA_BAND listed above, as specified in
25			Table 3.7.2.3.2.26-3.
26	BYPASS_SYS_DET_IND	-	Direct to idle allowed indicator.
27			The base station shall set this field to '1' if the mobile station
28			is allowed to go directly to idle state on any CDMA channel
29			belonging to the ADD_CDMA_BAND listed above.
30	NUM_ADD_FREQ	-	Number of additional CDMA Frequencies
31			The base station shall set this field to the number of
32			occurrences of the ADD_CDMA_FREQ field included hereafter.
33	The mobile station shall include NUM_ADD_FREQ occurrences of the following record:		
34	ADD_CDMA_FREQ	-	CDMA Channel frequency assignment.
35			If this message is sent on the Paging Channel:
36			The base station shall set this field to the CDMA channel
37			number corresponding to the CDMA frequency
38			assignment for a CDMA Channel containing a Paging
39			Channel (see [2]).

1 This CDMA channel resides in the band class listed in  
2 this ADD\_CDMA\_BAND record. If  
3 ADD\_SUBCLASS\_INFO\_INCL is equal to '1', this CDMA  
4 channel shall also reside in at least one supported  
5 ADD\_CDMA\_SUBCLASS included in this  
6 ADD\_CDMA\_BAND record.

7 If this message is sent on the Primary Broadcast Control  
8 Channel:

9 The base station shall set this field to the CDMA Channel  
10 number corresponding to the CDMA frequency  
11 assignment for a CDMA Channel containing a Primary  
12 Broadcast Control Channel and Forward Common Control  
13 Channel (see [2]).

14 This CDMA channel resides in the band class listed in  
15 this ADD\_CDMA\_BAND record. If  
16 ADD\_SUBCLASS\_INFO\_INCL is equal to '1', this CDMA  
17 channel shall also reside in at least one supported  
18 ADD\_CDMA\_SUBCLASS included in this  
19 ADD\_CDMA\_BAND record.

20 If the base station supports a CDMA frequency  
21 assignment without transmit diversity, the base station  
22 should not set the first occurrence of this field to a CDMA  
23 channel number corresponding to a transmit diversity  
24 frequency assignment.

25 ADD\_RC\_QPCH\_HASH\_IND - RC QPCH channel hashing indicator

26 If RC\_QPCH\_SEL\_INCL is set to '0', the base station shall  
27 omit this field; otherwise, the base station shall include this  
28 field and set it as follows:

29 The base station shall set this field to '1', if the corresponding  
30 CDMA channel is to be selected for channel hashing by  
31 mobile stations capable of Radio Configurations greater than  
32 two or capable of supporting Quick Paging Channel.

33 ADD\_TD\_HASH\_IND - Transmit diversity hash indicator.

34 If TD\_SEL\_INCL is set to '0', the base station shall omit this  
35 field; otherwise, the base station shall include this field and  
36 set it as follows:

37 If the associated ADD\_CDMA\_FREQ is to be selected for  
38 CDMA channel hashing by mobile stations capable of  
39 supporting transmit diversity [TD\_MODE], the base station  
40 shall set the field to '1'; otherwise, the base station shall set  
41 this field to '0'.

42 ADD\_TD\_POWER\_LEVEL - Transmit diversity power level.

43 If ADD\_TD\_HASH\_IND is not included or is included and set  
44 to '0', the base station shall omit this field; otherwise, the  
45 base station shall include this field and set it to the transmit  
46 diversity transmission power level relative to that of the  
47 Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.

1    ADD\_CDMA\_FREQ\_WEIGHT -    CDMA frequency weight  
2  
3                                If CDMA\_FREQ\_WEIGHT\_INCL is set to '0', the base station  
4                                shall omit this field; otherwise, the base station shall include  
5                                this field and set it as follows:  
6  
7                                The base station shall set this field to one less than the  
8                                weight for this CDMA channel to be used in channel hashing  
                                 by the mobile station.



## 1 3.7.2.3.2.29 User Zone Reject Message

2 MSG\_TAG: UZRM

Field	Length (bits)
REJECT_UZID	16
REJECT_ACTION_INDI	3
UZID_ASSIGN_INCL	1
ASSIGN_UZID	0 or 16

3 REJECT\_UZID - Rejected User Zone identifier.

4 The base station shall set this field to the User Zone identifier  
5 of the User Zone rejected by the base station.

6 REJECT\_ACTION\_INDI - Rejection action indicator.

7 The base station shall set this field to the value shown in  
8 Table 3.7.2.3.2.29-1 corresponding to the User Zone rejection  
9 action field to identify the mobile station action.

10 **Table 3.7.2.3.2.29-1. Rejection Action Indicators**

Description	REJECT_ACTION_INDI (binary)
Disable UZID until Next Update	000
Disable UZID until next power cycle	001
Disable UZID until new SID	010
Disable UZID until new SID/NID	011
Disable UZID until next BASE_ID	100
All other REJECT_ACTION_INDI values are reserved	

11

12 UZID\_ASSIGN\_INCL - User Zone identifier assignment included indicator.

13 If assigned UZID information is included, the base station  
14 shall set this field to '1'; otherwise, the base station shall set  
15 this field to '0'.

16 ASSIGN\_UZID - Assigned User Zone identifiers.

1  
2  
3

The base station shall set this field to the User Zone identifier of the User Zone assigned to the mobile station.

1 3.7.2.3.2.30 ANSI-41 System Parameters Message  
2 MSG\_TAG: A41SPM  
3

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
SID	15
NID	16
PACKET_ZONE_ID	8
REG_ZONE	12
TOTAL_ZONES	3
ZONE_TIMER	3
MULT_SIDS	1
MULT_NIDS	1
HOME_REG	1
FOR_SID_REG	1
FOR_NID_REG	1
POWER_UP_REG	1
POWER_DOWN_REG	1
PARAMETER_REG	1
REG_PRD	7
DIST_REG_INCL	1
REG_DIST	0 or 11
DELETE_FOR_TMSI	1
USE_TMSI	1
PREF_MSID_TYPE	2

(continues on next page)

4  
5

1

<b>Field</b>	<b>Length (bits)</b>
TMSI_ZONE_LEN	4
TMSI_ZONE	$8 \times \text{TMSI\_ZONE\_LEN}$
IMSI_T_SUPPORTED	1
MAX_NUM_ALT_SO	3
AUTO_MSG_SUPPORTED	1
AUTO_MSG_INTERVAL	0 or 3
OTHER_INFO_INCL	1
BASE_ID	0 or 16
MCC	0 or 10
IMSI_11_12	0 or 7
BROADCAST_GPS_ASST	0 or 1
SIG_ENCRYPT_SUP	0 or 8
CS_SUPPORTED	1
MS_INIT_POS_LOC_SUP_IND	1
MSG_INTEGRITY_SUP	1
SIG_INTEGRITY_SUP_INCL	0 or 1
SIG_INTEGRITY_SUP	0 or 8
IMSI_10_INCL	1
IMSI_10	0 or 4
MAX_ADD_SERV_INSTANCE	0 or 3
TKZ_MODE_SUPPORTED	1
TKZ_ID	0 or 8
PZ_HYST_ENABLED	0 or 1
PZ_HYST_INFO_INCL	0 or 1
PZ_HYST_LIST_LEN	0 or 4
PZ_HYST_ACT_TIMER	0 or 8
PZ_HYST_TIMER_MUL	0 or 3
PZ_HYST_TIMER_EXP	0 or 5
EXT_PREF_MSID_TYPE	2
MEID_REQD	0 or 1

2

3

1	PILOT_PN	- Pilot PN sequence offset index.
2		The base station shall set this field to the pilot PN sequence
3		offset for this base station, in units of 64 PN chips.
4	CONFIG_MSG_SEQ	- Configuration message sequence number.
5		The base station shall set this field to CONFIG_SEQ
6		(see 3.6.2.2).
7	SID	- System identification.
8		The base station shall set this field to the system
9		identification number for this system (see 2.6.5.2).
10	NID	- Network identification.
11		This field serves as a sub-identifier of a system as defined by
12		the owner of the SID.
13		The base station shall set this field to the network
14		identification number for this network (see 2.6.5.2).
15	PACKET_ZONE_ID	- Packet data services zone identifier.
16		If the base station supports a packet data service zone, the
17		base station shall set this field to its non-zero packet data
18		services zone identifier.
19		If the base station does not support a packet data service
20		zone, the base station shall set this field to '00000000'.
21	REG_ZONE	- Registration zone.
22		The base station shall set this field to its registration zone
23		number (see 2.6.5.1.5).
24	TOTAL_ZONES	- Number of registration zones to be retained.
25		The base station shall set this field to the number of
26		registration zones the mobile station is to retain for purposes
27		of zone-based registration (see 2.6.5.1.5).
28		If zone-based registration is to be disabled, the base station
29		shall set this field to '000'.
30	ZONE_TIMER	- Zone timer length.
31		The base station shall set this field to the ZONE_TIMER value
32		shown in Table 3.7.2.3.2.30-1 corresponding to the length of
33		the zone registration timer to be used by mobile stations.
34		

1

**Table 3.7.2.3.2.30-1. Value of Zone Timer**

<b>ZONE_TIMER Value (binary)</b>	<b>Timer Length (Minutes)</b>
000	1
001	2
010	5
011	10
100	20
101	30
110	45
111	60

2

3

MULT\_SIDS - Multiple SID storage indicator.

4

If mobile stations may store entries of SID\_NID\_LIST containing different SIDs, the base station shall set this field to '1'; otherwise the base station shall set this field to '0'.

5

6

7

MULT\_NIDS - Multiple NID storage indicator.

8

If mobile stations may store multiple entries of SID\_NID\_LIST having the same SID (with different NIDs), the base station shall set this field to '1'; otherwise the base station shall set this field to '0'.

9

10

11

12

HOME\_REG - Home registration indicator.

13

If mobile stations that are not roaming (see 2.6.5.3) and have MOB\_TERM\_HOME equal to '1' are to be enabled for autonomous registrations, the base station shall set this field to '1'. If such mobile stations are not to be enabled for autonomous registration, the base station shall set this field to '0'.

14

15

16

17

18

19

FOR\_SID\_REG - SID roamer registration indicator.

20

If mobile stations that are foreign SID roamers (see 2.6.5.3) and have MOB\_TERM\_FOR\_SID equal to '1' are to be enabled for autonomous registration, the base station shall set this field to '1'. If such mobile stations are not to be enabled for autonomous registration, the base station shall set this field to '0'.

21

22

23

24

25

26

FOR\_NID\_REG - NID roamer registration indicator.

27

If mobile stations that are foreign NID roamers (see 2.6.5.3) and have MOB\_TERM\_FOR\_NID equal to '1' are to be enabled for autonomous registration, the base station shall set this field to '1'. If such mobile stations are not to be enabled for autonomous registration, the base station shall set this field to '0'.

28

29

30

31

32

1	POWER_UP_REG	-	Power-up registration indicator.
2			If mobile stations enabled for autonomous registration are to
3			register immediately after powering on and receiving the
4			system overhead messages, the base station shall set this
5			field to '1'; otherwise, the base station shall set this field to
6			'0'.
7	POWER_DOWN_REG	-	Power-down registration indicator.
8			If mobile stations enabled for autonomous registration are to
9			register immediately before powering down, the base station
10			shall set this field to '1'; otherwise, the base station shall set
11			this field to '0'.
12	PARAMETER_REG	-	Parameter-change registration indicator.
13			If mobile stations are to register on parameter change events
14			as specified in 2.6.5.1.6, the base station shall set this field to
15			'1'. If not, the base station shall set this field to '0'.
16	REG_PRD	-	Registration period.
17			If mobile stations are not to perform timer-based registration,
18			the base station shall set this field to '0000000'. If mobile
19			stations are to perform timer-based registration, the base
20			station shall set this field to the value in the range 29 to 85
21			inclusive, such that the desired timer value is
22			$\lfloor 2\text{REG\_PRD}/4 \rfloor \times 0.08 \text{ seconds.}$
23	DIST_REG_INCL	-	Distance-Based Registration Information Included.
24			The base station shall set this field to '1' if it includes
25			distance-based registration information in the message and
26			mobile stations are to perform distance-based registration;
27			otherwise the base station shall set this field to '0'.
28	REG_DIST	-	Registration distance.
29			If DIST_REG_INCL is set to '1', the base station shall include
30			the field REG_DIST and shall set this field as shown below;
31			otherwise, the base station shall omit this field.
32			The base station shall set this field to the non-zero "distance"
33			beyond which the mobile station is to re-register (see
34			2.6.5.1.4).
35	DELETE_FOR_TMSI	-	Delete foreign TMSI.
36			The base station shall set this field to '1' to cause the mobile
37			station to delete its TMSI if the TMSI was assigned in a
38			different TMSI zone from that specified by the TMSI_ZONE
39			field of this message; otherwise, the base station shall set this
40			field to '0'.
41	USE_TMSI	-	Use TMSI indicator.
42			The base station shall set this field to the value shown in
43			Table 3.7.2.3.2.13-1 corresponding to the type of MSID that
44			the mobile station is to use on the Enhanced Access
45			Channel.

1	PREF_MSID_TYPE	-	Preferred Enhanced Access Channel Mobile Station Identifier Type.
2			
3			The base station shall set this field to the value shown in
4			Table 3.7.2.3.2.13-1 and Table 3.7.2.3.2.13-1a corresponding
5			to the type of MSID that the mobile station is to use on the
6			Enhanced Access Channel.
7	TMSI_ZONE_LEN	-	TMSI zone length.
8			The base station shall set this field to the number of octets
9			included in the TMSI_ZONE. The base station shall set this
10			field to a value in the range 1 to 8 inclusive.
11	TMSI_ZONE	-	TMSI zone.
12			The base station shall set this field to the TMSI zone number
13			as specified in [27].
14	IMSI_T_SUPPORTED	-	IMSI_T support indicator.
15			The base station shall set this field to '1' to indicate support
16			for a 15-digit IMSI_T addressing according to [18].
17	MAX_NUM_ALT_SO	-	Maximum number of alternative service options.
18			The base station shall set this field to the maximum number
19			of service option numbers defined in [30], corresponding to
20			alternative service options with no service option group
21			number assigned, that the mobile station is allowed to
22			include in the <i>Origination Message</i> , and the <i>Page Response</i> .
23			If the base station sets this field to a value greater than zero,
24			in addition, the base station shall allow the mobile station to
25			include
26			• a 4-bit or 8-bit service option bitmap in the <i>Origination</i>
27			<i>Message</i> and the <i>Page Response Message</i> ;
28			• alternate service option numbers, not limited to
29			MAX_ALT_SO_NUM, in the <i>Enhanced Origination</i>
30			<i>Message</i> .
31	AUTO_MSG_SUPPORTED	-	Autonomous message supported indicator.
32			If the base station allows the autonomous delivery of the
33			<i>Device Information Message</i> on the r-csch, the base station
34			shall set this field to '1'; otherwise, the base station shall set
35			this field to '0'.
36	AUTO_MSG_INTERVAL	-	Autonomous message interval.
37			If AUTO_MSG_SUPPORTED is set to '0', the base station shall
38			omit this field; otherwise, the base station shall include this
39			field and shall set this field to the AUTO_MSG_INTERVAL
40			value shown in Table 3.7.2.3.2.13-4 to indicate the minimum
41			time interval between autonomous messages sent by a mobile
42			station to the infrastructure. This parameter is intended to
43			allow the infrastructure to limit the frequency of autonomous
44			messages sent by a mobile station on the r-csch.
45	OTHER_INFO_INCL	-	Other information included indicator.



1		The base station shall set this field to '1' if the MC-RR
2		Parameters Message is not sent (see [32]); otherwise, the base
3		station shall set this field to '0'.
4	BASE_ID	- Base station identification.
5		If OTHER_INFO_INCL is set to '1', the base station shall
6		include this field and set it as follows; otherwise, the base
7		station shall omit this field.
8		The base station shall set this field to its identification
9		number.
10	MCC	- Mobile Country Code.
11		If OTHER_INFO_INCL is set to '1', the base station shall
12		include this field and set it as follows; otherwise, the base
13		station shall omit this field.
14		The base station shall set this field to the MCC (see 2.3.1)
15	IMSI_11_12	- 11 <sup>th</sup> and 12 <sup>th</sup> digits of the IMSI.
16		If OTHER_INFO_INCL is set to '1', the base station shall
17		include this field and set it as follows; otherwise, the base
18		station shall omit this field.
19		The base station shall set this field to the IMSI_11_12 (see
20		2.3.1).
21	BROADCAST_GPS_ASST	- Broadcast GPS Assist Indicator.
22		If OTHER_INFO_INCL is set to '1', the base station shall
23		include this field and set it as follows; otherwise, the base
24		station shall omit this field.
25		The base station shall set this field to '1' if it supports
26		Broadcast GPS Assist capability; otherwise, the base station
27		shall set this field to '0'.
28	SIG_ENCRYPT_SUP	- Signaling encryption supported indicator.
29		If OTHER_INFO_INCL is set to '1', the base station shall
30		include this field and set it as follows; otherwise, the base
31		station shall omit this field.
32		This field consists of the subfields shown in Table
33		2.7.1.3.2.1-5.
34		If this field is included, the base station shall set the
35		subfields as follows:
36		The base station shall set the CMEA subfield to '1'.
37		The base station shall set each other subfield to '1' if the
38		corresponding signaling encryption algorithm is supported by
39		the base station; otherwise, the base station shall set the
40		subfield to '0'.
41		The base station shall set the RESERVED subfield to '00000'.
42	CS_SUPPORTED	- Concurrent Services supported indicator.

1			If the base station supports concurrent services, the base
2			station shall set this field to '1'; otherwise, the base station
3			shall set this field to '0'.
4	MS_INIT_POS_LOC_SUP_IND	-	Mobile station initiated position location
5			determination supported indicator.
6			If the base station supports mobile station initiated position
7			determination, the base station shall set this field to '1';
8			otherwise, the base station shall set this field to '0'.
9	MSG_INTEGRITY_SUP	-	Message integrity supported indicator.
10			If the base station supports message integrity the base
11			station shall set this field to '1'; otherwise, the base station
12			shall set this field to '0'.
13	SIG_INTEGRITY_SUP_INCL	-	Signaling message integrity information included
14			indicator.
15			If MSG_INTEGRITY_SUP is set to '1', the base station shall
16			include this field and set it as follows; otherwise, the base
17			station shall omit this field.
18			If the base station supports other integrity algorithm(s) in
19			addition to the default integrity algorithm, the base station
20			shall set this field to '1'; otherwise, the base station shall set
21			this field to '0'.
22	SIG_INTEGRITY_SUP	-	Signaling integrity algorithm supported by the base station.
23			If SIG_INTEGRITY_SUP_INCL is included and is set to '1',
24			the base station shall set this field as follows; otherwise, the
25			base station shall omit this field.
26			The base station shall set this field to indicate the supported
27			message integrity algorithms in addition to the default
28			integrity algorithm.
29			This field consists of the subfields shown in Table
30			2.7.1.3.2.1-6.
31			The base station shall set each subfield to '1' if the
32			corresponding message integrity algorithm is supported by
33			the base station; otherwise, the base station shall set the
34			subfield to '0'.
35			The base station shall set the RESERVED subfield to
36			'00000000'.
37	IMSI_10_INCL	-	IMSI_10 included.
38			If the MNC is a 3-digit number and the base station wants to
39			convey the third digit of the MNC to the mobile station, the
40			base station shall set this field to '1'; otherwise, the base
41			station shall set this field to '0'.
42	IMSI_10	-	The least significant digit of MNC when the MNC is a 3-digit
43			number.

1		If IMSI_10_INCL is set to '0', the base station shall omit this
2		field; otherwise, the base station shall set this field to the
3		least significant digit of MNC converted to binary by the
4		standard decimal-to-binary conversion as shown in Table
5		2.3.1.1-1.
6	MAX_ADD_SERV_INSTANCE-	Maximum number of additional service reference
7		identifiers allowed in origination
8		If the CS_SUPPORTED field is set to '0', the base station shall
9		omit this field; otherwise, the base station shall include this
10		field and set it as follows:
11		The base station shall set this field to the maximum number
12		of additional service reference identifiers that can be included
13		in the <i>Origination Message</i> or <i>Enhanced Origination Message</i> .
14	TKZ_MODE_SUPPORTED	- Tracking zone mode supported indicator.
15		The base station shall set this field to '1' if tracking zone
16		mode is supported; otherwise, the base station shall set this
17		field to '0'.
18	TKZ_ID	- Tracking zone identifier.
19		If TKZ_MODE_SUPPORTED is set to '1', the base station shall
20		set this field to its tracking zone identifier; otherwise, the
21		base station shall omit this field.
22	PZ_HYST_ENABLED	- Packet zone hysteresis enabled.
23		If the PACKET_ZONE_ID field is set to '00000000', the base
24		station shall omit this field; otherwise, the base station shall
25		include this field and set it as follows:
26		If the packet zone hysteresis feature is to be enabled at the
27		mobile station, the base station shall set this field to '1';
28		otherwise, the base station shall set this field to '0'.
29	PZ_HYST_INFO_INCL	- Packet zone hysteresis information included indicator.
30		If the PZ_HYST_ENABLED field is included and is set to '1',
31		the base station shall include this field and set it as follows;
32		otherwise, the base station shall omit this field.
33		If the base includes the PZ_HYST_LIST_LEN,
34		PZ_HYST_ACT_TIMER and packet zone hysteresis timer
35		related fields, the base station shall set this field to '1';
36		otherwise, the base station shall set this field to '0'.
37	PZ_HYST_LIST_LEN	- Packet zone hysteresis list length.
38		If the PZ_HYST_INFO_INCL field is included and is set to '1',
39		the base station shall include this field and set it as follows;
40		otherwise, the base station shall omit this field.
41		The base station shall set this field to the length of the packet
42		zone hysteresis list. This field shall be within the range '0001'
43		through '1111', inclusive.
44	PZ_HYST_ACT_TIMER	- Packet zone hysteresis activation timer.

1			If the PZ_HYST_INFO_INCL field is included and is set to '1',
2			the base station shall include this field and set it as follows;
3			otherwise, the base station shall omit this field.
4			The base station shall set to the value of the packet zone
5			hysteresis activation timer (in units of seconds). This field
6			shall be within the range '00000001' through '11111111',
7			inclusive.
8	PZ_HYST_TIMER_MUL	-	Packet zone hysteresis timer multiplier.
9			If the PZ_HYST_INFO_INCL field is included and is set to '1',
10			the base station shall include this field and set it as follows;
11			otherwise, the base station shall omit this field.
12			The base station shall set the field to x, where $x \times 8^y$
13			seconds is the value of the hysteresis timer and y is the value
14			indicated in the PZ_HYST_TIMER_EXP field. The base station
15			shall set this field to a value that is between 1 and 7
16			inclusive. The value 0 is reserved.
17	PZ_HYST_TIMER_EXP	-	Packet zone hysteresis timer exponent.
18			If the PZ_HYST_INFO_INCL field is included and is set to '1',
19			the base station shall include this field and set it as follows;
20			otherwise, the base station shall omit this field.
21			The base station shall set the field to y, where $x \times 8^y$
22			seconds is the value of the hysteresis timer and x is the value
23			indicated in the PZ_HYST_TIMER_MUL field. The base station
24			shall set this field to a value that is between 0 and 4
25			inclusive. All the other values are reserved.
26	EXT_PREF_MSID_TYPE	-	Extended Preferred Enhanced Access Channel Mobile Station
27			Identifier Type.
28			The base station shall set this field to the value shown in
29			Table 3.7.2.3.2.13-1 and Table 3.7.2.3.2.13-1a corresponding
30			to the type of MSID that the mobile station is to use on the
31			Enhanced Access Channel.
32	MEID_REQD	-	MEID Required Indicator.
33			If EXT_PREF_MSID_TYPE is set to '11' and PREF_MSID_TYPE
34			is set to either '00' or '11', the base station shall omit this
35			field; otherwise, the base station shall include this field and
36			set it as follows:
37			The base station shall set this field to '1' to indicate that
38			network requires MEID (of mobile stations having R-UIM) in
39			registrations; otherwise the base station shall set this field to
40			'0'.
41			
42			

## 1 3.7.2.3.2.31 MC-RR Parameters Message

## 2 MSG\_TAG: MCRRPM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
BASE_ID	16
P_REV	8
MIN_P_REV	8
SR3_INCL	1
SR3_CENTER_FREQ_INCL	0 or 1
SR3_CENTER_FREQ	0 or 11
SR3_BRAT	0 or 2
SR3_BCCH_CODE_CHAN	0 or 7
SR3_PRIMARY_PILOT	0 or 2
SR3_PILOT_POWER1	0 or 3
SR3_PILOT_POWER2	0 or 3
SRCH_WIN_A	4
SRCH_WIN_R	4
T_ADD	6
T_DROP	6
T_COMP	4
T_TDROP	4
NGHBR_MAX_AGE	4
SOFT_SLOPE	6
ADD_INTERCEPT	6
DROP_INTERCEPT	6
ENC_SUPPORTED	1
SIG_ENCRYPT_SUP	0 or 8
UI_ENCRYPT_SUP	0 or 8

(continues on next page)

3

4

<b>Field</b>	<b>Length (bits)</b>
ADD_FIELDS_LEN	8
ADD_FIELDS	$8 \times \text{ADD\_FIELDS\_LEN}$
CCH_INFO_INCL	1
MCC	0 or 10
IMSI_11_12	0 or 7
MAX_SLOT_CYCLE_INDEX	0 or 3
PWR_REP_THRESH	0 or 5
PWR_REP_FRAMES	0 or 4
PWR_THRESH_ENABLE	0 or 1
PWR_PERIOD_ENABLE	0 or 1
PWR_REP_DELAY	0 or 5
RESELECT_INCLUDED	0 or 1
EC_THRESH	0 or 5
EC_I0_THRESH	0 or 5
BASE_LAT	0 or 22
BASE_LONG	0 or 23
PILOT_REPORT	0 or 1
ACC_ENT_HO_ORDER	0 or 1
ACCESS_HO	0 or 1
ACCESS_HO_MSG_RSP	0 or 1
ACCESS_PROBE_HO	0 or 1
ACC_HO_LIST_UPD	0 or 1
ACC_PROBE_HO_OTHER_MSG	0 or 1
MAX_NUM_PROBE_HO	0 or 3
NUM_FCCCH	0 or 3
FCCCH_RATE	0 or 3
FCCCH_CODE_RATE	0 or 1

NUM\_FCCCH occurrences of the following one field record:

{ (NUM\_FCCCH)

FCCCH_CODE_CHAN	8
} (NUM_FCCCH)	

(continues on next page)

<b>Field</b>	<b>Length (bits)</b>
BCAST_INDEX	0 or 3
NUM_BCCH_BCAST	0 or 3
NUM_BCCH_BCAST occurrences of the following three-field record: <i>{ (NUM_BCCH_BCAST)</i>	
BCCH_CODE_CHAN	7
BRAT	2
BCCH_CODE_RATE	1
<i>} (NUM_BCCH_BCAST)</i>	
QPCH_SUPPORTED	0 or 1
NUM_QPCH	0 or 2
QPCH_RATE	0 or 1
QPCH_POWER_LEVEL_PAGE	0 or 3
QPCH_CCI_SUPPORTED	0 or 1
QPCH_POWER_LEVEL_CONFIG	0 or 3
NUM_QPCH occurrences of the following one field record if SR3_INCL is set to '1' : <i>{ (NUM_QPCH)</i>	
QPCH_CODE_CHAN	0 or 8
<i>} (NUM_QPCH)</i>	
QPCH_BI_SUPPORTED	0 or 1
QPCH_POWER_LEVEL_BCAST	0 or 3
SDB_SUPPORTED	0 or 1
BROADCAST_GPS_ASST	0 or 1
RLGAIN_TRAFFIC_PILOT	0 or 6
REV_PWR_CNTL_DELAY_INCL	0 or 1
REV_PWR_CNTL_DELAY	0 or 2
MOB_QOS	0 or 1
USE_SYNC_ID	0 or 1
NUM_OPT_MSG_BITS	0 or 4

(continues on next page)

<b>Field</b>	<b>Length (bits)</b>
SENDING_RAND	0 or 1
PRI_NGHR_LST	0 or 1
USER_ZONE_ID	0 or 1
EXT_GLOBAL_REDIRECT	0 or 1
AP_PILOT_INFO	0 or 1
AP_IDT	0 or 1
AP_ID_TEXT	0 or 1
GEN_OVHD_INF_IND	0 or 1
FD_CHAN_LST_IND	0 or 1
ATIM_IND	0 or 1
RESERVED	0 or (NUM_OPT_MSG_BITS - 10)
PILOT_INFO_REQ_SUPPORTED	0 or 1
BAND_CLASS_INFO_REQ	0 or 1
ALT_BAND_CLASS	0 or 5
CDMA_OFF_TIME_REP_SUP_IND	1
CDMA_OFF_TIME_REP_THRESHOLD_UNIT	0 or 1
CDMA_OFF_TIME_REP_THRESHOLD	0 or 3
CHM_SUPPORTED	1
RELEASE_TO_IDLE_IND	1
RECONNECT_MSG_IND	1
T_TDROP_RANGE_INCL	1
T_TDROP_RANGE	0 or 4
FOR_PDCH_SUPPORTED	1
PDCH_CHM_SUPPORTED	0 or 1
PDCH_PARMS_INCL	0 or 1
FOR_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_ACKCH_PILOT	0 or 6
RLGAIN_CQICH_PILOT	0 or 6
NUM_SOFT_SWITCHING_FRAMES	0 or 4
NUM_SOFTEN_SWITCHING_FRAMES	0 or 4



NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTER_SWITCHING_SLOTS	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTER_SWITCHING_DELAY	0 or 8

Field	Length (bits)
WALSH_TABLE_ID	0 or 3
NUM_PDCCH	0 or 3

NUM\_PDCCH+1 occurrences of the following record:

{ (NUM\_PDCCH+1)

FOR_PDCCH_WALSH	0 or 6
-----------------	--------

} (NUM\_PDCCH+1)

IMSI_10_INCL	0 or 1
IMSI_10	0 or 4
NEG_SLOT_CYCLE_INDEX_SUP	1
RER_MODE_SUPPORTED	1
AUTO_FCSO_ALLOWED	1
SENDING_BSPM	1
BSPM_PERIOD_INDEX	0 or 4
REV_PDCH_SUPPORTED	0 or 1
REV_PDCH_PARMS_INCL	0 or 1
REV_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_SPICH_PILOT	0 or 6
RLGAIN_REQCH_PILOT	0 or 6
RLGAIN_PDCCH_PILOT	0 or 6
REV_PDCH_PARMS_1_INCL	0 or 1
REV_PDCH_TABLE_SEL	0 or 1
REV_PDCH_MAX_AUTO_TPR	0 or 8
REV_PDCH_NUM_ARQ_ROUNDS_NORMAL	0 or 2
REV_PDCH_OPER_PARMS_INCL	0 or 1
REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET	0 or 4
REV_PDCH_DEFAULT_PERSISTENCE	0 or 1
REV_PDCH_RESET_PERSISTENCE	0 or 1
REV_PDCH_GRANT_PRECEDENCE	0 or 1
REV_PDCH_MSIB_SUPPORTED	0 or 1
REV_PDCH_SOFT_SWITCHING_RESET_IND	0 or 1

SDB_IN_RCNM_IND	0 or 1
CAND_BAND_INFO_REQ	0 or 1
NUM_CAND_BAND_CLASS	0 or 3

NUM\_CAND\_BAND\_CLASS + 1 occurrences of the following record:

$\{(NUM\_CAND\_BAND\_CLASS + 1)\}$

CAND_BAND_CLASS	5
SUBCLASS_INFO_INCL	1
SUBCLASS_REC_LEN	0 or 5

SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord:

$\{(SUBCLASS\_REC\_LEN + 1)\}$

BAND_SUBCLASS_IND	0 or 1
-------------------	--------

$\}(SUBCLASS\_REC\_LEN + 1)$

$\}(NUM\_CAND\_BAND\_CLASS + 1)$

RESCAN	1
TX_PWR_LIMIT_INCL	1
TX_PWR_LIMIT	0 or 6
BYPASS_REG_IND	2
CRRM_MSG_IND	1
APPIM_PERIOD_INDEX	0 or 3
GEN_OVHD_CYCLE_INDEX	0 or 3
ATIM_CYCLE_INDEX	0 or 3
ADD_LOC_INFO_INCL	0 or 1
LOC_UNC_H	0 or 4
HEIGHT	0 or 14
LOC_UNC_V	0 or 4

1

2

PILOT\_PN - Pilot PN sequence offset index.

3

4

The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.

5

CONFIG\_MSG\_SEQ - Configuration message sequence number.

6

7

The base station shall set this field to CONFIG\_SEQ (see 3.6.2.2).

8

BASE\_ID - Base station identification.

1		The base station shall set this field to its identification
2		number.
3	P_REV	- Protocol revision level.
4		The base station shall set this field to '00001100'.
5	MIN_P_REV	- Minimum protocol revision level.
6		The base station sets this field to prevent mobile stations,
7		which cannot be supported by the base station from
8		accessing the system.
9		The base station shall set this field to the minimum protocol
10		revision level that it supports.
11	SR3_INCL	- Spreading Rate 3 common channel parameters included
12		indicator.
13		The base station shall set this field to '1' if the base station
14		includes SR3 related parameters in this message; otherwise,
15		the base station shall set this field to '0'.
16	SR3_CENTER_FREQ_INCL	- Center SR3 frequency assignment included.
17		If SR3_INCL is set to '0', the base station shall omit this field;
18		otherwise, the base station shall set this field as follows:
19		The base station shall set this field to '1', if the CDMA
20		Channel number corresponding to the SR3 center frequency
21		assignment for the CDMA Channel containing a Broadcast
22		Control Channel is different from the current SR1 frequency
23		assignment. Otherwise, the base station shall set this field to
24		'0'.
25	SR3_CENTER_FREQ	- Center SR3 frequency assignment.
26		If SR3_CENTER_FREQ_INCL is not included or is included
27		but is set to '0', the base station shall omit this field;
28		otherwise, the base station shall set this field as follows:
29		The base station shall set this field to the CDMA Channel
30		number corresponding to the SR3 center frequency
31		assignment for the CDMA Channel containing a Broadcast
32		Control Channel.
33	SR3_BRAT	- Spreading Rate 3 BCCH data rate.
34		If SR3_INCL is set to '0', the base station shall omit this field;
35		otherwise, the base station shall set this field as follows:
36		The base station shall set this field to the BCCH rate field
37		value shown in Table 3.7.2.3.2.26-2 corresponding to the
38		data rate used by the Primary Broadcast Control Channel in
39		the system.
40	SR3_BCCH_CODE_CHAN	- Spreading Rate 3 BCCH Walsh code index.
41		If SR3_INCL is set to '0', the base station shall omit this field;
42		otherwise, the base station shall set this field as follows:

1			The base station shall set this field to the Walsh code index
2			corresponding to the Spreading Rate 3 BCCH.
3	SR3_PRIMARY_PILOT	-	Primary SR3 pilot.
4			If SR3_INCL is set to '0', the base station shall omit this field;
5			otherwise, the base station shall set this field as follows:
6			The base station shall set this field to the value shown in
7			Table 3.7.2.3.2.26-5 corresponding to the position of the
8			primary SR3 pilot.
9	SR3_PILOT_POWER1	-	The primary SR3 pilot power level relative to that of the pilot
10			on the lower frequency of the two remaining SR3 frequencies.
11			If SR3_INCL is set to '0', the base station shall omit this field;
12			otherwise, the base station shall set this field to the value
13			shown in Table 3.7.2.3.2.26-6 corresponding to the power
14			level of the primary pilot with respect to the pilot on the lower
15			frequency of the two remaining SR3 frequencies.
16	SR3_PILOT_POWER2	-	The primary SR3 pilot power level relative to that of the pilot
17			on the higher frequency of the two remaining SR3
18			frequencies.
19			If SR3_INCL is set to '0', the base station shall omit this field;
20			otherwise, the base station shall set this field to the value
21			shown in Table 3.7.2.3.2.26-6 corresponding to the power
22			level of the primary pilot with respect to the pilot on the
23			higher frequency of the two remaining SR3 frequencies.
24	SRCH_WIN_A	-	Search window size for the Active Set and Candidate Set.
25			The base station shall set this field to the value shown in
26			Table 2.6.6.2.1-1 corresponding to the search window size to
27			be used by mobile stations for the Active Set and Candidate
28			Set.
29	SRCH_WIN_R	-	Search window size for the Remaining Set.
30			The base station shall set this field to the value shown in
31			Table 2.6.6.2.1-1 corresponding to the search window size to
32			be used by mobile stations for the Remaining Set.
33	T_ADD	-	Pilot detection threshold.
34			This value is used by the mobile station to trigger the transfer
35			of a pilot from the Neighbor Set or Remaining Set to the
36			Candidate Set (see 2.6.6.2.6) and to trigger the sending of the
37			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
38			<i>Strength Measurement Message</i> initiating the handoff process
39			(see 2.6.6.2.5.2).
40			The base station shall set this field to the pilot detection
41			threshold, expressed as an unsigned binary number equal to
42			$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .

1	T_DROP	-	Pilot drop threshold.
2			This value is used by mobile stations to start a handoff drop
3			timer for pilots in the Active Set and the Candidate Set (see
4			2.6.6.2.3).
5			The base station shall set this field to the pilot drop
6			threshold, expressed as an unsigned binary number equal to
7			$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
8	T_COMP	-	Active Set versus Candidate Set comparison threshold.
9			Mobile stations transmit a <i>Pilot Strength Measurement</i>
10			<i>Message</i> or <i>Extended Pilot Strength Measurement Message</i>
11			when the strength of a pilot in the Candidate Set exceeds that
12			of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
13			The base station shall set this field to the threshold
14			Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB.
15	T_TDROP	-	Drop timer value.
16			Timer value after which an action is taken by mobile stations
17			for a pilot that is a member of the Active Set or Candidate Set,
18			and whose strength has not become greater than T_DROP. If
19			the pilot is a member of the Active Set, a <i>Pilot Strength</i>
20			<i>Measurement Message</i> or <i>Extended Pilot Strength</i>
21			<i>Measurement Message</i> is issued. If the pilot is a member of
22			the Candidate Set, it will be moved to the Neighbor Set.
23			The base station shall set this field to the T_TDROP value
24			shown in Table 2.6.6.2.3-1 corresponding to the drop timer
25			value to be used by mobile stations.
26	NGHBR_MAX_AGE	-	Neighbor Set maximum AGE.
27			The base station shall set this field to the maximum AGE
28			value beyond which mobile stations are to drop members
29			from the Neighbor Set (see 2.6.6.2.6.3).
30	SOFT_SLOPE	-	The slope in the inequality criterion for adding a pilot to the
31			Active Set, or dropping a pilot from the Active Set (see
32			2.6.6.2.3 and 2.6.6.2.5.2).
33			The base station shall set this field as an unsigned binary
34			number.
35	ADD_INTERCEPT	-	The intercept in the inequality criterion for adding a pilot to
36			the Active Set (see 2.6.6.2.5.2).
37			The base station shall set this field as a two's complement
38			signed binary number, in units of 0.5 dB.
39	DROP_INTERCEPT	-	The intercept in the inequality criterion for dropping a pilot
40			from the Active Set (see 2.6.6.2.3).
41			The base station shall set this field as a two's complement
42			signed binary number, in units of 0.5 dB.

1	ENC_SUPPORTED	-	Encryption fields included.
2			The base station shall set this field to '1' if the encryption
3			related fields are included; otherwise the base station shall
4			set this field to '0'.
5	SIG_ENCRYPT_SUP	-	Signaling encryption supported indicator.
6			If ENC_SUPPORTED is equal to '1', the base station shall
7			include this field; otherwise, the base station shall omit this
8			field. If this field is included, this field indicates which
9			signaling encryption algorithms are supported by the base
10			station.
11			This field consists of the subfields shown in Table
12			2.7.1.3.2.1-5.
13			If this field is included, the base station shall set the
14			subfields as follows:
15			The base station shall set the CMEA subfield to '1'.
16			The base station shall set each other subfield to '1' if the
17			corresponding signaling encryption algorithm is supported by
18			the base station; otherwise, the base station shall set the
19			subfield to '0'.
20			The base station shall set the RESERVED subfield to '00000'.
21	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
22			If ENC_SUPPORTED is equal to '1', the base station shall
23			include this field; otherwise, the base station shall omit this
24			field. If this field is included, the base station shall set this
25			field to indicate the supported user information encryption
26			algorithms.
27			This field consists of the subfields shown in Table
28			2.7.1.3.2.4-9.
29			The base station shall set each subfield to '1' if the
30			corresponding user information encryption algorithm is
31			supported by the base station; otherwise, the base station
32			shall set the subfield to '0'.
33	ADD_FIELDS_LEN	-	Additional fields length.
34			The base station shall set this field to the number of octets
35			included in the ADD_FIELDS.
36	ADD_FIELDS	-	Additional fields.
37			If the ADD_FIELDS_LEN field is not equal to '00000000', the
38			base station shall include the following fields as additional
39			fields.
40			

Field	Length (bits)
RESERVED	0 – 7 (as needed)

1	CCH_INFO_INCL	-	Common Channel information included indicator.
2			If the message is sent on the f-csch and additional
3			information is included, the base station shall set this field to
4			'1'; otherwise, the base station shall set this field to '0'.
5			The base station shall set this field to '1'.
6	MCC	-	Mobile Country Code.
7			If CCH_INFO_INCL is set to '1', the base station shall include
8			this field and set it as follows; otherwise, the base station
9			shall omit this field.
10			The base station shall set this field to the MCC (see 2.3.1)
11	IMSI_11_12	-	11 <sup>th</sup> and 12 <sup>th</sup> digits of the IMSI.
12			If CCH_INFO_INCL is set to '1', the base station shall include
13			this field and set it as follows; otherwise, the base station
14			shall omit this field.
15			The base station shall set this field to the IMSI_11_12 (see
16			2.3.1).
17	MAX_SLOT_CYCLE_INDEX	-	Maximum slot cycle index.
18			If CCH_INFO_INCL is set to '1', the base station shall include
19			the field MAX_SLOT_CYCLE_INDEX and shall set this field as
20			shown below; otherwise, the base station shall omit this field.
21			The base station shall set this field to the
22			SLOT_CYCLE_INDEX value corresponding to the maximum
23			slot cycle length permitted (see 2.6.2.1.1).
24	PWR_REP_THRESH	-	Power control reporting threshold.
25			If CCH_INFO_INCL is set to '1', the base station shall include
26			the field PWR_REP_THRESH and shall set this field as shown
27			below; otherwise, the base station shall omit this field.
28			The base station shall set this field to the number of bad
29			frames (see [2]) to be received in a measurement period on the
30			channel which carries the Power Control Subchannel before
31			mobile stations are to generate a <i>Power Measurement Report</i>
32			<i>Message</i> (see 2.6.4.1.1). If the base station sets
33			PWR_THRESH_ENABLE to '1', it shall not set this field to
34			'00000'.
35	PWR_REP_FRAMES	-	Power control reporting frame count.
36			If CCH_INFO_INCL is set to '1', the base station shall include
37			the field PWR_REP_FRAMES and shall set this field as shown
38			below; otherwise, the base station shall omit this field.



1		The base station shall set this field to the value such that the
2		number given by
3		$\lfloor 2^{(PWR\_REP\_FRAMES/2)} \times 5 \rfloor \text{ frames}$
4		is the number of frames over which mobile stations are to
5		count frame errors.
6	PWR_THRESH_ENABLE -	Threshold report mode indicator.
7		If CCH_INFO_INCL is set to '1', the base station shall include
8		the field PWR_THRESH_ENABLE and shall set this field as
9		shown below; otherwise, the base station shall omit this field.
10		If mobile stations are to generate threshold <i>Power</i>
11		<i>Measurement Report Messages</i> , the base station shall set this
12		field to '1'. If mobile stations are not to generate threshold
13		<i>Power Measurement Report Messages</i> , the base station shall
14		set this field to '0'.
15	PWR_PERIOD_ENABLE -	Periodic report mode indicator.
16		If CCH_INFO_INCL is set to '1', the base station shall include
17		the field PWR_PERIOD_ENABLE and shall set this field as
18		shown below; otherwise, the base station shall omit this field.
19		If mobile stations are to generate periodic <i>Power Measurement</i>
20		<i>Report Messages</i> , the base station shall set this field to '1'. If
21		mobile stations are not to generate periodic <i>Power</i>
22		<i>Measurement Report Messages</i> , the base station shall set this
23		field to '0'.
24	PWR_REP_DELAY -	Power report delay.
25		The period that mobile stations wait following a <i>Power</i>
26		<i>Measurement Report Message</i> before restarting frame
27		counting for power control purposes.
28		If CCH_INFO_INCL is set to '1', the base station shall include
29		the field PWR_REP_DELAY and shall set this field as shown
30		below; otherwise, the base station shall omit this field.
31		The base station shall set this field to the power report delay
32		value, in units of 4 frames (see 2.6.4.1.1).
33	RESELECT_INCLUDED -	System reselection parameters included.
34		If CCH_INFO_INCL is set to '1', the base station shall include
35		the field RESELECT_INCLUDED and shall set this field as
36		shown below; otherwise, the base station shall omit this field.
37		If the base station is including system reselection parameters,
38		the base station shall set this field to '1'; otherwise, the base
39		station shall set this field to '0'.
40	EC_THRESH -	Pilot power threshold.
41		If RESELECT_INCLUDED is included and is set to '1', the
42		base station shall include the field EC_THRESH and shall set
43		this field as shown below; otherwise, the base station shall
44		omit this field.
45		The base station shall set this field to:

1		$\lceil (pilot\_power\_threshold + 115) \rceil$
2		where <i>pilot_power_threshold</i> is the pilot power, $E_c$ , in
3		dBm/1.23 MHz, below which the mobile station is to perform
4		system reselection.
5	EC_I0_THRESH	- Pilot $E_c/I_0$ threshold.
6		If RESELECT_INCLUDED is included and is set to '1', the
7		base station shall include the field EC_I0_THRESH and shall
8		set this field as shown below; otherwise, the base station
9		shall omit this field.
10		The base station shall set this field to:
11		$\lfloor -20 \times \log_{10} (pilot\_threshold) \rfloor$
12		where <i>pilot_threshold</i> is the pilot $E_c/I_0$ below which the
13		mobile station is to perform system reselection.
14	BASE_LAT	- Base station latitude.
15		If CCH_INFO_INCL is set to '1', the base station shall include
16		this field and set it as shown below; otherwise, the base
17		station shall omit this field.
18		The base station shall set this field to its latitude in units of
19		0.25 second, expressed as a two's complement signed
20		number with positive numbers signifying North latitudes.
21		The base station shall set this field to a value in the range -
22		1296000 to 1296000 inclusive (corresponding to a range of -
23		90° to +90°).
24		The base station shall set this field to all zeros if its latitude is
25		not known.
26	BASE_LONG	- Base station longitude.
27		If CCH_INFO_INCL is set to '1', the base station shall include
28		this field and set it as shown below; otherwise, the base
29		station shall omit this field.
30		The base station shall set this field to its longitude in units of
31		0.25 second, expressed as a two's complement signed
32		number with positive numbers signifying East longitude. The
33		base station shall set this field to a value in the range -
34		2592000 to 2592000 inclusive (corresponding to a range of -
35		180° to +180°).
36		The base station shall set this field to all zeros if its longitude
37		is not known.
38	PILOT_REPORT	- Pilot reporting indicator.
39		If CCH_INFO_INCL is set to '1', the base station shall include
40		the field PILOT_REPORT and shall set this field as shown
41		below; otherwise, the base station shall omit this field.

1			The base station shall set this field to '1' if the mobile station
2			is to report the additional pilots which have pilot strengths
3			exceeding T_ADD in all Enhanced Access Channel messages.
4			The base station shall set this field to '0' if the mobile station
5			is to report the additional pilots which have pilot strengths
6			exceeding T_ADD only in the <i>Origination Message</i> , <i>Reconnect</i>
7			<i>Message</i> , and the <i>Page Response Message</i> .
8	ACC_ENT_HO_ORDER	-	Access entry handoff permitted indicator.
9			If CCH_INFO_INCL is set to '1', the base station shall include
10			this field and set it as described below; otherwise, the base
11			station shall omit this field.
12			The base station shall set this field to '1' if the mobile station
13			is permitted to perform an access entry handoff after receiving
14			a message while performing the <i>Mobile Station Order and</i>
15			<i>Message Processing Operation</i> in the <i>Mobile Station Idle State</i>
16			(see 2.6.2.4); otherwise, the base station shall set this field to
17			'0'.
18	ACCESS_HO	-	Access handoff permitted indicator.
19			If CCH_INFO_INCL is set to '1', the base station shall include
20			this field and set it as described below; otherwise, the base
21			station shall omit this field.
22			The base station shall set this field to '1' if the mobile station
23			is permitted to perform an access handoff (see 2.6.3.1.3.2);
24			otherwise, the base station shall set this field to '0'.
25	ACCESS_HO_MSG_RSP	-	Access handoff permitted for message response indicator.
26			If ACCESS_HO is included and set to '1', the base station
27			shall include this field and set it as described below;
28			otherwise, the base station shall omit this field.
29			The base station shall set this field to '1' if the mobile station
30			is permitted to perform an access handoff after receiving a
31			message and before responding to that message in the
32			<i>System Access State</i> ; otherwise, the base station shall set this
33			field to '0'.
34	ACCESS_PROBE_HO	-	Access probe handoff permitted indicator.
35			If CCH_INFO_INCL is set to '1', the base station shall include
36			this field and set it as described below; otherwise, the base
37			station shall omit this field.
38			The base station shall set this field to '1' if the mobile station
39			is permitted to perform an access probe handoff (see
40			2.6.3.1.3.3); otherwise, the base station shall set this field to
41			'0'.
42	ACC_HO_LIST_UPD	-	Access handoff list update permitted indicator.
43			If ACCESS_PROBE_HO is included and is set to '1', the base
44			station shall include this field and set it as described below;
45			otherwise, the base station shall omit this field.

1		The base station shall set this field to '1' if the mobile station
2		is permitted to update the access handoff list during an
3		access attempt (see 2.6.3.1.7.2); otherwise, the base station
4		shall set this field to '0'.
5	ACC_PROBE_HO_OTHER_MSG	- Access probe handoff permitted for messages other
6		than the <i>Origination Message</i> , <i>Reconnect Message</i> , and the
7		<i>Page Response Message</i> .
8		If ACCESS_PROBE_HO is included and set to '1', the base
9		station shall include this field and set it as described below;
10		otherwise, the base station shall omit this field.
11		The base station shall set this field to '1' if the mobile station
12		is permitted to perform an access probe handoff for messages
13		other than the <i>Origination Message</i> , <i>Reconnect Message</i> , and
14		the <i>Page Response Message</i> . The base station shall set this
15		field to '0' if the mobile station is permitted to perform an
16		access probe handoff only for the <i>Origination Message</i> ,
17		<i>Reconnect Message</i> , and the <i>Page Response Message</i> . See
18		2.6.3.1.3.3.
19	MAX_NUM_PROBE_HO	- Maximum number of times that the mobile station is
20		permitted to perform an access probe handoff.
21		If ACCESS_PROBE_HO is included and set to '1', the base
22		station shall include this field and set it as described below;
23		otherwise, the base station shall omit this field.
24		The base station shall set this field to the maximum number
25		of times the mobile station is allowed to perform an access
26		probe handoff within an access attempt minus one.
27	NUM_FCCCH	- Total number of Forward Common Control Channels.
28		If CCH_INFO_INCL is set to '1', the base station shall include
29		this field and shall set it as shown below; otherwise, the base
30		station shall omit this field.
31		The base station shall set this field to the total number of
32		Forward Common Control Channels on this CDMA Channel.
33		If this is not a pilot beacon base station, the base station
34		shall set this field to an integer value greater than 0.
35	FCCCH_RATE	- Rate words for the Forward Common Control Channels.
36		If CCH_INFO_INCL is set to '1' and NUM_FCCCH is not equal
37		to '0', the base station shall include this field and shall set it
38		as shown below; otherwise, the base station shall omit this
39		field.
40		The base station shall set this field to the FCCCH rate field
41		value shown in Table 3.7.2.3.2.31-1 corresponding to the
42		data rate used on the Forward Common Control Channels in
43		the system.

**Table 3.7.2.3.2.31-1. Forward Common Control Channel Rate Words**

<b>FCCCH Rate Field (binary)</b>	<b>Forward Common Control Channel rate word</b>
000	9600 bps, 20 ms frame size
001	19200 bps, 20 ms frame size
010	19200 bps, 10 ms frame size
011	38400 bps, 20 ms frame size
100	38400 bps, 10 ms frame size
101	38400 bps, 5 ms frame size
110 – 111	Reserved

- 3
- 4 **FCCCH\_CODE\_RATE** - Code Rate for the Forward Common Control Channels.
- 5 If CCH\_INFO\_INCL is set to '1' and NUM\_FCCCH is not equal
- 6 to '0', the base station shall include this field and shall set it
- 7 as shown below; otherwise, the base station shall omit this
- 8 field.
- 9 If the FCCCH is operating in Spreading Rate 1, the base
- 10 station shall set this field to '0' if the FCCCH Code Rate is 1/4
- 11 (see [2]). The base station shall set this field to '1' if the
- 12 FCCCH Code Rate is 1/2 (see [2]).
- 13 If the FCCCH is operating in Spreading Rate 3, the base
- 14 station shall set this field to '0'.
- 15 The base station shall include NUM\_FCCCH occurrences of the following one field record:
- 16 **FCCCH\_CODE\_CHAN** - Code channel index for the Forward Common Control
- 17 Channel.
- 18 The base station shall set this field to the code channel index
- 19 (see [2]) in the range 1 to 255 inclusive that the mobile
- 20 station is to use on the Forward Common Control Channel.
- 21 **BCAST\_INDEX** - Broadcast index.
- 22 If CCH\_INFO\_INCL is set to '1', the base station shall include
- 23 the field BCAST\_INDEX and shall set this field as shown
- 24 below; otherwise, the base station shall omit this field.
- 25 If Periodic Enhanced Broadcast Paging is disabled, the base
- 26 station shall set this field to '000'; otherwise, the base station
- 27 shall set this field to the Broadcast Index (see 2.6.2.1.1.3.3.2).
- 28 **NUM\_BCCH\_BCAST** - The number of Broadcast Control Channels used for
- 29 transmitting broadcast messages.

If CCH\_INFO\_INCL is set to '1', the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the number of Broadcast Control Channels used for transmitting broadcast messages.

If the NUM\_BCCH\_BCAST field is included, the base station shall set NUM\_BCCH\_BCAST occurrences of the following three-field record, where the *i*th occurrence corresponds to a BCCH indexed by BCN of *i*+1:

BCCH\_CODE\_CHAN - The Walsh Code index for the Broadcast Control Channel.

The base station shall set this field to the Walsh code corresponding to the Broadcast Control Channel.

BRAT - BCCH data rate.

The base station shall set this field to the BRAT field value shown in Table 3.7.2.3.2.31-2 corresponding to the data rate used by the Broadcast Control Channel to which the mobile station is being directed.

**Table 3.7.2.3.2.31-2. Broadcast Control Channel Data Rate**

BRAT Field (binary)	Broadcast Control Channel data rate
00	4800 bps
01	9600 bps
10	19200 bps
11	Reserved

BCCH\_CODE\_RATE - BCCH code rate.

For spreading rate 1, the base station shall set this field to '0' if the BCCH Code Rate is 1/4 (see [2]). For spreading rate 1, the base station shall set this field to '1' if the BCCH code rate is 1/2 (see [2]). For spreading rate 3, the base station shall set this field to '0'.

QPCH\_SUPPORTED - Quick Paging Channel Supported Indication.

If CCH\_INFO\_INCL is set to '1', the base station shall include the field QPCH\_SUPPORTED and shall set this field as shown below; otherwise, the base station shall omit this field.

If the base station supports Quick Paging Channel operation, the base station shall set this field to '1'; otherwise the base station shall set this field to '0'.

NUM\_QPCH - Number of Quick Paging Channels.

1			If QPCH_SUPPORTED is included and set to '1', the base
2			station shall include this field and set it as described below;
3			otherwise, the base station shall omit this field.
4			The base station shall set this field to the number of Quick
5			Paging Channels on this CDMA Channel. The base station
6			shall not set this field to '00'.
7	QPCH_RATE	-	Quick Paging Channel indicator rate.
8			If QPCH_SUPPORTED is included and set to '1', the base
9			station shall include this field and set it as described below;
10			otherwise, the base station shall omit this field.
11			The base station shall set this field to the QPCH_RATE field
12			value shown in Table 3.7.2.3.2.13-2 corresponding to the
13			indicator rate used by the Quick Paging Channel in the
14			system.
15	QPCH_POWER_LEVEL_PAGE	-	Quick Paging Channel paging indicator transmit
16			power level.
17			If QPCH_SUPPORTED is included and set to '1', the base
18			station shall include this field and set it as described below;
19			otherwise, the base station shall omit this field.
20			The base station shall set this field to the Quick Paging
21			Channel paging indicator transmit power level relative to that
22			of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.

**Table 3.7.2.3.2.31-3. Quick Paging Channel Transmit Power Level**

<b>QPCH_POWER_LEVEL_PAGE QPCH_POWER_LEVEL_CONFIG QPCH_POWER_LEVEL_BCAST (binary)</b>	<b>Transmit Power Level</b>
000	5 dB below the Pilot Channel Transmit Power
001	4 dB below the Pilot Channel Transmit Power
010	3 dB below the Pilot Channel Transmit Power
011	2 dB below the Pilot Channel Transmit Power
100	1 dB below the Pilot Channel Transmit Power
101	Same as the Pilot Channel Transmit Power
110	1 dB above the Pilot Channel Transmit Power
111	2 dB above the Pilot Channel Transmit Power

**QPCH\_CCI\_SUPPORTED** - Quick Paging Channel configuration change indicator supported.

If QPCH\_SUPPORTED is included and set to '1', the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

If the base station supports configuration change indicators on the Quick Paging Channel, the base station shall set this field to '1'; otherwise the base station shall set this field to '0'.

**QPCH\_POWER\_LEVEL\_CONFIG** - Quick Paging Channel configuration change indicator transmit power level.

If QPCH\_CCI\_SUPPORTED is included and set to '1', the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel configuration change indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.



1			If SR3_INCL is set to '1' and QPCH_SUPPORTED is included
2			and set to '1', the base station shall include NUM_QPCH
3			occurrences of the following one field record:
4	QPCH_CODE_CHAN	-	Code channel index of the Quick Paging Channel for
5			Spreading Rate 3.
6			The base station shall set this field to the code channel index
7			(see [2]) in the range 1 to 255 inclusive that the mobile
8			station is to use on the Quick Paging Channel for Spreading
9			Rate 3.
10	QPCH_BI_SUPPORTED	-	Quick Paging Channel broadcast indicator supported.
11			If QPCH_SUPPORTED is included and set to '1', the base
12			station shall include this field and set it as described below;
13			otherwise, the base station shall omit this field.
14			If the base station supports broadcast indicators on the
15			Quick Paging Channel, the base station shall set this field to
16			'1'; otherwise the base station shall set this field to '0'.
17	QPCH_POWER_LEVEL_BCAST	-	Quick Paging Channel broadcast indicator transmit
18			power level.
19			If QPCH_BI_SUPPORTED is included and set to '1', the base
20			station shall include this field and set it as described below;
21			otherwise, the base station shall omit this field.
22			The base station shall set this field to the Quick Paging
23			Channel broadcast indicator transmit power level relative to
24			that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.
25	SDB_SUPPORTED	-	Short Data Burst supported indicator.
26			If CCH_INFO_INCL is set to '1', the base station shall include
27			the field SDB_SUPPORTED and shall set this field as shown
28			below; otherwise, the base station shall omit this field.
29			The base station shall set this field to '1' if the mobile station
30			is permitted to send a Short Data Burst; otherwise, the base
31			station shall set this field to '0'.
32	BROADCAST_GPS_ASST	-	Broadcast GPS Assist Indicator.
33			If CCH_INFO_INCL is set to '1', the base station shall include
34			the field BROADCAST_GPS_ASST and shall set this field as
35			shown below; otherwise, the base station shall omit this field.
36			The base station shall set this field to '1' if it supports
37			Broadcast GPS Assist capability; otherwise, the base station
38			shall set this field to '0'.
39	RLGAIN_TRAFFIC_PILOT	-	Gain adjustment of the Reverse Traffic Channel relative to the
40			Reverse Pilot Channel for Radio Configurations greater than
41			2.
42			If CCH_INFO_INCL is set to '1', the base station shall include
43			the field RLGAIN_TRAFFIC_PILOT and shall set this field as
44			shown below; otherwise, the base station shall omit this field.

1		The base station shall set this field to the correction factor to
2		be used by mobile stations in setting the power of a reverse
3		traffic channel, expressed as a two's complement value in
4		units of 0.125 dB (see [2]).
5	REV_PWRCNTL_DELAY_INCL	- Reverse Power Control Delay included indicator.
6		If CCH_INFO_INCL is set to '1', the base station shall include
7		this field and set it as shown below; otherwise, the base
8		station shall omit this field.
9		The base station shall set this field to '1' if the base station
10		includes the REV_PWR_CNTL_DELAY field in this message;
11		otherwise, the base station shall set this field to '0'.
12	REV_PWR_CNTL_DELAY	- The reverse power control delay.
13		If REV_PWR_CNTL_DELAY_INCL is included and set to '1', the
14		base station shall include this field and set it as follows;
15		otherwise, the base station shall omit this field.
16		The base station shall set this field to the closed-loop reverse
17		power control delay minus one (the closed-loop reverse power
18		control delay is the time between the end of a gated-on
19		reverse PCG and the beginning of the reverse PCG where the
20		corresponding feedback is sent on the Forward Power Control
21		Subchannel, see [2]), in units of 1.25 ms.
22	MOB_QOS	- Indicator granting permission to the mobile station to request
23		QoS parameter settings in the <i>Origination Message</i> ,
24		<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
25		<i>Message</i> .
26		If CCH_INFO_INCL is set to '1', the base station shall include
27		this field and set it as shown below; otherwise, the base
28		station shall omit this field.
29		The base station shall set this field to '1', if the mobile station
30		is allowed to include a QoS record in the <i>Origination Message</i> ,
31		<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
32		<i>Message</i> ; otherwise, the base station shall set this field to '0'.
33	USE_SYNC_ID	- Sync ID supported indicator.
34		If CCH_INFO_INCL is set to '1', the base station shall include
35		this field and set it as shown below; otherwise, the base
36		station shall omit this field.
37		The base station shall set this field to '1' to indicate that the
38		mobile station is permitted to include the SYNC_ID field in
39		the <i>Page Response Message</i> , the <i>Reconnect Message</i> , the
40		<i>Origination Message</i> and the <i>Enhanced Origination Message</i> ;
41		otherwise, the base station shall set this field to '0'.
42	NUM_OPT_MSG_BITS	- Number of optional overhead messages to be sent.
43		If CCH_INFO_INCL is set to '1', the base station shall include
44		this field and shall set this field as shown below; otherwise,
45		the base station shall omit this field.

1		The base station shall set this field to the number of optional
2		overhead messages to be sent.
3	SENDING_RAND	- <i>ANSI-41 RAND Message</i> indicator.
4		If NUM_OPT_MSG_BITS is included and is equal to or greater
5		than 1, the base station shall include the field
6		SENDING_RAND and shall set this field as shown below;
7		otherwise, the base station shall omit this field.
8		If the base station is sending the <i>ANSI-41 RAND Message</i> on
9		the Primary Broadcast Control Channel, it shall set this field
10		to '1'; otherwise, it shall set this field to '0'.
11	PRI_NGHBR_LST	- <i>Private Neighbor List Message</i> indicator.
12		If NUM_OPT_MSG_BITS is included and is equal to or greater
13		than 2, the base station shall include the field
14		PRI_NGHBR_LST and shall set this field as shown below;
15		otherwise, the base station shall omit this field.
16		If the base station is sending the <i>Private Neighbor List</i>
17		<i>Message</i> on the Primary Broadcast Control Channel, it shall
18		set this field to '1'; otherwise, it shall set this field to '0'.
19	USER_ZONE_ID	- <i>User Zone Identification Message</i> indicator.
20		If NUM_OPT_MSG_BITS is included and is equal to or greater
21		than 3, the base station shall include the field
22		USER_ZONE_ID and shall set this field as shown below;
23		otherwise, the base station shall omit this field.
24		If the base station is sending the <i>User Zone Identification</i>
25		<i>Message</i> on the Primary Broadcast Control Channel, it shall
26		set this field to '1'; otherwise, it shall set this field to '0'.
27	EXT_GLOBAL_REDIRECT	- <i>Extended Global Service Redirection Message</i> indicator.
28		If NUM_OPT_MSG_BITS is included and is equal to or greater
29		than 4, the base station shall include the field
30		EXT_GLOBAL_REDIRECT and shall set this field as shown
31		below; otherwise, the base station shall omit this field.
32		If the base station is sending the <i>Extended Global Service</i>
33		<i>Redirection Message</i> on the Primary Broadcast Control
34		Channel, it shall set this field to '1'; otherwise, the base
35		station shall set this field to '0'.
36	AP_PILOT_INFO	- <i>Access Point Pilot Information Message</i> indicator.
37		If NUM_OPT_MSG_BITS is included and is equal to or greater
38		than 5, the base station shall include the field
39		AP_PILOT_INFO and shall set this field as shown below;
40		otherwise, the base station shall omit this field.
41		If the base station is sending the <i>Access Point Pilot</i>
42		<i>Information Message</i> on the Primary Broadcast Control
43		Channel, it shall set this field to '1'; otherwise, the base
44		station shall set this field to '0'.
45	AP_IDT	- <i>Access Point Identification Message</i> indicator.

1			If NUM_OPT_MSG_BITS is included and is equal to or greater
2			than 6, the base station shall include the field AP_IDT and
3			shall set this field as shown below; otherwise, the base
4			station shall omit this field.
5			If the base station is sending the <i>Access Point Identification</i>
6			<i>Message</i> on the Primary Broadcast Control Channel, it shall
7			set this field to '1'; otherwise, the base station shall set this
8			field to '0'.
9	AP_ID_TEXT	-	<i>Access Point Identification Text Message</i> indicator.
10			If NUM_OPT_MSG_BITS is included and is equal to or greater
11			than 7, the base station shall include the field AP_ID_TEXT
12			and shall set this field as shown below; otherwise, the base
13			station shall omit this field.
14			If the base station is sending the <i>Access Point Identification</i>
15			<i>Text Message</i> on the Primary Broadcast Control Channel, it
16			shall set this field to '1'; otherwise, the base station shall set
17			this field to '0'.
18	GEN_OVHD_INF_IND	-	<i>General Overhead Information Message</i> indicator.
19			If NUM_OPT_MSG is equal to or greater than 8, the base
20			station shall include the field GEN_OVHD_INF_IND and shall
21			set this field as shown below; otherwise, the base station
22			shall omit this field.
23			If the base station is sending the <i>General Overhead</i>
24			<i>Information Message</i> on the Paging Channel, it shall set this
25			field to '1'; otherwise, the base station shall set this field to
26			'0'.
27	FD_CHAN_LST_IND	-	<i>Flex Duplex CDMA Channel List Message</i> indicator.
28			If NUM_OPT_MSG is equal to or greater than 9, the base
29			station shall include the field FD_CHAN_LST_IND and shall
30			set this field as shown below; otherwise, the base station
31			shall omit this field.
32			If the base station is sending the <i>Flex Duplex CDMA Channel</i>
33			<i>List Message</i> on the Primary Broadcast Control Channel, it
34			shall set this field to '1'; otherwise, the base station shall set
35			this field to '0'.
36	ATIM_IND	-	<i>Alternative Technologies Information Message</i> indicator.
37			If NUM_OPT_MSG is equal to or greater than 10, the base
38			station shall include the field ATIM_IND and shall set this
39			field as shown below; otherwise, the base station shall omit
40			this field.
41			If the base station is sending the <i>Alternative Technologies</i>
42			<i>Information Message</i> on the Paging Channel, it shall set this
43			field to '1'; otherwise, the base station shall set this field to
44			'0'.
45			
46	RESERVED	-	Reserved bits.

1		If NUM_OPT_MSG_BITS is included and is equal to or greater
2		than 11, the base station shall include the field RESERVED
3		and shall set this field as shown below; otherwise, the base
4		station shall omit this field.
5		The base station shall add (NUM_OPT_MSG_BITS - 10)
6		reserved bits. The base station shall set these bits to '0'.
7	PILOT_INFO_REQ_SUPPORTED	- Pilot information request supported indicator.
8		If CCH_INFO_INCL is set to '1', the base station shall include
9		this field and set it as shown below; otherwise, the base
10		station shall omit this field.
11		If the base station supports mobile station request for pilot
12		information using the "Pilot Information" record in the <i>Base</i>
13		<i>Station Status Request Message</i> , the base station shall set
14		this field to '1'; otherwise, the base station shall set this field
15		to '0'.
16	BAND_CLASS_INFO_REQ	- Band class information request indicator.
17		If CCH_INFO_INCL is set to '1', the base station shall include
18		this field and set it as shown below; otherwise, the base
19		station shall omit this field.
20		The base station shall set this field to '1' if the
21		ALT_BAND_CLASS field is included in this message;
22		otherwise, the base station shall set this field to '0'.
23	ALT_BAND_CLASS	- Alternate band class.
24		If BAND_CLASS_INFO_REQ is not included, or is included
25		and set to '0', then the base station shall omit this field;
26		otherwise, the base station shall include this field and set it
27		as follows:
28		The base station shall set this field to an alternate CDMA
29		band class (see [30]) supported by the base station. The
30		mobile station is to indicate its capability to support the
31		alternate band class in the <i>Origination Message</i> and <i>Page</i>
32		<i>Response Message</i> .
33	CDMA_OFF_TIME_REP_SUP_IND	- CDMA off time report supported indicator.
34		If the base station supports mobile station report for CDMA
35		off time information using the <i>CDMA Off Time Report</i>
36		<i>Message</i> , the base station shall set this field to '1'; otherwise,
37		the base station shall set this field to '0'.
38	CDMA_OFF_TIME_REP_THRESHOLD_UNIT	- CDMA off time report threshold unit
39		If CDMA_OFF_TIME_REP_SUP_IND is set to '0', the base
40		station shall omit this field; otherwise, the base station shall
41		include this field and set it as follows:
42		The base station shall set this field to the time unit used in
43		CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table
44		3.7.2.3.2.13-5
45	CDMA_OFF_TIME_REP_THRESHOLD	- CDMA off time report threshold

1		If CDMA_OFF_TIME_REP_SUP_IND is set to '0', the base
2		station shall omit this field; otherwise, the base station shall
3		include this field and set it as follows:
4		The base station shall set this field to the time in units of
5		CDMA_OFF_TIME_REP_THRESHOLD_UNIT such that if the
6		mobile station goes away from the CDMA traffic channel
7		longer than this value, the mobile station is to send a <i>CDMA</i>
8		<i>Off Time Report Message</i> .
9	CHM_SUPPORTED	- Control Hold Mode supported indicator.
10		The base station shall set this field to '1' to indicate that the
11		base station supports the Control Hold Mode; otherwise, the
12		base station shall set this field to '0'.
13	RELEASE_TO_IDLE_IND	- Release to Idle State allowed indicator.
14		If the mobile station is allowed to return to the <i>Mobile Station</i>
15		<i>Idle State</i> upon call release, the base station shall set this
16		field to '1'; otherwise, the base station shall set this field to
17		'0'.
18	RECONNECT_MSG_IND	- <i>Reconnect Message</i> supported indicator.
19		The base station shall set this field to '0' if the mobile station
20		is not allowed to send a <i>Reconnect Message</i> instead of an
21		<i>Origination Message</i> or a <i>Page Response Message</i> ; otherwise,
22		the base station shall set this field to '1'.
23	T_TDROP_RANGE_INCL	- Drop timer range value included indicator.
24		The base station shall set this field to '1' if the
25		T_TDROP_RANGE field is included in this message;
26		otherwise, the base station shall set this field to '0'.
27	T_TDROP_RANGE	- Drop timer range value.
28		Timer range value to use in association with the T_TDROP
29		parameter when determining the drop timer expiration.
30		If T_TDROP_RANGE_INCL is set to '0', the base station shall
31		omit this field; otherwise, the base station shall set this field
32		to the T_TDROP_RANGE value shown in Table 2.6.6.2.3-2
33		corresponding to the timer expiration range value to be used
34		by the mobile station.
35	FOR_PDCH_SUPPORTED	- Forward Packet Data Channel supported indicator.
36		If the base station supports the Forward Packet Data Channel
37		(F-PDCH), the base station shall set this field to '1'; otherwise,
38		the base station shall set this field to '0'.
39	PDCH_CHM_SUPPORTED	- PDCH Control Hold Mode supported indicator.
40		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
41		omit this field; otherwise, the base station shall include this
42		field and set it as follows:
43		The base station shall set this field to '1' to indicate that the
44		base station supports the PDCH Control Hold Mode;
45		otherwise, the base station shall set this field to '0'

1	PDCH_PARMS_INCL	-	Forward Packet Data Channel related parameters included indicator.
2			
3			If FOR_PDCH_SUPPORTED is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
4			
5			
6			The base station shall set this field to '1' if the following F-PDCH related fields are included in this message; otherwise, the base station shall set this field to '0'.
7			
8			
9	FOR_PDCH_RLGAIN_INCL	-	Forward Packet Data Channel parameters related to reverse link adjustment gains included indicator.
10			
11			If PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.
12			
13			
14			The base station shall set this field to '1' if the following F-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to '0'.
15			
16			
17	RLGAIN_ACKCH_PILOT	-	Reverse Acknowledgment Channel to pilot adjustment gain.
18			If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.
19			
20			
21			The base station shall set this field to the Reverse Acknowledgment Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).
22			
23			
24	RLGAIN_CQICH_PILOT	-	Reverse Channel Quality Indicator Channel to pilot adjustment gain.
25			
26			If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.
27			
28			
29			The base station shall set this field to the Reverse Channel Quality Indicator Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).
30			
31			
32	NUM_SOFT_SWITCHING_FRAMES	-	Number of frames for R-CQICH soft switching.
33			If PDCH_PARMS_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
34			
35			
36			The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups (see [3]).
37			
38			
39			
40			
41	NUM_SOFTEN_SWITCHING_FRAMES	-	Number of frames for R-CQICH softer switching.
42			
43			If PDCH_PARMS_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
44			
45			

1                   The base station shall set this field to the duration of the cell  
2                   switching period, in units of 20 ms, minus one, during which  
3                   the mobile station is to transmit the cell switch sequence on  
4                   the R-CQICH when it switches between two pilots which are  
5                   in the same group (see [3]).

6   NUM\_SOFT\_SWITCHING\_SLOTS   -   Number of slots per frame for R-CQICH soft  
7                   switching.

8                   If PDCH\_PARMS\_INCL is not included, or is included and set  
9                   to '0', the base station shall omit this field; otherwise, the  
10                  base station shall include this field and set it as follows:

11                 The base station shall set this field to the duration of the cell  
12                 switching slots within a switching frame, in units of 1.25 ms  
13                 as specified in Table 3.7.2.3.2.21-10, during which the mobile  
14                 station is to transmit the cell switch indication by using  
15                 Walsh cover of target on the R-CQICH when it switches  
16                 between two pilots which are in different groups.

17   NUM\_SOFTER\_SWITCHING\_SLOTS -   Number of slots per frame for R-CQICH softer  
18                   switching.

19                   If PDCH\_PARMS\_INCL is not included, or is included and set  
20                   to '0', the base station shall omit this field; otherwise, the  
21                   base station shall include this field and set it as follows:

22                 The base station shall set this field to the duration of the cell  
23                 switching slots within a switching frame, in units of 1.25 ms  
24                 as specified in Table 3.7.2.3.2.21-10, during which the mobile  
25                 station is to transmit the cell switch indication by using  
26                 Walsh cover of target on the R-CQICH when it switches  
27                 between two pilots which are in the same group.

28   PDCH\_SOFT\_SWITCHING\_DELAY   -   F-PDCH soft switching delay.

29                   If PDCH\_PARMS\_INCL is not included, or is included and set  
30                   to '0', the base station shall omit this field; otherwise, the  
31                   base station shall include this field and set it as follows:

32                 The base station shall set this field to the minimum  
33                 interruption seen by the mobile station, in units of 10 ms,  
34                 minus one, when the mobile station is to transmit the cell  
35                 switch sequence on the R-CQICH channel when it switches  
36                 between two pilots which are in different groups (see [3]).

37   PDCH\_SOFTER\_SWITCHING\_DELAY   -   F-PDCH softer switching delay.

38                   If PDCH\_PARMS\_INCL is not included, or is included and set  
39                   to '0', the base station shall omit this field; otherwise, the  
40                   base station shall include this field and set it as follows:

41                 The base station shall set this field to the minimum  
42                 interruption seen by the mobile station, in units of 10 ms,  
43                 minus one, when the mobile station is to transmit the cell  
44                 switch sequence on the R-CQICH channel when it switches  
45                 between two pilots which are in the same group (see [3]).

46   WALSH\_TABLE\_ID   -   The index of the Walsh Table used.



1		If PDCH_PARMS_INCL is not included, or is included and set
2		to '0', the base station shall omit this field; otherwise, the
3		base station shall set this field as follows:
4		The base station shall set this field to the index of the Walsh
5		Table being used by the Packet Data Channel. (See [3]).
6	NUM_PDCCH	- The number of Packet Data Control Channels supported.
7		If PDCH_PARMS_INCL is not included, or is included and set
8		to '0', the base station shall omit this field; otherwise, the
9		base station shall include this field and set it as follows:
10		The base station shall set this field to '000' if the pilot
11		supports one Packet Data Control Channel. The base station
12		shall set this field to '001' if the pilot supports two Packet
13		Data Control Channels. The base station shall not set this
14		field to any other value.
15	The base station shall include <i>NUM_PDCCH+1</i> occurrences of the following one-field	
16	record:	
17	FOR_PDCCH_WALSH	- Forward Packet Data Control Channel Walsh code
18		assignment.
19		If PDCH_PARMS_INCL is not included, or is included and set
20		to '0', the base station shall omit this field; otherwise, the
21		base station shall include this field and set it as follows:
22		The base station shall set this field to the Walsh code
23		assignment for the Forward Packet Data Control Channel.
24		If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
25		shall be included first, followed by the Walsh code for
26		PDCCH1.
27	IMSI_10_INCL	- IMSI_10 included.
28		If CCH_INFO_INCL is set to '1', the base station shall include
29		this field and set it as follows; otherwise, the base station
30		shall omit this field.
31		If the MNC is a 3-digit number, the base station shall set this
32		field to '1'; otherwise, the base station shall set this field to
33		'0'.
34	IMSI_10	- The least significant digit of MNC when the MNC is a 3-digit
35		number.
36		If IMSI_10_INCL is not included, or is included and set to '0',
37		the base station shall omit this field; otherwise, the base
38		station shall set this field to the least significant digit of MNC
39		converted to binary by the standard decimal-to-binary
40		conversion as shown in Table 2.3.1.1-1.
41	NEG_SLOT_CYCLE_INDEX_SUP	- Negative slot cycle index supported indicator.
42		The base station shall set this field to '1' if it supports
43		negative values of the preferred slot cycle index
44		(SLOT_CYCLE_INDEX <sub>p</sub> ); otherwise, the base station shall set
45		this field to '0'.

1	RER_MODE_SUPPORTED	- Radio environment reporting mode supported indicator.
2		If the base station supports radio environment reporting
3		mode, the base station shall set this field to '1'; otherwise, the
4		base station shall set this field to '0'.
5	AUTO_FCSO_ALLOWED	- Autonomous <i>Fast Call Setup Order</i> allowed indicator.
6		The base station shall set this field to '1' if the mobile station
7		is allowed to send an autonomous <i>Fast Call Setup Order</i> ;
8		otherwise, the base station shall set this field to '0'.
9	SENDING_BSPM	- <i>BCMC Service Parameters Message</i> indicator.
10		If the base station is sending the <i>BCMC Service Parameters</i>
11		<i>Message</i> on the Primary Broadcast Control Channel, it shall
12		set this field to '1'; otherwise, it shall set this field to '0'.
13	BSPM_PERIOD_INDEX	- BSPM Transmission Periodicity Index.
14		If the SENDING_BSPM field is set to '0', the base station shall
15		omit this field; otherwise, the base station shall include this
16		field and set it as follows:
17		The base station shall set this field to the BSPM transmission
18		periodicity index corresponding to the periodicity with which
19		the BSPM with DIFF_BSPM equal to '0' is transmitted on the
20		Primary Broadcast Control Channel.
21	REV_PDCH_SUPPORTED	- Reverse Packet Data Channel supported indicator.
22		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
23		omit this field; otherwise, the base station shall include this
24		field and set it as follows:
25		If the base station supports the Reverse Packet Data Channel
26		(R-PDCH), the base station shall set this field to '1';
27		otherwise, the base station shall set this field to '0'.
28	REV_PDCH_PARMS_INCL	- Reverse Packet Data Channel related parameters included
29		indicator.
30		If REV_PDCH_SUPPORTED is omitted, or if it is included and
31		set to '0', the base station shall omit this field; otherwise, the
32		base station shall include this field and set it as follows:
33		The base station shall set this field to '1' if the R-PDCH
34		parameters are included in this message; otherwise, the base
35		station shall set this field to '0'.
36	REV_PDCH_RLGAIN_INCL	- Reverse Packet Data Channel parameters related to
37		reverse link adjustment gains included indicator.
38		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
39		set to '0', the base station shall omit this field; otherwise, the
40		base station shall include this field, and set it as follows.
41		The base station shall set this field to '1' if the following R-
42		PDCH gain related fields are included in this message;
43		otherwise, the base station shall set this field to '0'.

1	RLGAIN_SPICH_PILOT	-	Reverse Secondary Pilot Channel to pilot adjustment gain.
2			If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
3			and set to '0', the base station shall omit this field; otherwise,
4			the base station shall include this field, and set it as follows.
5			The base station shall set this field to the Reverse Secondary
6			Pilot Channel to pilot adjustment gain expressed as a two's
7			complement value in units of 0.125 dB (see [2]).
8	RLGAIN_REQCH_PILOT	-	Reverse Request Channel to pilot adjustment gain.
9			If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
10			and set to '0', the base station shall omit this field; otherwise,
11			the base station shall include this field, and set it as follows.
12			The base station shall set this field to the Reverse Request
13			Channel to pilot adjustment gain expressed as a two's
14			complement value in units of 0.125 dB (see [2]).
15	RLGAIN_PDCCH_PILOT	-	Reverse Packet Data Control Channel to pilot adjustment
16			gain.
17			If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
18			and set to '0', the base station shall omit this field; otherwise,
19			the base station shall include this field, and set it as follows.
20			The base station shall set this field to the Reverse Packet
21			Data Channel to pilot adjustment gain expressed as a two's
22			complement value in units of 0.125 dB (see [2]).
23	REV_PDCH_PARMS_1_INCL	-	Reverse Packet Data Channel parameters subset included
24			indicator.
25			If REV_PDCH_PARMS_INCL is omitted, or if it is included and
26			set to '0', the base station shall omit this field; otherwise, the
27			base station shall include this field, and set it as follows.
28			The base station shall set this field to '1' if the following R-
29			PDCH parameters are included in this message; otherwise,
30			the base station shall set this field to '0'.
31	REV_PDCH_TABLE_SEL	-	Reverse Packet Data Channel Table selector.
32			If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
33			and set to '0', the base station shall omit this field; otherwise,
34			the base station shall include this field, and set it as follows.
35			The base station shall set this field to the Reverse Packet
36			Data Channel Table selector (see [2]).
37	REV_PDCH_MAX_AUTO_TPR	-	Reverse Packet Data Channel maximum traffic to
38			pilot ratio for autonomous transmission.
39			If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
40			and set to '0', the base station shall omit this field; otherwise,
41			the base station shall include this field and set it as follows.
42			The base station shall set this field to the maximum traffic to
43			pilot ratio for autonomous transmission on the Reverse
44			Packet Data Channel (see [2] and [3]).

1		The base station shall set this field to a value in the range 0
2		to 18 dB inclusive in units of 0.125 dB.
3	REV_PDCH_NUM_ARQ_ROUNDS_NORMAL -	Maximum number of allowed ARQ rounds on
4		the Reverse PDCH in the non-boosted mode.
5		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
6		and set to '0', the base station shall omit this field; otherwise,
7		the base station shall include this field and set it as follows:
8		The base station shall set this field to one less the maximum
9		number of allowed ARQ rounds on the Reverse PDCH in the
10		non-boosted mode. The base station shall set this field to 0,
11		1, or 2 corresponding to 1, 2, or 3 rounds respectively (See
12		[3]).
13	REV_PDCH_OPER_PARMS_INCL -	Reverse Packet Data Channel operational parameters
14		included indicator.
15		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
16		set to '0', the base station shall omit this field; otherwise, the
17		base station shall include this field, and set it as follows.
18		The base station shall set this field to '1' if the following R-
19		PDCH operational parameters are included in this message;
20		otherwise, the base station shall set this field to '0'.
21	REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET -	Maximum Allowed Reverse
22		PDCH encoder packet size.
23		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
24		included and set to '0', the base station shall omit this field;
25		otherwise, the base station shall include this field and set it
26		as follows.
27		The base station shall set this field to the maximum size
28		encoder packet that the mobile station is allowed to use. (see
29		[2] and [3]).
30		The base station shall set this field to a value in the range 0
31		to 10 inclusive, corresponding to the encoder packet sizes
32		192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384,
33		and 18456 bits respectively.
34	REV_PDCH_DEFAULT_PERSISTENCE -	Reverse Packet Data Channel default initial
35		persistence.
36		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
37		included and set to '0', the base station shall omit this field;
38		otherwise, the base station shall include this field and set it
39		as follows:
40		The base station shall set this field to '1' if the mobile station
41		is to be persistent at the call setup; otherwise, the base
42		station shall set this field to '0' (See [3]).
43	REV_PDCH_RESET_PERSISTENCE -	Reverse Packet Data Channel reset persistence
44		indicator.

1		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
2		included and set to '0', the base station shall omit this field;
3		otherwise, the base station shall include this field and set it
4		as follows:
5		The base station shall set this field to '1' if, at the end of a
6		persistent grant, the mobile station shall reset its persistent
7		indicator to persistent; otherwise, the base station shall set
8		this field to '0' if the mobile station shall reset its persistent
9		indicator to non-persistent (See [3]).
10	REV_PDCH_GRANT_PRECEDENCE -	Reverse Packet Data Channel Grant Precedence
11		Indicator.
12		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
13		included and set to '0', the base station shall omit this field;
14		otherwise, the base station shall include this field and set it
15		as follows:
16		The base station shall set this field to '1' if unicast Forward
17		Grant Channel messages have precedence over Rate Control
18		commands; otherwise, the base station shall set this field to
19		'0' to indicate that Rate Control down commands from non-
20		serving sectors have precedence over Forward Grant Channel
21		messages (see [3]).
22	REV_PDCH_MSIB_SUPPORTED -	Reverse PDCH MSIB usage indicator.
23		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
24		included and set to '0', the base station shall omit this field;
25		otherwise, the base station shall include this field and set it
26		as follows:
27		The base station shall set this field to '1' if the mobile station
28		is to use the MSIB bit on the Reverse Packet Data Control
29		Channel; otherwise, the base station shall set this field to '0'
30		(see [3]).
31	REV_PDCH_SOFT_SWITCHING_RESET_IND -	Reverse Packet Data Channel soft
32		switching reset indicator.
33		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
34		included and set to '0', the base station shall omit this field;
35		otherwise, the base station shall include this field and set it
36		as follows:
37		The base station shall set this field to '1' if the mobile station
38		is to initialize RPDCHCF when soft selection occurs in the
39		FPDCHCF; otherwise, the base station shall set this field to
40		'0' (see [3]).
41	SDB_IN_RCNM_IND -	Short Data Burst allowed in <i>Reconnect Message</i> indicator.
42		If RECONNECT_MSG_IND is set to '0' or SDB_SUPPORTED is
43		set to '0', the base station shall omit this field; otherwise, the
44		base station shall include this field and set it as follows:

1		The base station shall set this field to '1' if the mobile station
2		is allowed to include a Short Data Burst (see [30]) in the
3		<i>Reconnect Message</i> ; otherwise, the base station shall set this
4		field to '0'.
5	CAND_BAND_INFO_REQ -	Candidate band class information request indicator
6		If CCH_INFO_INCL is set to '1', the base station shall include
7		this field and set it as shown below; otherwise, the base
8		station shall omit this field.
9		The base station shall set this field to '1' when requesting
10		mobiles to report whether various candidate band class and
11		band subclass (if applicable) combinations are supported;
12		otherwise, the base station shall set this field to '0'.
13		The base station shall not include more than 16 band class-
14		band subclass queries in this message.
15	NUM_CAND_BAND_CLASS -	Number of candidate band classes
16		If CAND_BAND_INFO_REQ is not included, or is included and
17		set to '0', the base station shall omit this field; otherwise, the
18		base station shall include this field and set it as follows:
19		The base station shall set this field to the number of
20		candidate band classes included in the record minus one.
21	If CAND_BAND_INFO_REQ is included and set to '1', the base station shall include	
22	NUM_CAND_BAND_CLASS + 1 occurrences of the following record:	
23	CAND_BAND_CLASS -	Candidate band class
24		The base station shall set this field to a band class (see [30])
25		for which the mobile is to report it's capabilities upon system
26		access. It may be used in conjunction with the
27		BAND_SUBCLASS_IND fields to specify band subclass(es) for
28		which the mobile is to report it's capabilities upon system
29		access.
30	SUBCLASS_INFO_INCL -	Band subclass information included
31		The base station shall set this field to '0' when no band
32		subclasses are associated with CAND_BAND_CLASS or if the
33		base station requires only the band class capabilities of the
34		mobile station. Otherwise, the base station shall set this field
35		to '1'.
36	SUBCLASS_REC_LEN -	Band subclass subrecord length
37		If SUBCLASS_INFO_INCL is set to '0', the base station shall
38		omit this field; otherwise, the base station shall set this field
39		as follows:

1 The base station shall set this field to the number of band  
2 subclass indicator fields included in the subrecord minus  
3 one. The number of subclass indicator fields included  
4 depends on the highest band subclass being queried for  
5 mobile support for the associated CAND\_BAND\_CLASS (i.e. if  
6 the highest band subclass being queried is K, then  
7 SUBCLASS\_REC\_LEN = K).

8 If the SUBCLASS\_REC\_LEN field is included, the base station shall include  
9 SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord. The first field included  
10 corresponds to band subclass '0' and the N<sup>th</sup> field included corresponds to band subclass  
11 'N-1'.

12 BAND\_SUBCLASS\_IND - Band subclass indicator

13 The base station shall set this field to '1' if it requires the  
14 mobile to report whether it supports this band subclass for  
15 the associated CAND\_BAND\_CLASS; otherwise, the base  
16 station shall set this field to '0'.

17 The mobile station is to indicate its capability to support the  
18 candidate band class and band subclass (if applicable)  
19 combination in the *Registration Message*, *Origination*  
20 *Message*, and *Page Response Message*.

21 RESCAN - Rescan indicator.

22 If mobile stations are to re-initialize and re-acquire the  
23 system upon receiving this message, the base station shall  
24 set this field to '1'; otherwise, the base station shall set this  
25 field to '0'.

26 TX\_PWR\_LIMIT\_INCL - Transmit Power Limit inclusion for the current base station

27 If the transmit power limit field is included in this message,  
28 the base station shall set this field to '1'; otherwise, the base  
29 station shall set this field to '0'.

30 TX\_PWR\_LIMIT - Transmit Power Limit for the current base station

31 If TX\_PWR\_LIMIT\_INCL is set to '0', the base station shall  
32 omit this field; otherwise, the base station shall include this  
33 field and set to as follows.

34 The base station shall set this field to thirty dB more than  
35 transmit power limit in dBm EIRP, in steps of 1 dB. This field  
36 can take the values 30 to 53 corresponding to maximum  
37 transmit power values 0 dBm to 23 dBm.

38 BYPASS\_REG\_IND - Indication to bypass the power up registration upon the  
39 change of bands, serving systems, and frequency blocks.

40 The base station shall set this field to '00' if the mobile  
41 station is to perform a power up registration upon band,  
42 frequency block or serving system change.

43 The base station shall set this field to '01' if the mobile  
44 station is to bypass the power up registration requirement  
45 upon band, frequency block or serving system changes due to  
46 processing the *Extended CDMA Channel List Message*.

1		The base station shall set this field to '10' if the mobile
2		station is to bypass the power up registration requirement
3		upon band, frequency block or serving system change when
4		the SID remains the same.
5		The base station shall set this field to '11' if the mobile
6		station is to bypass the power up registration requirement
7		upon band, frequency block or serving system change.
8	CRRM_MSG_IND -	<i>Call Recovery Request Message</i> supported indicator.
9		The base station shall set this field to '0' if the mobile station
10		is not allowed to send a <i>Call Recovery Request Message</i> ;
11		otherwise, the base station shall set this field to '1'.
12	APPIM_PERIOD_INDEX -	<i>Access Point Pilot Information Message</i> transmission
13		frequency.
14		If the AP_PILOT_INFO is not included or is included and set
15		to 0, the base station shall omit this field. Otherwise, the
16		base station shall include this field if there are any fields
17		following this field or if the base station needs to set this field
18		to a value other than '000'.
19		The base station shall set this field to the period index value
20		of <i>Access Point Pilot Information Message</i> . The base station
21		shall set this field value in the range '000' - '101', both
22		inclusive.
23	GEN_OVHD_CYCLE_INDEX -	<i>General Overhead Information Message</i> transmission
24		frequency.
25		If the GEN_OVHD_INF_IND is not included or is included and
26		set to 0, the base station shall omit this field. Otherwise, the
27		base station shall include this field if there are any fields
28		following this field or if the base station needs to set this field
29		to a value other than '000'.
30		The base station shall set this field to the cycle index value of
31		<i>General Overhead Message</i> . The base station shall set this
32		field value in the range '000' - '101', both inclusive.
33	ATIM_CYCLE_INDEX -	<i>Alternative Technologies Information Message</i> transmission
34		frequency.
35		If the ATIM_IND is not included or is included and set to 0,
36		the base station shall omit this field. Otherwise, the base
37		station shall include this field if there are any fields following
38		this field or if the base station needs to set this field to a
39		value other than '000'.
40		The base station shall set this field to the cycle index value of
41		<i>Alternative Technologies Information Message</i> . The base
42		station shall set this field vale in the range '000' - '101', both
43		inclusive.
44	ADD_LOC_INFO_INCL	- Location information included.



1		If CCH_INFO_INCL is set to '1', the base station shall include
2		this field and set it as shown below; otherwise, the base
3		station shall omit this field.
4		The base station shall set this field to '1' to indicate if the
5		LOC_UNC_H, HEIGHT, and LOC_UNC_V fields are included
6		in this message and to indicate if the BASE_LAT and
7		BASE_LONG contain legitimate values, otherwise, the base
8		station shall set this field to '0'.
9	LOC_UNC_H	- Horizontal location uncertainty.
10		If ADD_LOC_INFO_INCL are set to '1', the base station shall
11		include this field and set it as shown below; otherwise, the
12		base station shall omit this field.
13		The base station shall set this field to the circular horizontal
14		location uncertainty, as specified in Table 3.7.2.3.2.1-2. The
15		value of this field indicates the radius of a circular 95%
16		confidence coverage area.
17	HEIGHT	- Height.
18		If ADD_LOC_INFO_INCL are set to '1', the base station shall
19		include this field and set it as shown below; otherwise, the
20		base station shall omit this field.
21		The base station shall this field to the height, above the
22		WGS-84 reference ellipsoid, in units of 1 meter, in the range
23		from -500 m to 15,882 m, where the binary value of the field
24		conveys the height plus 500 m.
25		The base station shall set this field to all ones if its height is
26		not known.
27	LOC_UNC_V	- Vertical location uncertainty.
28		If ADD_LOC_INFO_INCL are set to '1', the base station shall
29		include this field and set it as shown below; otherwise, the
30		base station shall omit this field.
31		The base station set this field to the vertical location
32		uncertainty, as specified in Table 3.7.2.3.2.1-3. The value of
33		this field indicates the one-sigma uncertainty of HEIGHT
34		within the corresponding horizontal coverage area.
35		The base station shall set this field to all ones if its height is
36		not known.
37		
38		

1 3.7.2.3.2.32 ANSI-41 RAND Message

2 MSG\_TAG: A41RANDM

3

4

Field	Length (bits)
PILOT_PN	9
ACC_MSG_SEQ	6
RAND	32

5

6

PILOT\_PN - Pilot PN sequence offset index.

7

The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.

8

9

ACC\_MSG\_SEQ - Enhanced Access Parameters Message sequence number.

10

The base station shall set this field to ACC\_CONFIG\_SEQ (see 3.6.2.2).

11

12

RAND - Random challenge value.

13

The base station shall set this field to the random challenge value to be used by mobile stations for authentication.

14

15

1 3.7.2.3.2.33 Enhanced Access Parameters Message

2 MSG\_TAG: EAPM

3

Field	Length (bits)
PILOT_PN	9
ACC_MSG_SEQ	6
PSIST_PARMS_INCL	1
PSIST_PARMS_LEN	0 or 5
PSIST(0-9)_EACH	0 or 6
PSIST(10)_EACH	0 or 3
PSIST(11)_EACH	0 or 3
PSIST(12)_EACH	0 or 3
PSIST(13)_EACH	0 or 3
PSIST(14)_EACH	0 or 3
PSIST(15)_EACH	0 or 3
PSIST_EMG	0 or 3
MSG_PSIST_EACH	0 or 3
REG_PSIST_EACH	0 or 3
RESERVED	0 – 7 (as needed)
LAC_PARMS_LEN	4
ACC_TMO	6
RESERVED_1	4
MAX_REQ_SEQ	4
MAX_RSP_SEQ	4
RESERVED	0 – 7 (as needed)

(continues on next page)

4

5

1

Field	Length (bits)
NUM_MODE_SELECTION_ENTRIES	3

NUM\_MODE\_SELECTION\_ENTRIES + 1 occurrences of the following record:

{ (NUM\_MODE\_SELECTION\_ENTRIES + 1)

ACCESS_MODE	3
ACCESS_MODE_MIN_DURATION	10
ACCESS_MODE_MAX_DURATION	10

} (NUM\_MODE\_SELECTION\_ENTRIES + 1)

RLGAIN_COMMON_PILOT	6
IC_THRESH	4
IC_MAX	4
NUM_MODE_PARM_REC	3

NUM\_MODE\_PARM\_REC + 1 occurrences of the following record:

{ (NUM\_MODE\_PARM\_REC + 1)

EACH_PARM_REC_LEN	4
APPLICABLE_MODES	8
EACH_NOM_PWR	5
EACH_INIT_PWR	5
EACH_PWR_STEP	3
EACH_NUM_STEP	4
EACH_PREAMBLE_ENABLED	1
EACH_PREAMBLE_NUM_FRAC	0 or 4
EACH_PREAMBLE_FRAC_DURATION	0 or 4
EACH_PREAMBLE_OFF_DURATION	0 or 4
EACH_PREAMBLE_ADD_DURATION	0 or 4
RESERVED	6
EACH_PROBE_BKOFF	4
EACH_BKOFF	4
EACH_SLOT	6
EACH_SLOT_OFFSET1	6

(continues on next page)

2

3

1

Field	Length (bits)
EACH_SLOT_OFFSET2	6
RESERVED	0 – 7 (as needed)

} (NUM\_MODE\_PARM\_REC + 1)

BA_PARMS_LEN	3
NUM_EACH_BA	0 or 5
EACH_BA_RATES_SUPPORTED	0 or 8
RESERVED	0 – 7 (as needed)
RA_PARMS_LEN	5
NUM_EACH_RA	0 or 5
NUM_CACH	0 or 3
CACH_CODE_RATE	0 or 1

(NUM\_CACH + 1) occurrences of the following record:

{ (NUM\_CACH + 1)

CACH_CODE_CHAN	8
----------------	---

} (NUM\_CACH + 1)

NUM_RCCCH	0 or 5
RCCCH_RATES_SUPPORTED	0 or 8
RCCCH_PREAMBLE_ENABLED	0 or 1
RCCCH_PREAMBLE_NUM_FRAC	0 or 4
RCCCH_PREAMBLE- _FRAC_DURATION	0 or 4
RCCCH_PREAMBLE_OFF_DURATION	0 or 4
RCCCH_PREAMBLE_ADD_DURATION	0 or 4
RCCCH_SLOT	0 or 6
RCCCH_SLOT_OFFSET1	0 or 6
RCCCH_SLOT_OFFSET2	0 or 6
RCCCH_NOM_PWR	0 or 5
RCCCH_INIT_PWR	0 or 5
RA_PC_DELAY	0 or 5

2

(continues on next page)

Field	Length (bits)
EACAM_CACH_DELAY	0 or 4
RCCCH_HO_SUPPORTED	0 or 1
RCCCH_HO_THRESH	0 or 4
EACAM_PCCAM_DELAY	0 or 5
NUM_CPCCH	0 or 2
CPCCH_RATE	0 or 2

(NUM\_CPCCH + 1) occurrences of the following record:

{ (NUM\_CPCCH + 1)

CPCCH_CODE_CHAN	8
-----------------	---

} (NUM\_CPCCH + 1)

NUM_PCSCH_RA	0 or 7
RESERVED	0 – 7 (as needed)
ACCT_INCL	1
ACCT_INCL_EMG	0 or 1
ACCT_AOC_BITMAP_INCL	0 or 1
ACCT_SO_INCL	0 or 1
NUM_ACCT_SO	0 or 4

NUM\_ACCT\_SO + 1 occurrences of the following record:

{ (NUM\_ACCT\_SO + 1)

ACCT_AOC_BITMAP1	0 or 5
ACCT_SO	16

} (NUM\_ACCT\_SO + 1)

ACCT_SO_GRP_INCL	0 or 1
NUM_ACCT_SO_GRP	0 or 3

NUM\_ACCT\_SO\_GRP + 1 occurrences of the following record:

{ (NUM\_ACCT\_SO\_GRP + 1)

ACCT_AOC_BITMAP2	0 or 5
ACCT_SO_GRP	5

} (NUM\_ACCT\_SO\_GRP + 1)

1

2

PILOT\_PN - Pilot PN sequence offset index.

3

The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.

4

1	ACC_MSG_SEQ	-	Enhanced Access Parameters Message sequence number.
2			The base station shall set this field to ACC_CONFIG_SEQ
3			(see 2.6.2.2.15).
4	PSIST_PARMS_INCL	-	Persistence parameters included indicator.
5			If persistence parameters are included in this message, the
6			base station shall set this field to '1'; otherwise, the base
7			station shall set this field to '0'.
8	PSIST_PARMS_LEN	-	Length of persistence parameters record.
9			If PSIST_PARMS_INCL is set to '0', the base station shall omit
10			this field; otherwise, the base station shall set this field to the
11			total length, in octets, of persistence parameters included in
12			the message, including the PSIST_PARMS_LEN and
13			RESERVED fields.
14	PSIST(0-9)_EACH	-	Persistence value for access overload classes 0 through 9.
15			If PSIST_PARMS_INCL is set to '0', the base station shall omit
16			this field; otherwise, the base station shall set this field as
17			follows:
18			If a mobile station in access overload classes 0 through 9 is
19			permitted to transmit requests on the Enhanced Access
20			Channel, the base station shall set this field to the
21			persistence value to be used. If such a mobile stations is not
22			permitted to transmit requests on the Enhanced Access
23			Channel, the base station shall set this field to '11111'.
24	PSIST(10)_EACH	-	Persistence value for access overload class 10 (test mobile
25			stations).
26			If PSIST_PARMS_INCL is set to '0', the base station shall omit
27			this field; otherwise, the base station shall set this field as
28			follows:
29			If a mobile station in access overload class 10 is permitted to
30			transmit requests on the Enhanced Access Channel, the base
31			station shall set this field to the persistence value to be used.
32			If such a mobile station is not permitted to transmit requests
33			on the Enhanced Access Channel, the base station shall set
34			this field to '111'.
35	PSIST(11)_EACH	-	Persistence value for access overload class 11 (emergency
36			mobile stations).
37			If PSIST_PARMS_INCL is set to '0', the base station shall omit
38			this field; otherwise, the base station shall set this field as
39			follows:
40			If a mobile station in access overload class 11 is permitted to
41			transmit requests on the Enhanced Access Channel, the base
42			station shall set this field to the persistence value to be used.
43			If such a mobile station is not permitted to transmit requests
44			on the Enhanced Access Channel, the base station shall set
45			this field to '111'.
46	PSIST(12)_EACH	-	Persistence value for access overload class 12.

1			If PSIST_PARMS_INCL is set to '0', the base station shall omit
2			this field; otherwise, the base station shall set this field as
3			follows:
4			If a mobile station in access overload class 12 is permitted to
5			transmit requests on the Enhanced Access Channel, the base
6			station shall set this field to the persistence value to be used.
7			If such a mobile station is not permitted to transmit requests
8			on the Enhanced Access Channel, the base station shall set
9			this field to '111'.
10	PSIST(13)_EACH	-	Persistence value for access overload class 13.
11			If PSIST_PARMS_INCL is set to '0', the base station shall omit
12			this field; otherwise, the base station shall set this field as
13			follows:
14			If a mobile station in access overload class 13 is permitted to
15			transmit requests on the Enhanced Access Channel, the base
16			station shall set this field to the persistence value to be used.
17			If such a mobile station is not permitted to transmit requests
18			on the Enhanced Access Channel, the base station shall set
19			this field to '111'.
20	PSIST(14)_EACH	-	Persistence value for access overload class 14.
21			If PSIST_PARMS_INCL is set to '0', the base station shall omit
22			this field; otherwise, the base station shall set this field as
23			follows:
24			If a mobile station in access overload class 14 is permitted to
25			transmit requests on the Enhanced Access Channel, the base
26			station shall set this field to the persistence value to be used.
27			If such a mobile station is not permitted to transmit requests
28			on the Enhanced Access Channel, the base station shall set
29			this field to '111'.
30	PSIST(15)_EACH	-	Persistence value for access overload class 15.
31			If PSIST_PARMS_INCL is set to '0', the base station shall omit
32			this field; otherwise, the base station shall set this field as
33			follows:
34			If a mobile station in access overload class 15 is permitted to
35			transmit requests on the Enhanced Access Channel, the base
36			station shall set this field to the persistence value to be used.
37			If such a mobile stations is not permitted to transmit
38			requests on the Enhanced Access Channel, the base station
39			shall set this field to '111'.
40	PSIST_EMG	-	Persistence value for emergency call for access overload
41			classes 0 through 9.
42			If PSIST_PARMS_INCL is set to '0', the base station shall omit
43			this field; otherwise, the base station shall set this field as
44			follows:



1			If a mobile station in access overload classes 0 through 9 is
2			permitted to transmit emergency requests on the Enhanced
3			Access Channel, the base station shall set this field to the
4			persistence value to be used for the emergency calls. If such
5			a mobile station is not permitted to transmit emergency
6			requests on the Enhanced Access Channel, the base station
7			shall set this field to '111'.
8	MSG_PSIST_EACH	-	Persistence modifier for Enhanced Access Channel attempts
9			for message transmissions.
10			If PSIST_PARMs_INCL is set to '0', the base station shall omit
11			this field; otherwise, the base station shall set this field to the
12			persistence modifier for Enhanced Access Channel attempts
13			for message transmissions.
14	REG_PSIST_EACH	-	Persistence modifier for Enhanced Access Channel attempts
15			for registrations which are not responses to the <i>Registration</i>
16			<i>Request Order</i> .
17			If PSIST_PARMs_INCL is set to '0', the base station shall omit
18			this field; otherwise, the base station shall set this field to the
19			persistence modifier for Enhanced Access Channel attempts
20			for registrations which are not responses to the <i>Registration</i>
21			<i>Request Order</i> .
22	RESERVED	-	Reserved bits.
23			If PSIST_PARMs_INCL is set to '0', the base station shall omit
24			this field; otherwise, the base station shall include as many
25			bits as required to make the length of the persistence
26			parameters record an integral number of octets. If this field is
27			included, the base station shall set each of these bits to '0'.
28	LAC_PARMs_LEN	-	Length of Link Access Control parameter fields.
29			The base station shall set this field to the total length, in
30			octets, of Link Access Control parameters included in the
31			message, including the LAC_PARMs_LEN and RESERVED
32			fields.
33	ACC_TMO	-	Acknowledgment timeout.
34			The base station shall set this field to one less than the
35			length of time, in units of 20 ms, that a mobile station is to
36			wait to receive a Layer 2 acknowledgment after the end of an
37			Enhanced Access Channel transmission.
38	RESERVED_1	-	The reserved bits
39			The base station shall set this field to '0000'
40	MAX_REQ_SEQ	-	Maximum number of access probe sequences for an
41			Enhanced Access Channel request.
42			The base station shall set this field to the maximum number
43			of access probe sequences a mobile station is to transmit for
44			an Enhanced Access Channel request. The base station shall
45			set this field to a value greater than 0.

- 1           MAX\_RSP\_SEQ   -   Maximum number of access probe sequences for an  
2                                   Enhanced Access Channel response.
- 3                                   The base station shall set this field to the maximum number  
4                                   of access probe sequences a mobile station is to transmit for  
5                                   an Enhanced Access Channel response. The base station  
6                                   shall set this field to a value greater than 0.
- 7           RESERVED       -   Reserved Bits.
- 8                                   The base station shall include as many bits as required to  
9                                   make the length of the Link Access Control parameters record  
10                                  an integral number of octets. The base station shall set each  
11                                  of these bits to '0'.
- 12   NUM\_MODE\_SELECTION\_ENTRIES -   Number of entries of the Mode Selection Table.
- 13                                  The base station shall set this field to the number of entries  
14                                  of the Mode Selection Table, minus one.
- 15   The base station shall include NUM\_MODE\_SELECTION\_ENTRIES + 1 occurrences of the  
16   following three-field record:
- 17           ACCESS\_MODE   -   Access Mode used for the Enhanced Access Channel.
- 18                                  The base station shall set this field to the Access Mode value  
19                                  shown in Table 3.7.2.3.2.33-1 corresponding to the Access  
20                                  Mode used.

21

22

**Table 3.7.2.3.2.33-1. Enhanced Access Modes**

<b>ACCESS_MODE (binary)</b>	<b>Access Mode</b>
000	Basic Access Mode
001	Reservation Access Mode
010 – 011	Reserved

- 23   ACCESS\_MODE\_MIN\_DURATION - The minimum message duration for the  
24                                   corresponding Access Mode.
- 25                                  The base station shall set this field to the minimum message  
26                                  duration for the corresponding Access Mode, in units of 5 ms.  
27                                  See [3].
- 28   ACCESS\_MODE\_MAX\_DURATION - The maximum message duration for the  
29                                   corresponding Access Mode.
- 30                                  The base station shall set this field to the maximum message  
31                                  duration for the corresponding Access Mode, in units of 5 ms.  
32                                  See [3].
- 33   RLGAIN\_COMMON\_PILOT   -   Gain adjustment of the Enhanced Access Channel or  
34                                   Reverse Common Control Channel relative to the Reverse  
35                                   Pilot Channel.

- 1 The base station shall set this field to the correction factor to  
 2 be used by mobile stations in setting the power of a code  
 3 channel, expressed as a two's complement value in units of  
 4 0.125 dB (see [2]).
- 5 **IC\_THRESH** - Interference correction threshold.  
 6 The threshold level at which the interference correction  
 7 begins to be applied.  
 8 The base station shall set this field to the negative of the  
 9 interference correction threshold to be used by mobile  
 10 stations to determine the interference correction, in units of 1  
 11 dB (see [2]).
- 12 **IC\_MAX** - The maximum interference correction that can be applied.  
 13 The base station shall set this field to the maximum  
 14 interference correction that can be applied, in units of 1 dB  
 15 (see [2]).
- 16 **NUM\_MODE\_PARM\_REC** - The number of mode-specific parameter records.  
 17 The base station shall set this field to the number of mode-  
 18 specific parameter records included in the message, minus  
 19 one.
- 20 The base station shall include **NUM\_MODE\_PARM\_REC** + 1 occurrences of the following  
 21 record:
- 22 **EACH\_PARM\_REC\_LEN** - Length of the mode-specific parameters record.  
 23 The base station shall set this field to the total length, in  
 24 octets, of the mode-specific parameters record, including the  
 25 **EACH\_PARM\_REC\_LEN** and **RESERVED** fields.
- 26 **APPLICABLE\_MODES** - Access modes to which the access parameters specified in  
 27 this record apply.  
 28 The base station shall set each subfield of the  
 29 **APPLICABLE\_MODES** field as follows: the base station shall  
 30 set the subfield to '1' if the access parameters included in this  
 31 record are applicable to the corresponding Access Mode in  
 32 Table 3.7.2.3.2.33-2; otherwise, the base station shall set the  
 33 subfield to '0'.  
 34

**Table 3.7.2.3.2.33-2. Applicable Modes**

Subfield	Length (bits)	Subfield Description
ACC_MODE_1	1	Basic Access Mode
ACC_MODE_2	1	Reservation Access Mode
RESERVED	6	

36

- 37 **EACH\_NOM\_PWR** - Nominal transmit power offset for the Enhanced Access  
 38 Channels.

1		The base station shall set this field to the correction factor to
2		be used by a mobile station in the open loop power estimate,
3		expressed as a two's complement value in units of 1 dB
4		(see [2]).
5	EACH_INIT_PWR	- Initial power offset for the Enhanced Access Channels.
6		The base station shall set this field to the correction factor to
7		be used by a mobile station in the open loop power estimate
8		for the initial transmission on an Enhanced Access Channel,
9		expressed as a two's complement value in units of 1 dB (see
10		[2]).
11	EACH_PWR_STEP	- Power increment for the Enhanced Access Channels.
12		The base station shall set this field to the value by which a
13		mobile station is to increase their transmit power between
14		successive access probes in an access probe sequence, in
15		units of 1 dB.
16	EACH_NUM_STEP	- Number of access probes.
17		The base station shall set this field to one less than the
18		maximum number of access probes a mobile station is to
19		transmit in a single access probe sequence.
20	EACH_PREAMBLE_ENABLED	- Preamble enabled indicator for the Enhanced Access
21		Channel.
22		The base station shall set this field to '1' if EACH preambles
23		related information is included in this message; otherwise,
24		the base station shall set this field to '0'.
25	EACH_PREAMBLE_NUM_FRAC	- The number of fractional preambles on the Enhanced
26		Access Channels.
27		If EACH_PREAMBLE_ENABLED is set to '1', the base station
28		shall set this field to the number of fractional preambles
29		minus one on the Enhanced Access Channels; otherwise, the
30		base station shall omit this field.
31	EACH_PREAMBLE_FRAC_DURATION	- Fractional preamble duration on the Enhanced
32		Access Channels.
33		If EACH_PREAMBLE_ENABLED is set to '1', the base station
34		shall set this field to the fractional preamble duration minus
35		one on an Enhanced Access Channel, in units of 1.25 ms;
36		otherwise, the base station shall omit this field.
37	EACH_PREAMBLE_OFF_DURATION	- Fractional preamble gated-off duration on the
38		Enhanced Access Channels.
39		If EACH_PREAMBLE_ENABLED is set to '1', the base station
40		shall set this field to the fractional preamble gated-off
41		duration (in units of 1.25 ms) after the transmission of each
42		fractional preamble on an Enhanced Access Channel;
43		otherwise, the base station shall omit this field.
44	EACH_PREAMBLE_ADD_DURATION	- Additional preamble duration on the Enhanced
45		Access Channels.

1			If EACH_PREAMBLE_ENABLED is set to '1', the base station
2			shall set this field to the additional preamble duration on an
3			Enhanced Access Channel, in units of 1.25 ms; otherwise,
4			the base station shall omit this field.
5	RESERVED	-	Reserved bits.
6			The base station shall set this field to '000000'.
7	EACH_PROBE_BKOFF	-	Enhanced Access Channel probe backoff range.
8			The base station shall set this field to one less than the
9			maximum number of slots a mobile station is to delay due to
10			random backoff between consecutive enhanced access
11			probes.
12	EACH_BKOFF	-	Enhanced Access Channel probe sequence backoff range.
13			The base station shall set this field to one less than the
14			maximum number of slots a mobile station is to delay due to
15			random backoff between successive enhanced access probe
16			sequences.
17	EACH_SLOT	-	Slot duration for the Enhanced Access Channels.
18			The base station shall set this field to N where the slot
19			duration of the Enhanced Access Channel is $(N+1) \times 1.25$ ms.
20			The base station shall set this field to a value between 0 and
21			63.
22	EACH_SLOT_OFFSET1	-	First slot offset for the Enhanced Access Channels.
23			The base station shall set this field so that the Enhanced
24			Access Channel has a slot offset equal to $(EACH\_ID \times$
25			$EACH\_SLOT\_OFFSET2 + EACH\_SLOT\_OFFSET1) \bmod$
26			$(EACH\_SLOT+1)$ , where EACH_ID is the Enhanced Access
27			Channel Index. The base station shall set this field to a value
28			between 0 and 63, in units of 1.25 ms.
29	EACH_SLOT_OFFSET2	-	Relative slot offset for the Enhanced Access Channels.
30			The base station shall set this field so that the Enhanced
31			Access Channel has a slot offset equal to $(EACH\_ID \times$
32			$EACH\_SLOT\_OFFSET2 + EACH\_SLOT\_OFFSET1) \bmod$
33			$(EACH\_SLOT+1)$ , where EACH_ID is the Enhanced Access
34			Channel Index. The base station shall set this field to a value
35			between 0 and 63, in units of 1.25 ms.
36	RESERVED	-	Reserved bits.
37			The base station shall include as many bits as required to
38			make the length of the mode-specific parameters record an
39			integral number of octets. The base station shall set each of
40			these bits to '0'.
41	BA_PARMS_LEN	-	Length of Basic Access Mode parameter record.

The base station shall set this field to the total length, in octets, of Basic Access Mode parameters record included in the message, excluding the BA\_PARMS\_LEN but including the RESERVED fields. If there are no fields other than the BA\_PARMS\_LEN in this record, the base station shall set this field to '000'.

**NUM\_EACH\_BA** - Number of Enhanced Access Channels used for the Basic Access Mode.

If BA\_PARMS\_LEN is equal to '000', the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Enhanced Access Channels used for the Basic Access mode minus one.

**EACH\_BA\_RATES\_SUPPORTED** - Supported rate words for the Basic Access mode on the Enhanced Access Channels.

If BA\_PARMS\_LEN is equal to '000', the base station shall omit this field; otherwise, the base station shall include this field and set each subfield of the EACH\_BA\_RATES\_SUPPORTED field as follows: the base station shall set the subfield to '1' if the corresponding mode in Table 3.7.2.3.2.33-3 is allowed; otherwise the base station shall set the subfield to '0'.

**Table 3.7.2.3.2.33-3. EACH and RCCCH Data Rate and Frame Size**

Subfield	Length (bits)	Subfield Description
RATE_SIZE_1	1	9600 bps, 20 ms frame size
RATE_SIZE_2	1	19200 bps, 20 ms frame size
RATE_SIZE_3	1	19200 bps, 10 ms frame size
RATE_SIZE_4	1	38400 bps, 20 ms frame size
RATE_SIZE_5	1	38400 bps, 10 ms frame size
RATE_SIZE_6	1	38400 bps, 5 ms frame size
RESERVED	2	Reserved

**RESERVED** - Reserved bits.

If BA\_PARMS\_LEN is equal to '000', the base station shall omit this field; otherwise, the base station shall include as many bits as required to make the length of the Basic Access Mode record (excluding the BA\_PARMS\_LEN field but including the RESERVED field) an integral number of octets. The base station shall set each of these bits to '0'.

**RA\_PARMS\_LEN** - Length of Reservation Access Mode parameters record.

1			The base station shall set this field to the total length, in
2			octets, of Reservation Access Mode parameters record
3			included in the message, excluding the RA_PARMS_LEN but
4			including the RESERVED field.
5	NUM_EACH_RA	-	Number of Enhanced Access Channels used for the
6			Reservation Access Mode.
7			If RA_PARMS_LEN is equal to '00000', the base station shall
8			omit this field; otherwise, the base station shall include this
9			field and set it to the number of Enhanced Access Channels
10			used for the Reservation Access mode minus one.
11	NUM_CACH	-	Number of Common Assignment Channels.
12			If RA_PARMS_LEN is equal to '00000', the base station shall
13			omit this field; otherwise, the base station shall include this
14			field and set it to the number of Common Assignment
15			Channels supported by the system minus one.
16	CACH_CODE_RATE	-	Code Rate for the Common Assignment Channels.
17			If RA_PARMS_LEN is equal to '00000', the base station shall
18			omit this field; otherwise, the base station shall include this
19			field and set it as follows:
20			If the CACH is operating in Spreading Rate 1, the base station
21			shall set this field to '0' if the CACH Code Rate is 1/4 (see [2]).
22			The base station shall set this field to '1' if the CACH Code
23			Rate is 1/2 (see [2]).
24			If the CACH is operating in Spreading Rate 3, the base station
25			shall set this field to '0'.
26	If RA_PARMS_LEN is not equal to '00000', the base station shall include (NUM_CACH + 1)		
27	occurrences of the following one field record:		
28	CACH_CODE_CHAN	-	Code channel index for the Common Assignment Channel.
29			The base station shall set this field to the code channel index
30			(see [2]) in the range 1 to 255 inclusive that the mobile
31			station is to use on the Common Assignment Channel.
32	NUM_RCCCH	-	Number of Reverse Common Control Channels used for the
33			Reservation Mode.
34			If RA_PARMS_LEN is equal to '00000', the base station shall
35			omit this field; otherwise, the base station shall include this
36			field and set it to the number of Reverse Common Control
37			Channels used for the Reservation mode minus one.
38	RCCCH_RATES_SUPPORTED	-	Supported rate words on the Reverse Common Control
39			Channels.
40			If RA_PARMS_LEN is equal to '00000', the base station shall
41			omit this field; otherwise, the base station shall include this
42			field and set each bit of the RCCCH_RATES_SUPPORTED
43			field as follows: the base station shall set the bit to '1' if the
44			corresponding mode in Table 3.7.2.3.2.33-3 is allowed;
45			otherwise the base station shall set the bit to '0'.

1	RCCCH_PREAMBLE_ENABLED	-	Preamble enabled indicator for the Reverse Common
2			Control Channel.
3			If RA_PARMS_LEN is equal to '00000', the base station shall
4			omit this field; otherwise, the base station shall include this
5			field and set it as follows:
6			If RCCCH preambles related information is included in this
7			message, the base station shall set this field to '1'; otherwise,
8			the base station shall set this field to '0'.
9	RCCCH_PREAMBLE_NUM_FRAC	-	Number of fractional preambles on the Reverse
10			Common Control Channels.
11			If RCCCH_PREAMBLE_ENABLED is included and is set to '1',
12			the base station shall set this field to the number of fractional
13			preambles minus one on the Reverse Common Control
14			Channels; otherwise, the base station shall omit this field.
15	RCCCH_PREAMBLEFRAC_DURATION	-	Fractional preamble duration for the Reverse
16			Common Control Channels.
17			If RCCCH_PREAMBLE_ENABLED is included and is set to '1',
18			the base station shall set this field to the fractional preamble
19			duration minus one on a Reverse Common Control Channel,
20			in units of 1.25 ms; otherwise, the base station shall omit
21			this field.
22	RCCCH_PREAMBLE_OFF_DURATION	-	Fractional preamble gated-off duration on
23			Reverse Common Control Channels.
24			If RCCCH_PREAMBLE_ENABLED is included and is set to '1',
25			the base station shall set this field to the fractional preamble
26			gated-off duration (in units of 1.25 ms) after the transmission
27			of each fractional preamble on a Reverse Common Control
28			Channel; otherwise, the base station shall omit this field.
29	RCCCH_PREAMBLE_ADD_DURATION	-	Additional preamble duration on the Reverse
30			Common Control Channels.
31			If RCCCH_PREAMBLE_ENABLED is included and is set to '1',
32			the base station shall set this field to the additional preamble
33			duration on a Reverse Common Control Channel, in units of
34			1.25 ms; otherwise, the base station shall omit this field.
35	RCCCH_SLOT	-	Slot interval for the Reverse Common Control Channels.
36			If RA_PARMS_LEN is equal to '00000', the base station shall
37			omit this field; otherwise, the base station shall include this
38			field and set it to N where the slot duration on the Reverse
39			Common Control Channel is $(N+1) \times 1.25$ ms. The base
40			station shall set this field to a value between 0 and 63.
41	RCCCH_SLOT_OFFSET1	-	First slot offset for the Reverse Common Control Channels.



1			If RA_PARMS_LEN is equal to '00000', the base station shall
2			omit this field; otherwise, the base station shall include this
3			field and set it so that Reverse Common Control Channel has
4			a slot offset equal to $(RCCCH\_ID \times RCCCH\_SLOT\_OFFSET2 +$
5			$RCCCH\_SLOT\_OFFSET1) \bmod (RCCCH\_SLOT+1)$ , where
6			RCCCH_ID is the Reverse Common Control Channel Index.
7			The base station shall set this field to a value between 0 and
8			63, in units of 1.25 ms.
9	RCCCH_SLOT_OFFSET2	-	Second slot offset for the Reverse Common Control Channels.
10			If RA_PARMS_LEN is equal to '00000', the base station shall
11			omit this field; otherwise, the base station shall include this
12			field and set it so that Reverse Common Control Channel has
13			a slot offset equal to $(RCCCH\_ID \times RCCCH\_SLOT\_OFFSET2 +$
14			$RCCCH\_SLOT\_OFFSET1) \bmod (RCCCH\_SLOT+1)$ , where
15			RCCCH_ID is the Reverse Common Control Channel Index.
16			The base station shall set this field to a value between 0 and
17			63, in units of 1.25 ms.
18	RCCCH_NOM_PWR	-	Nominal transmit power offset for the Reverse Common
19			Control Channels.
20			If RA_PARMS_LEN is equal to '00000', the base station shall
21			omit this field; otherwise, the base station shall include this
22			field and set it to the correction factor to be used by a mobile
23			station in the open loop power estimate, expressed as a two's
24			complement value in units of 1 dB (see [2]).
25	RCCCH_INIT_PWR	-	Initial power offset for the Reverse Common Control
26			Channels.
27			If RA_PARMS_LEN is equal to '00000', the base station shall
28			omit this field; otherwise, the base station shall include this
29			field and set it to the correction factor to be used by a mobile
30			station in the open loop power estimate for the initial
31			transmission on a Reverse Common Control Channel,
32			expressed as a two's complement value in units of 1 dB (see
33			[2]).
34	RA_PC_DELAY	-	Power control delay for the Reverse Common Control
35			Channel.
36			If RA_PARMS_LEN is equal to '00000', the base station shall
37			omit this field; otherwise, the base station shall include this
38			field and set it to the number of power control bits the mobile
39			is to disregard after initiating transmission on a Reverse
40			Common Control Channel.
41	EACAM_CACH_DELAY	-	Maximum time after an Enhanced Access Channel header
42			transmission for receiving a response on the Common
43			Assignment Channel when Reverse Common Control
44			Channel soft handoff has not been requested.

1		If RA_PARMS_LEN is equal to '00000', the base station shall
2		omit this field; otherwise, the base station shall include this
3		field and set it to the number of complete Common
4		Assignment Channel frames minus one, from the end of the
5		<i>R-EACH Header</i> , for which a mobile station is to wait for the
6		<i>Early Acknowledgment Channel Assignment Message</i> if the
7		mobile station has not requested Reverse Common Control
8		Channel soft handoff.
9	RCCCH_HO_SUPPORTED	- Reverse Common Control Channel handoff supported
10		indicator.
11		If RA_PARMS_LEN is equal to '00000', the base station shall
12		omit this field; otherwise, the base station shall include this
13		field and set it as follows:
14		The base station shall set this field to '1' if Reverse Common
15		Control Channel handoff is supported by the base station;
16		otherwise, the base station shall set this field to '0'.
17	RCCCH_HO_THRESH	- Reverse Common Control Channel soft handoff threshold.
18		If RCCCH_HO_SUPPORTED is included and is set to '1', the
19		base station shall include this field; otherwise the base
20		station shall omit this field.
21		If included, the base station shall set this field to:
22		$\lfloor -20 \times \log_{10} \text{pilot\_threshold} \rfloor$
23		where <i>pilot_threshold</i> is the pilot $E_c/I_0$ threshold used to
24		determine whether the mobile station requests Reverse
25		Common Control Channel in soft handoff.
26		This is a positive value in units of 0.5 dB.
27	EACAM_PCCAM_DELAY	- Maximum time after an Enhanced Access Channel header
28		transmission for receiving a response on the Common
29		Assignment Channel when Reverse Common Control
30		Channel soft handoff has been requested.
31		If RCCCH_HO_SUPPORTED is included and is set to '1', the
32		base station shall include this field; otherwise the base
33		station shall omit this field.
34		If included, the base station shall set this field to the number
35		of complete Common Assignment Channel frames minus one,
36		from the end of the <i>R-EACH Header</i> , for which a mobile
37		station is to wait for the <i>Early Acknowledgment Channel</i>
38		<i>Assignment Message</i> and <i>Power Control Channel Assignment</i>
39		<i>Message</i> if the mobile station has requested Reverse Common
40		Control Channel soft handoff (see [3]).
41	NUM_CPCCH	- Number of Common Power Control Channels.
42		If RA_PARMS_LEN is equal to '00000', the base station shall
43		omit this field; otherwise, the base station shall include this
44		field and set it to the number of Common Power Control
45		Channels supported minus one.

**CPCCH\_RATE** - Power control rate for the Common Power Control Channels.

If RA\_PARMS\_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it to the value shown in Table 3.7.2.3.2.33-4 corresponding to the power control rate for the Common Power Control Channels.

**Table 3.7.2.3.2.33-4. CPCCH Power Control Rate**

<b>CPCCH_RATE (Binary)</b>	<b>Power Control Rate</b>
00	200 bps
01	400 bps
10	800 bps
11	Reserved

If RA\_PARMS\_LEN is not equal to '00000', the base station shall include (NUM\_CPCCH + 1) occurrences of the following one field record:

**CPCCH\_CODE\_CHAN** - Code channel index for the Common Power Control Channel.

The base station shall set this field to the code channel index (see [2]) in the range 1 to 127 inclusive that the mobile station is to use on the Common Power Control Channel.

**NUM\_PCSCH\_RA** - Number of Power Control Subchannels used for the Reservation Access Mode.

If RA\_PARMS\_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Power Control Subchannels used for the Reservation Access Mode minus one.

**RESERVED** - Reserved bits.

If RA\_PARMS\_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include as many bits as required to make the length of the Reservation Access Mode record (excluding the RA\_PARMS\_LEN but including the RESERVED field) an integral number of octets. The base station shall set each of these bits to '0'.

**ACCT\_INCL** - Access Control based on Call Type (ACCT) information included indicator.

If the base station enables ACCT for at least one service option, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

If the base station sets this field to '1', then the base station shall also set at least one of ACCT\_SO\_INCL or ACCT\_SO\_GRP\_INCL to '1'.

1	ACCT_INCL_EMG	-	Access Control based on Call Type (ACCT) includes
2			emergency calls indicator.
3			If ACCT_INCL is set to '0', the base station shall omit this
4			field; otherwise, the base station shall include this field and
5			set it as follows:
6			The base station shall set this field to '0' if the mobile station
7			is not to apply ACCT to a call that is recognized by the mobile
8			station to be an emergency call; otherwise, the base station
9			shall set this field to '1'.
10	ACCT_AOC_BITMAP_INCL	-	Access Control based on Call Type (ACCT) access overload
11			class bitmap included indicator.
12			If ACCT_INCL is set to '0', the base station shall omit this
13			field; otherwise, the base station shall include this field and
14			set it as follows:
15			The base station shall set this field to '0' if all mobile stations
16			are to apply ACCT regardless of their access overload classes;
17			otherwise, the base station shall set this field to '1' to indicate
18			that the mobile station is to apply ACCT according to its
19			access overload class.
20	ACCT_SO_INCL	-	Access Control based on Call Type (ACCT) service option
21			included indicator.
22			If ACCT_INCL is set to '0', the base station shall omit this
23			field; otherwise, the base station shall include this field and
24			set it as follows:
25			The base station shall set this field to '1' if at least one
26			occurrence of the ACCT_SO field is included in this message;
27			otherwise, the base station shall set this field to '0'.
28	NUM_ACCT_SO	-	Number of service options for Access Control based on Call
29			Type (ACCT).
30			If ACCT_SO_INCL is not included, or is included and set to
31			'0', then the base station shall omit this field; otherwise, the
32			base station shall include this field and set it to one less than
33			the number of occurrences of the ACCT_SO field included in
34			this message.
35	If ACCT_SO_INCL is included and set to '1', then the base station shall include		
36	NUM_ACCT_SO + 1 occurrences of the following variable-field record:		
37	ACCT_AOC_BITMAP1	-	Access Control based on Call Type (ACCT) access overload
38			class bitmap.
39			If ACCT_AOC_BITMAP_INCL is set to '0', then the base station
40			shall omit this field; otherwise, the base station shall include
41			this field and set it as follows:
42			This field consists of the subfields defined in Table
43			3.7.2.3.2.2-1.

1			The base station shall set a subfield to '1' to indicate that
2			mobile stations having the corresponding access overload
3			class are not permitted to perform access attempts using the
4			associated service option ACCT_SO; otherwise, the base
5			station shall set the subfield to '0'.
6	ACCT_SO	-	Access Control based on Call Type (ACCT) service option
7			number.
8			The base station shall set this field to the value of the service
9			option number (as specified in [30]) that has ACCT enabled.
10	ACCT_SO_GRP_INCL	-	Access Control based on Call Type (ACCT) service option
11			group included indicator.
12			If ACCT_INCL is set to '0', the base station shall omit this
13			field; otherwise, the base station shall include this field and
14			set it as follows:
15			The base station shall set this field to '1' if at least one
16			occurrence of the ACCT_SO_GRP field is included in this
17			message; otherwise, the base station shall set this field to '0'.
18	NUM_ACCT_SO_GRP	-	Number of service option groups for Access Control based on
19			Call Type (ACCT).
20			If ACCT_SO_GRP_INCL is not included, or is included and set
21			to '0', then the base station shall omit this field; otherwise,
22			the base station shall include this field and set it to one less
23			than the number of occurrences of the ACCT_SO_GRP field
24			included in this message.
25	If ACCT_SO_GRP_INCL is included and set to '1', then the base station shall include		
26	NUM_ACCT_SO_GRP + 1 occurrences of the following variable-field record:		
27	ACCT_AOC_BITMAP2	-	Access Control based on Call Type (ACCT) access overload
28			class bitmap.
29			If ACCT_AOC_BITMAP_INCL is set to '0', then the base station
30			shall omit this field; otherwise, the base station shall include
31			this field and set it as follows:
32			This field consists of the subfields defined in Table
33			3.7.2.3.2.2-1. The base station shall set a subfield to '1' to
34			indicate that mobile stations having the corresponding access
35			overload class are not permitted to perform access attempts
36			using a service option specified by the associated
37			ACCT_SO_GRP field; otherwise, the base station shall set the
38			subfield to '0'.
39	ACCT_SO_GRP	-	Access Control based on Call Type (ACCT) service option
40			group number.
41			The base station shall set this field to the value of the service
42			option group number (as specified in [30]) whose members all
43			have ACCT enabled.
44			

## 1 3.7.2.3.2.34 Universal Neighbor List Message

2 MSG\_TAG: UNLM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
NUM_RADIO_INTERFACE	4

NUM\_RADIO\_INTERFACE occurrences of the following record:

{ (NUM\_RADIO\_INTERFACE)

RADIO_INTERFACE_TYPE	4
RADIO_INTERFACE_LEN	8
Radio Interface Type-specific fields	8 × RADIO_INTERFACE_LEN

} (NUM\_RADIO\_INTERFACE)

3

4 PILOT\_PN - Pilot PN sequence offset index.

5 The base station shall set this field to the pilot PN sequence  
6 offset for this base station, in units of 64 PN chips.

7 CONFIG\_MSG\_SEQ - Configuration message sequence number.

8 The base station shall set this field to CONFIG\_SEQ (see  
9 3.6.2.2).

10 NUM\_RADIO\_INTERFACE - Number of interface types.

11 The base station shall set this field to the number of radio  
12 interface types for which neighbors are included in this  
13 message.

14 The base station shall include NUM\_RADIO\_INTERFACE occurrences of the following  
15 record, one occurrence for each radio interface for which neighbors are included in this  
16 message.

17 RADIO\_INTERFACE\_TYPE - The radio interface type.

18 The base station shall set this field to the radio interface type  
19 of this record as specified in Table 3.7.2.3.2.34-1.

20

21

22

23

24

1

**Table 3.7.2.3.2.34-1. Radio Interface Type**

<b>RADIO_INTERFACE_TYP E (binary)</b>	<b>Descriptions</b>
0000	MC system
0001	Reserved (Previously: Analog system)
0010	HRPD System
0011-1111	Reserved

- 2 RADIO\_INTERFACE\_LEN - The length of the Radio Interface Type-specific fields.  
 3 The base station shall set this field to the number of octets in  
 4 the Radio Interface Type-specific fields of this record.  
 5 If RADIO\_INTERFACE\_TYPE is equal to '0000', the base station shall include the following  
 6 fields:

<b>Field</b>	<b>Length (bits)</b>
PILOT_INC	4
NGHBR_SRCH_MODE	2
SRCH_WIN_N	0 or 4
SRCH_OFFSET_INCL	1
FREQ_FIELDS_INCL	1
USE_TIMING	1
GLOBAL_TIMING_INCL	0 or 1
GLOBAL_TX_DURATION	0 or 4
GLOBAL_TX_PERIOD	0 or 7
NGHBR_SET_ENTRY_INFO	1
NGHBR_SET_ACCESS_INFO	1
NUM_NGHR	6

NUM\_NGHR occurrences of the following subrecord:

{ (NUM\_NGHR)

NGHBR_CONFIG	3
NGHBR_PN	9
BCCH_SUPPORT	0 or 1

(continues on next page)

7

Field	Length (bits)
ADD_PILOT_REC_INCL	1
NGHBR_PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times$ RECORD_LEN
SEARCH_PRIORITY	0 or 2
SRCH_WIN_NGHR	0 or 4
SRCH_OFFSET_NGHR	0 or 3
FREQ_INCL	0 or 1
NGHBR_BAND	0 or 5
NGHBR_FREQ	0 or 11
TIMING_INCL	0 or 1
NGHBR_TX_OFFSET	0 or 7
NGHBR_TX_DURATION	0 or 4
NGHBR_TX_PERIOD	0 or 7
ACCESS_ENTRY_HO	0 or 1
ACCESS_HO_ALLOWED	0 or 1

} (NUM\_NGHR)

RESQ_ENABLED	1
RESQ_DELAY_TIME	0 or 6
RESQ_ALLOWED_TIME	0 or 6
RESQ_ATTEMPT_TIME	0 or 6
RESQ_CODE_CHAN	0 or 11
RESQ_QOF	0 or 2
RESQ_MIN_PERIOD_INCL	0 or 1
RESQ_MIN_PERIOD	0 or 5
RESQ_NUM_TOT_TRANS_INCL	0 or 1
RESQ_NUM_TOT_TRANS_20MS	0 or 4
RESQ_NUM_TOT_TRANS_5MS	0 or 4
RESQ_NUM_PREAMBLE_RC1_RC2	0 or 3
RESQ_NUM_PREAMBLE	0 or 3

(continues on next page)



Field	Length (bits)
RESQ_POWER_DELTA	0 or 3

NUM\_NGHR occurrences of the following one-field record if RESQ\_ENABLED is set to '1':

{ (NUM\_NGHR)

NGHR_RESQ_CONFIGURED	1
----------------------	---

} (NUM\_NGHR)

{ (NUM\_NGHR)

NGHR_PDCH_SUPPORTED	1
---------------------	---

} (NUM\_NGHR)

RESERVED	0 – 7 (as needed)
----------	-------------------

1

2

PILOT\_INC - Pilot PN sequence offset index increment.

3

4

A mobile station searches for Remaining-Set pilots at pilot PN sequence index values that are multiples of this value.

5

6

7

8

9

10

The base station shall set this field to the pilot PN sequence increment, in units of 64 PN chips, that mobile stations are to use for searching the Remaining Set. The base station should set this field to the largest increment such that the pilot PN sequence offsets of all its neighbor base stations are integer multiples of that increment.

11

12

The base station shall set this field to a value in the range 1 to 15 inclusive.

13

NGHR\_SRCH\_MODE - Search mode.

14

15

The base station shall set this field to the value shown in Table 3.7.2.3.2.34-2 corresponding to the search mode.

16

17

**Table 3.7.2.3.2.34-2. Search Mode Field**

Value (binary)	Description
00	No search priorities or search windows
01	Search priorities
10	Search windows
11	Search windows and search priorities

18

19

SRCH\_WIN\_N - Search window size for the Neighbor Set.

1			If NGHBR_SRCH_MODE = '00' or NGHBR_SRCH_MODE =
2			'01', the base station shall include the field SRCH_WIN_N and
3			shall set this field as described below; otherwise, the base
4			station shall omit this field.
5			The base station shall set this field to the value shown in
6			Table 2.6.6.2.1-1 corresponding to the search window size to
7			be used by mobile stations for the Neighbor Set.
8	SRCH_OFFSET_INCL	-	Neighbor pilot channel search window offset included.
9			If NGHBR_SRCH_MODE = '10' or '11' and if the
10			SRCH_OFFSET_NGHR field is included in the following
11			records, the base station shall set this bit to '1'; otherwise,
12			the base station shall set this bit to '0'.
13	FREQ_FIELDS_INCL	-	Frequency fields included.
14			If frequency fields are included in this message, the base
15			station shall set this field to '1'; otherwise, the base station
16			shall set this field to '0'.
17	USE_TIMING	-	Use timing indicator.
18			If base station timing information is included for neighbor
19			base stations, the base station shall set this field to '1';
20			otherwise, the base station shall set this field to '0'.
21	GLOBAL_TIMING_INCL	-	Global timing included.
22			If USE_TIMING is set to '1', the base station shall include the
23			field GLOBAL_TIMING_INCL and shall set this field as
24			described below; otherwise, the base station shall omit this
25			field.
26			If base station timing information is included globally for all
27			neighbor base stations with TIMING_INCL equal to '1', the
28			base station shall set this field to '1'; otherwise, the base
29			station shall set this field to '0'.
30	GLOBAL_TX_DURATION	-	Global neighbor transmit time duration.
31			If GLOBAL_TIMING_INCL is included and is set to '1', the
32			base station shall include the field GLOBAL_TX_DURATION
33			and shall set this field as described below; otherwise, the
34			base station shall omit this field.
35			The base station shall set this field to the duration of the
36			base station transmit window, during each period, in units of
37			80 ms. The base station should set this field to a value of 3
38			or greater.
39	GLOBAL_TX_PERIOD	-	Global neighbor transmit time period.
40			If GLOBAL_TIMING_INCL is included and is set to '1', the
41			base station shall include the field GLOBAL_TX_PERIOD and
42			shall set this field as described below; otherwise, the base
43			station shall omit this field.
44			The base station shall set this field to duration of the period,
45			in units of 80 ms.

1	NGHBR_SET_ENTRY_INFO	-	Neighbor Set access entry handoff information included
2			indicator.
3			If the base station is including information on the Neighbor
4			Set access entry handoff, the base station shall set this field
5			to '1'; otherwise, the base station shall set this field to '0'.
6	NGHBR_SET_ACCESS_INFO	-	Neighbor Set access handoff included indicator.
7			If the base station is including information on the Neighbor
8			Set access handoff or access probe handoff, the base station
9			shall set this field to '1', otherwise, the base station shall set
10			this field to '0'.
11	NUM_NGHBR	-	Number of neighbor pilot PN sequences.
12			The base station shall set this field to the number of
13			neighbors included in the message.
14			

The base station shall include one occurrence of the following subrecord for each pilot that a mobile station is to place in its Neighbor Set.

NGHBR\_CONFIG - Neighbor configuration.

The base station shall set this field to the value shown in Table 3.7.2.3.2.34-3 corresponding to the configuration of this neighbor.

**Table 3.7.2.3.2.34-3. Neighbor Configuration Field**

<b>Value (binary)</b>	<b>Neighbor Configuration</b>
000	<p>The neighbor base station has the same number of frequencies having Primary Broadcast Control Channel/Forward Common Control Channels as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment corresponding to this CDMA frequency assignment with the same number of Forward Common Control Channels, and the neighbor frequency is given as follows:</p> <ul style="list-style-type: none"> <li>• If <b>FREQ_INCL</b> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</li> <li>• If <b>FREQ_INCL</b> equals '1' for this record, this corresponding CDMA frequency assignment is given by <b>NGHBR_BAND</b> and <b>NGHBR_FREQ</b>.</li> </ul> <p>The position of the neighbor CDMA frequency assignment in the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p> <p>The rate, code rate, and code channel of the Primary Broadcast Control Channel on this corresponding CDMA frequency are the same values as the current ones.</p> <p>The rate, code rate, and code channel of the corresponding Forward Common Control Channel on this corresponding CDMA frequency are the same values as the current ones.</p> <p>If <b>NGHBR_PILOT_REC_TYPE</b> is included in this message, then neighbor pilot type is as specified in <b>NGHBR_PILOT_REC_TYPE</b>; otherwise, the neighbor pilot is a 1X common pilot.</p>

<b>Value (binary)</b>	<b>Neighbor Configuration</b>
001	<p>The neighbor base station does not have any frequencies with Primary Broadcast Control Channel/Forward Common Control Channel.</p> <p>The neighbor base station has the same number of frequencies having Paging Channels as the current base station has frequencies having Primary Broadcast Control Channel/Forward Common Control Channel.</p> <p>The neighbor base station has a CDMA frequency assignment corresponding to this CDMA frequency assignment but possibly with a different number of Paging Channels, and the neighbor frequency is given as follows:</p> <ul style="list-style-type: none"> <li>• If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</li> <li>• If <code>FREQ_INCL</code> equals '1' for this record, this corresponding CDMA frequency assignment is given by <code>NGHBR_BAND</code> and <code>NGHBR_FREQ</code>.</li> </ul> <p>The position of the neighbor CDMA frequency assignment in the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p> <p>This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel, at 9600 bps.</p>

<b>Value (binary)</b>	<b>Neighbor Configuration</b>
010	<p>The neighbor base station may have a different number of frequencies having Primary Broadcast Control Channel/Forward Common Control Channel as the current base station.</p> <p>The neighbor base station has a Primary Broadcast Control Channel on the following frequency:</p> <ul style="list-style-type: none"> <li>• If <code>FREQ_INCL</code> equals '0' for this record, the neighbor base station has a Primary Broadcast Control Channel on the first CDMA Channel listed in the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</li> <li>• If <code>FREQ_INCL</code> equals '1' for this record, the neighbor base station has a Primary Broadcast Control Channel on the CDMA frequency assignment given by <code>NGHBR_BAND</code> and <code>NGHBR_FREQ</code>.</li> </ul> <p>The rate, code rate, and code channel of the Primary Broadcast Control Channel on this corresponding CDMA frequency are the same values as the current ones.</p> <p>If <code>NGHBR_PILOT_REC_TYPE</code> is included in this message, then neighbor pilot type is as specified in <code>NGHBR_PILOT_REC_TYPE</code>; otherwise, the neighbor pilot is a 1X common pilot.</p>
011	<p>The neighbor base station configuration is unknown but the neighbor base station has a Pilot Channel on the following frequency:</p> <ul style="list-style-type: none"> <li>• If <code>FREQ_INCL</code> equals '0' for this record, the neighbor CDMA frequency assignment is the same as the current CDMA frequency assignment and has a Pilot Channel.</li> <li>• If <code>FREQ_INCL</code> equals '1' for this record, the CDMA frequency assignment given by <code>NGHBR_BAND</code> and <code>NGHBR_FREQ</code> has a Pilot Channel.</li> </ul>

Value (binary)	Neighbor Configuration
100	<p>The neighbor base station has the same number of frequencies having Primary Broadcast Control Channel/Forward Common Control Channel as the current base station.</p> <p>The neighbor base station has a CDMA frequency assignment corresponding to this CDMA frequency assignment with a Primary Broadcast Control Channel, and the neighbor CDMA frequency is given as follows:</p> <ul style="list-style-type: none"> <li>• If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</li> <li>• If <code>FREQ_INCL</code> equals '1' for this record, this corresponding CDMA frequency assignment is given by <code>NGHBR_BAND</code> and <code>NGHBR_FREQ</code>.</li> </ul> <p>The position of the neighbor CDMA frequency assignment in the <i>Extended CDMA Channel List Message</i> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <i>Extended CDMA Channel List Message</i> transmitted by the current base station.</p> <p>The rate, code rate, and code channel of the Primary Broadcast Control Channel on this corresponding CDMA frequency are the same values as the current ones.</p> <p>If <code>NGHBR_PILOT_REC_TYPE</code> is included in this message, then neighbor pilot type is as specified in <code>NGHBR_PILOT_REC_TYPE</code>; otherwise, the neighbor pilot is a 1X common pilot.</p>
101-111	Reserved.

- 1
- 2            `NGHBR_PN`    -   Neighbor pilot PN sequence offset index.
- 3                                      The base station shall set this field to the pilot PN sequence
- 4                                      offset for this neighbor, in units of 64 PN chips.
- 5            `BCCH_SUPPORT`    -   BCCH support indicator.
- 6                                      If the `NGHBR_CONFIG` field is not set to '011', the base
- 7                                      station shall omit this field; otherwise, the base station shall
- 8                                      include this field and set it as follows:
- 9                                      If this neighbor base station supports Broadcast Control
- 10                                     Channel, the base station shall set this field to '1'; otherwise,
- 11                                     the base station shall set this field to '0'.
- 12    `ADD_PILOT_REC_INCL`    -   Additional pilot information included indicator.

The base station shall set this field to '1' if additional pilot information listed in the NGHBR\_PILOT\_REC\_TYPE and RECORD\_LEN fields are included. The base station shall set this field to '0' if the corresponding pilot is the common pilot and there is no additional pilot information included.

NGHBR\_PILOT\_REC\_TYPE - Neighbor Pilot record type

If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall set this field to the NGHBR\_PILOT\_REC\_TYPE value shown in Table 3.7.2.3.2.34-4 corresponding to the type of Pilot Record specified by this record.

**Table 3.7.2.3.2.34-4. Neighbor Pilot Record Types**

<b>Description</b>	<b>NGHBR_PILOT_REC_TYPE (binary)</b>
1X Common Pilot with Transmit Diversity	000
1X Auxiliary Pilot	001
1X Auxiliary Pilot with Transmit Diversity	010
3X Common Pilot	011
3X Auxiliary Pilot	100
All other NGHBR_PILOT_REC_TYPE values are reserved	

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

RECORD\_LEN - Pilot record length.

If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall include type-specific fields based on the NGHBR\_PILOT\_REC\_TYPE of this pilot record.

If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall omit this field.

If NGHBR\_PILOT\_REC\_TYPE is equal to '000', the base station shall include the following fields:



1

Field	Length (bits)
TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	4

2

3 TD\_POWER\_LEVEL - TD Transmit Power Level.

4 The base station shall set this field to the TD transmit power  
5 level relative to that of the Forward Pilot Channel as specified  
6 in Table 3.7.2.3.2.26-4.

7 TD\_MODE - Transmit Diversity mode.

8 The base station shall set this field to the Transmit Diversity  
9 mode, as specified in Table 3.7.2.3.2.26-3.

10 RESERVED - Reserved bits.

11 The base station shall set this field to '0000'.

12 If NGHBR\_PILOT\_REC\_TYPE is equal to '001', the base station shall include the following  
13 fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

14

15 QOF - Quasi-orthogonal function index.

16 The base station shall set this field to the index of the Quasi-  
17 orthogonal function (see [2]).

18 WALSH\_LENGTH - Length of the Walsh Code.

19 The base station shall set this field to the WALSH\_LENGTH  
20 value shown in Table 3.7.2.3.2.22-6 corresponding to the  
21 length of the Walsh code for the pilot that is used in as the  
22 Auxiliary pilot.

23 AUX\_PILOT\_WALSH - Walsh Code for the Auxiliary Pilot.

24 The base station shall set this field to the Walsh code  
25 corresponding to the Auxiliary pilot.

26 RESERVED - Reserved bits.

27 The base station shall set all the bits of this field to '0' to  
28 make the entire record octet-aligned.

29

If NGHBR\_PILOT\_REC\_TYPE is equal to '010', the base station shall include the following fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_WALSH	WALSH_LENGTH+6
AUX_TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	0 to 7 (as needed)

- QOF** - Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot.  
The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).
- WALSH\_LENGTH** - Length of the Walsh Code.  
The base station shall set this field to the WALSH\_LENGTH value shown in 3.7.2.3.2.22-6 corresponding to the length of the Walsh code for the pilots that are used as Auxiliary pilot in the transmit diversity mode.
- AUX\_WALSH** - Walsh Code for the Auxiliary Pilot.  
The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.
- AUX\_TD\_POWER\_LEVEL** - Auxiliary Transmit Diversity Pilot Power Level.  
The base station shall set this field to the Auxiliary Transmit Diversity Pilot transmit power level relative to that of the Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.
- TD\_MODE** - Transmit Diversity mode.  
The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.
- RESERVED** - Reserved bits.  
The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.

If NGHBR\_PILOT\_REC\_TYPE is equal to '011', the base station shall include the following fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

- 1
- 2    SR3\_PRIMARY\_PILOT    –    Primary SR3 pilot.
- 3                            The base station shall set this field to the value shown in
- 4                            Table 3.7.2.3.2.26-5 corresponding to the position of the
- 5                            primary SR3 pilot.
- 6    SR3\_PILOT\_POWER1    –    The primary SR3 pilot power level relative to that of the pilot
- 7                            on the lower frequency of the two remaining SR3 frequencies.
- 8                            The base station shall set this field to the value shown in
- 9                            Table 3.7.2.3.2.26-6 corresponding to the power level of the
- 10                           primary pilot with respect to the pilot on the lower frequency
- 11                           of the two remaining SR3 frequencies.
- 12    SR3\_PILOT\_POWER2    –    The primary SR3 pilot power level relative to that of the pilot
- 13                            on the higher frequency of the two remaining SR3
- 14                            frequencies.
- 15                            The base station shall set this field to the value shown in
- 16                            Table 3.7.2.3.2.26-6 corresponding to the power level of the
- 17                            primary pilot with respect to the pilot on the higher frequency
- 18                            of the two remaining SR3 frequencies.
- 19
- 20    If NGHBR\_PILOT\_REC\_TYPE is equal to '100', the base station shall include the following
- 21    fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
ADD_INFO_INCL1	1
QOF1	0 or 2
WALSH_LENGTH1	0 or 3
AUX_PILOT_WALSH1	0 or WALSH_LENGTH1+6
ADD_INFO_INCL2	1
QOF2	0 or 2
WALSH_LENGTH2	0 or 3
AUX_PILOT_WALSH2	0 or WALSH_LENGTH2+6
RESERVED	0 – 7 (as needed)

- 1 SR3\_PRIMARY\_PILOT – Primary SR3 pilot.  
2  
3 The base station shall set this field to the value shown in  
4 Table 3.7.2.3.2.26-5 corresponding to the position of the  
5 primary SR3 pilot.
- 6 SR3\_PILOT\_POWER1 – The primary SR3 pilot power level relative to that of the pilot  
7 on the lower frequency of the two remaining SR3 frequencies.  
8 The base station shall set this field to the value shown in  
9 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
10 primary pilot with respect to the pilot on the lower frequency  
11 of the two remaining SR3 frequencies.
- 12 SR3\_PILOT\_POWER2 – The primary SR3 pilot power level relative to that of the pilot  
13 on the higher frequency of the two remaining SR3  
14 frequencies.  
15 The base station shall set this field to the value shown in  
16 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
17 primary pilot with respect to the pilot on the higher frequency  
18 of the two remaining SR3 frequencies.
- 19 QOF – Quasi-orthogonal function index.  
20 The base station shall set this field to the index of the Quasi-  
21 orthogonal function (see [2]) on the frequency of the primary  
22 pilot.
- 23 WALSH\_LENGTH – Length of the Walsh Code.

1		The base station shall set this field to the WALSH_LENGTH
2		value shown in Table 3.7.2.3.2.22-6 corresponding to the
3		length of the Walsh code for the pilot that is used as the
4		Auxiliary pilot on the frequency of the primary pilot.
5	AUX_PILOT_WALSH	- Walsh Code for the Auxiliary Pilot.
6		The base station shall set this field to the Walsh code
7		corresponding to the Auxiliary pilot on the frequency of the
8		primary pilot.
9	ADD_INFO_INCL1	- Additional information included for the pilot on the lower
10		frequency of the two remaining SR3 frequencies.
11		If the additional information for the pilot on the lower
12		frequencies of the two remaining SR3 frequencies is the same
13		as pilot on the primary frequency, the base station shall set
14		this field to '0'; otherwise, the base station shall set this field
15		to '1'.
16	QOF1	- Quasi-orthogonal function index for the pilot on the lower
17		frequency of the two remaining SR3 frequencies.
18		If ADD_INFO_INCL1 is set to '0', the base station shall omit
19		this field; otherwise, the base station shall set this field as
20		follows:
21		The base station shall set this field to the index of the Quasi-
22		orthogonal function (see [2]) on the lower frequency of the two
23		remaining SR3 frequencies.
24	WALSH_LENGTH1	- Length of the Walsh Code for the pilot on the lower frequency
25		of the two remaining SR3 frequencies.
26		If ADD_INFO_INCL1 is set to '0', the base station shall omit
27		this field; otherwise, the base station shall set this field as
28		follows:
29		The base station shall set this field to the WALSH_LENGTH
30		value shown in Table 3.7.2.3.2.22-6 corresponding to the
31		length of the Walsh code for the pilot that is used as the
32		Auxiliary pilot on the lower frequency of the two remaining
33		SR3 frequencies.
34	AUX_PILOT_WALSH1	- Walsh Code for the Auxiliary Pilot on the lower frequency of
35		the two remaining SR3 frequencies.
36		If ADD_INFO_INCL1 is set to '0', the base station shall omit
37		this field; otherwise, the base station shall set this field as
38		follows:
39		The base station shall set this field to the Walsh code
40		corresponding to the Auxiliary pilot on the lower frequency of
41		the two remaining SR3 frequencies.
42	ADD_INFO_INCL2	- Additional information included for the pilot on the higher
43		frequency of the two remaining SR3 frequencies.

1			If the additional information for the pilot on the higher
2			frequencies of the two remaining SR3 frequencies is the same
3			as pilot on the primary frequency, the base station shall set
4			this field to '0'; otherwise, the base station shall set this field
5			to '1'.
6	QOF2	-	Quasi-orthogonal function index for the pilot on the higher
7			frequency of the two remaining SR3 frequencies.
8			If ADD_INFO_INCL2 is set to '0', the base station shall omit
9			this field; otherwise, the base station shall set this field as
10			follows:
11			The base station shall set this field to the index of the Quasi-
12			orthogonal function (see [2]) on the higher frequency of the
13			two remaining SR3 frequencies.
14	WALSH_LENGTH2	-	Length of the Walsh Code for the pilot on the higher
15			frequency of the two remaining SR3 frequencies.
16			If ADD_INFO_INCL2 is set to '0', the base station shall omit
17			this field; otherwise, the base station shall set this field as
18			follows:
19			The base station shall set this field to the WALSH_LENGTH
20			value shown in Table 3.7.2.3.2.22-6 corresponding to the
21			length of the Walsh code for the pilot that is used as the
22			Auxiliary pilot on the higher frequency of the two remaining
23			SR3 frequencies.
24	AUX_PILOT_WALSH2	-	Walsh Code for the Auxiliary Pilot on the higher frequency of
25			the two remaining SR3 frequencies.
26			If ADD_INFO_INCL2 is set to '0', the base station shall omit
27			this field; otherwise, the base station shall set this field as
28			follows:
29			The base station shall set this field to the Walsh code
30			corresponding to the Auxiliary pilot on the higher frequency
31			of the two remaining SR3 frequencies.
32	RESERVED	-	Reserved bits.
33			The base station shall set all the bits of this field to '0' to
34			make the entire record octet-aligned.
35	SEARCH_PRIORITY	-	Pilot Channel search priority.
36			If NGHBR_SRCH_MODE = '01' or NGHBR_SRCH_MODE =
37			'11', the base station shall include the field
38			SEARCH_PRIORITY and shall set this field as described
39			below; otherwise, the base station shall omit this field.
40			The base station shall set this field to the search priority for
41			the Pilot Channel corresponding to NGHBR_PN. The base
42			station shall set the search priority as shown in Table
43			3.7.2.3.2.34-5.
44			

1

**Table 3.7.2.3.2.34-5. Search Priority Field**

<b>Value (binary)</b>	<b>Search Priority</b>
00	Low
01	Medium
10	High
11	Very High

2

3      **SRCH\_WIN\_NGHBR**      -      Neighbor pilot channel search window size.

4      If NGHBR\_SRCH\_MODE = '10' or NGHBR\_SRCH\_MODE =  
5      '11', the base station shall include the field  
6      SRCH\_WIN\_NGHBR and shall set this field as described  
7      below; otherwise, the base station shall omit this field.

8      The base station shall set this field to the value shown in  
9      Table 2.6.6.2.1-1 corresponding to the search window size to  
10     be used by mobile stations for this neighbor.

11     **SRCH\_OFFSET\_NGHBR**      -      Neighbor pilot channel search window size offset.

12     If SRCH\_OFFSET\_INCL equals to '1', then the base station  
13     shall include the field SRCH\_OFFSET\_NGHBR and shall set  
14     this field as described below; otherwise, the base station shall  
15     omit this field.

16     The base station shall set this field to the value shown in  
17     Table 2.6.6.2.1-2 corresponding to the search window offset  
18     to be used by mobile stations for this neighbor.

19                    **FREQ\_INCL**      -      Frequency included indicator.

20     If FREQ\_FIELDS\_INCL is set to '1', the base station shall  
21     include the field FREQ\_INCL and shall set this field as  
22     described below; otherwise, the base station shall omit this  
23     field.

24     If the NGHBR\_BAND and NGHBR\_FREQ fields are included  
25     for this neighbor base station, the base station shall set this  
26     bit to '1'. If the NGHBR\_BAND and NGHBR\_FREQ fields are  
27     not included in this assignment record, the base station shall  
28     set this bit to '0'.

29                    **NGHBR\_BAND**      -      Neighbor band class.

30     If the FREQ\_INCL field is included and is set to '1', the base  
31     station shall include the field NGHBR\_BAND and shall set  
32     this field as described below; otherwise, the base station shall  
33     omit this field.

1			The base station shall set this field to the CDMA band class,
2			as specified in [30], corresponding to the CDMA frequency
3			assignment for the CDMA Channel containing the Broadcast
4			Control Channel/Forward Common Control Channel the
5			mobile station is to search.
6	NGHBR_FREQ	-	Neighbor frequency assignment.
7			If the FREQ_INCL field is omitted or is set to '0', the base
8			station shall omit this field.
9			If the FREQ_INCL field is included and is set to '1' and the
10			corresponding neighbor has a 1X neighbor pilot record type,
11			the base station shall set this field to the CDMA Channel
12			number, in the specified CDMA band class, corresponding to
13			the CDMA frequency assignment for the CDMA Channel
14			containing the Broadcast Control Channel/Forward Common
15			Control Channel the mobile station is to search.
16			If the FREQ_INCL field is included and is set to '1' and the
17			corresponding neighbor has a 3X neighbor pilot record type,
18			the base station shall set this field to the CDMA Channel
19			number, in the specified CDMA band class, corresponding to
20			the center SR3 frequency assignment containing the
21			Broadcast Control Channel/Forward Common Control
22			Channel the mobile station is to search.
23	TIMING_INCL	-	Timing included indicator.
24			If USE_TIMING is set to '1', the base station shall include the
25			field TIMING_INCL and set this field as described below;
26			otherwise, the base station shall omit this field.
27			If base station timing information is included for this
28			neighbor base station, the base station shall set this field to
29			'1'; otherwise, the base station shall set this field to '0'.
30	NGHBR_TX_OFFSET	-	Neighbor transmit time offset.
31			If TIMING_INCL is included and is set to '1', the base station
32			shall include the field NGHBR_TX_OFFSET and shall set this
33			field as described below; otherwise, the base station shall
34			omit this field.
35			The base station shall set this field to the time offset, in units
36			of 80 ms, from the beginning of the neighbor timing period to
37			the beginning of the first base station transmit window within
38			the period. The beginning of the neighbor timing period
39			occurs when $\lfloor t/4 \rfloor \bmod (16384) = 0$ .
40	NGHBR_TX_DURATION	-	Neighbor transmit time duration.
41			If TIMING_INCL is included and is set to '1' and
42			GLOBAL_TIMING_INCL is set to '0', the base station shall
43			include the field NGHBR_TX_DURATION and shall set this
44			field as described below; otherwise, the base station shall
45			omit this field.



1			The base station shall set this field to duration of the base
2			station transmit window, during each period, in units of
3			80 ms. The base station should set this field to a value of 3
4			or greater.
5	NGHBR_TX_PERIOD	-	Neighbor transmit time period.
6			If TIMING_INCL is included and is set to '1' and
7			GLOBAL_TIMING_INCL is set to '0', the base station shall
8			include the field NGHBR_TX_PERIOD and shall set this field
9			as described below; otherwise, the base station shall omit
10			this field.
11			The base station shall set this field to duration of the period,
12			in units of 80 ms.
13	ACCESS_ENTRY_HO	-	Access entry handoff permitted when entering the System
14			Access State.
15			If NGHBR_SET_ENTRY_INFO is equal to '1', the base station
16			shall include the field ACCESS_ENTRY_HO and shall set this
17			field as described below; otherwise, the base station shall
18			omit this field.
19			The base station shall set this field to '1' if the mobile station
20			is permitted to perform an access entry handoff to the base
21			station associated with the corresponding pilot between the
22			time it receives a message on the Paging Channel when in the
23			<i>Mobile Station Idle State</i> and it enters the <i>System Access State</i>
24			to respond to the message; otherwise, the base station shall
25			set this field to '0'.
26	ACCESS_HO_ALLOWED	-	Access handoff and access probe handoff permitted for the
27			corresponding pilot while in the <i>System Access State</i> .
28			If NGHBR_SET_ACCESS_INFO is equal to '1', the base station
29			shall include the field ACCESS_HO_ALLOWED and shall set
30			this field as described below; otherwise, the base station shall
31			omit this field.
32			The base station shall set this field to '1' if the mobile station
33			is permitted to perform an access handoff or access probe
34			handoff to the base station associated with the corresponding
35			pilot when the mobile station is in the <i>System Access State</i>
36			(see 2.6.3.1.8 and 2.6.3.1.9); otherwise, the base station shall
37			set this field to '0'.
38			The base station shall set this field to '0' if this pilot does not
39			support a Reverse Enhanced Access Channel (R-EACH).
40	RESQ_ENABLED	-	Call rescue feature enabled indicator.
41			The base station shall set this field to '1' if the call rescue
42			feature is enabled and there is at least one occurrence of
43			NGHBR_RESQ_CONFIGURED set to '1' in this message;
44			otherwise, the base station shall set this field to '0'.

1	RESQ_DELAY_TIME	-	Call rescue delay timer value.
2			If RESQ_ENABLED is set to '0', the base station shall omit
3			this field; otherwise, the base station shall include this field
4			and set it as follows:
5			The base station shall set this field to the value of the call
6			rescue delay timer to be used by the mobile station, in units
7			of 80 ms.
8	RESQ_ALLOWED_TIME	-	Call rescue allowed timer value.
9			If RESQ_ENABLED is set to '0', the base station shall omit
10			this field; otherwise, the base station shall include this field
11			and set it as follows:
12			The base station shall set this field to the value of the call
13			rescue allowed timer to be used by the mobile station, in
14			units of 80 ms.
15	RESQ_ATTEMPT_TIME	-	Call rescue attempt timer value.
16			If RESQ_ENABLED is set to '0', the base station shall omit
17			this field; otherwise, the base station shall include this field
18			and set it as follows:
19			The base station shall set this field to the value of the call
20			rescue attempt timer to be used by the mobile station, in
21			units of 40 ms.
22	RESQ_CODE_CHAN	-	Code channel index for the Rescue Channel.
23			If RESQ_ENABLED is set to '0', the base station shall omit
24			this field; otherwise, the base station shall include this field
25			and set it as follows:
26			The base station shall set this field to the code channel index
27			(see [2]) that the mobile station is to use on the Forward
28			Fundamental Channel when attempting Call Rescue Soft
29			Handoff with the associated neighbor pilot.
30			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
31			station shall set this field in the range 1 to 63 inclusive. If
32			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
33			station shall set this field in the range 1 to 127 inclusive. If
34			Radio Configuration 7 or 9 is used, the base station shall set
35			this field in the range 1 to 255 inclusive.
36	RESQ_QOF	-	Quasi-Orthogonal Function mask identifier for the Rescue
37			Channel.
38			If RESQ_ENABLED is set to '0', the base station shall omit
39			this field; otherwise, the base station shall include this field
40			and set it as follows:
41			The base station shall set this field to the quasi-orthogonal
42			function mask identifier (see [2]) that the mobile station is to
43			use on the Forward Fundamental Channel when attempting
44			Call Rescue Soft Handoff with the associated neighbor pilot.

1	RESQ_MIN_PERIOD_INCL	- Minimum time between consecutive rescues included
2		indicator.
3		If RESQ_ENABLED is set to '0', the base station shall omit
4		this field; otherwise, the base station shall include this field
5		and set it as follows:
6		The base station shall set this field to '1' if the
7		RESQ_MIN_PERIOD field is included in this message;
8		otherwise, the base station shall set this field to '0'.
9		This field is set to '0' if there is no minimum time restriction
10		between consecutive rescues.
11	RESQ_MIN_PERIOD	- Minimum time between consecutive rescues.
12		If RESQ_MIN_PERIOD_INCL is not included, or is included
13		and set to '0', the base station shall omit this field; otherwise,
14		the base station shall include this field and set it as follows:
15		The base station shall set this field to one less than the
16		minimum time after a successful call rescue (i.e. receipt of
17		N <sub>3m</sub> good frames by the mobile station after the rescue
18		attempt timer is enabled) before any subsequent call rescue
19		attempts can be initiated, in units of 2 seconds.
20	RESQ_NUM_TOT_TRANS_INCL	- The required number of transmissions before
21		declaring L2 Acknowledgment Failure when Call Rescue is
22		enabled included indicator.
23		If RESQ_ENABLED is set to '0', the base station shall omit
24		this field; otherwise, the base station shall include this field
25		and set it as follows:
26		If the required number of transmissions of a regular PDU and
27		mini PDU before declaring L2 Acknowledgment Failure when
28		Call Rescue is enabled is included in this message, the base
29		station shall set this field to '1'; otherwise, the base station
30		shall set this field to '0'.
31	RESQ_NUM_TOT_TRANS_20MS	- The required number of transmissions of a regular
32		PDU before declaring L2 Acknowledgment Failure when Call
33		Rescue is enabled.
34		If RESQ_NUM_TOT_TRANS_INCL field is not included or is
35		included and is set to '0', the base station shall omit this
36		field; otherwise, the base station shall include this field and
37		set it as follows:
38		The base station shall set this field to the required number of
39		transmissions of a regular PDU before declaring L2
40		Acknowledgment Failure when Call Rescue is enabled.
41		The base station shall not set this field to a value greater
42		than N <sub>1m</sub> .
43	RESQ_NUM_TOT_TRANS_5MS	- The required number of transmissions of a mini PDU
44		before declaring L2 Acknowledgment Failure when Call
45		Rescue is enabled.

1 If RESQ\_NUM\_TOT\_TRANS\_INCL field is not included or is  
2 included and is set to '0', the base station shall omit this  
3 field; otherwise, the base station shall include this field and  
4 set it as follows:

5 The base station shall set this field to the required number of  
6 transmissions of a mini PDU before declaring L2  
7 Acknowledgment Failure when Call Rescue is enabled.

8 The base station shall not set this field to a value greater  
9 than  $N_{15m}$ .

10 RESQ\_NUM\_PREAMBLE\_RC1\_RC2 – The Traffic Channel preamble length for Call  
11 Rescue Soft Handoff when operating in Radio Configuration 1  
12 or 2.

13 If RESQ\_ENABLED is set to '0', the base station shall omit  
14 this field; otherwise, the base station shall include this field  
15 and set it to the length of Traffic Channel preamble, in 20 ms  
16 units, that the mobile station is to send when performing a  
17 call rescue soft handoff.

18 RESQ\_NUM\_PREAMBLE – The Traffic Channel preamble Length for Call Rescue Soft  
19 Handoff when operating in Radio Configuration greater than  
20 2.

21 If RESQ\_ENABLED is set to '0', the base station shall omit  
22 this field; otherwise, the base station shall include this field  
23 and set it to the length of Traffic Channel preamble that the  
24 mobile station is to send when performing a call rescue soft  
25 handoff, as follows:

26 The base station shall set this field to the value shown in  
27 Table 3.7.3.3.2.17-1 corresponding to the Traffic Channel  
28 preamble length in 1.25 ms units.

29 RESQ\_POWER\_DELTA – The power level adjustment to be applied to the last closed-  
30 loop power level when re-enabling the transmitter for call  
31 rescue soft handoff.

32 If RESQ\_ENABLED is set to '0', the base station shall omit  
33 this field; otherwise, the base station shall set this field to a  
34 value by which mobile stations are to adjust the last closed-  
35 loop power level when re-enabling the transmitter for call  
36 rescue, expressed as a two's complement value in units of  
37 1 dB.

38 The base station shall include NUM\_NGHBR occurrences of the following one-field record  
39 if RESQ\_ENABLED is set to '1'. The base station shall use the same order for the following  
40 field as is used for the NGHBR\_PN fields listed in this message.

41 NGHBR\_RESQ\_CONFIGURED – Neighbor Rescue Channel configured indicator.

42 The base station shall set this field to '1' if a Rescue Channel  
43 is configured for this neighbor pilot; otherwise, the base  
44 station shall set this field to '0'.

45 The base station shall include NUM\_NGHBR occurrences of the following variable length  
46 record. The base station shall use the same order for the following field as is used for the  
47 NGHBR\_PN fields listed in this message.

1    NGHBR\_PDCH\_SUPPORTED – Neighbor PDCH supported indicator.

2                                    The base station shall set this field to '1' if PDCH is  
3                                    configured for this neighbor pilot; otherwise, the base station  
4                                    shall set this field to '0'.

5                    RESERVED    -    Reserved bits.

6                                    The base station shall add reserved bits as needed in order to  
7                                    make the length of the entire RADIO\_INTERFACE\_TYPE  
8                                    record equal to an integer number of octets. The base station  
9                                    shall set these bits to '0'.

10

11    If RADIO\_INTERFACE\_TYPE is equal to '0010', the base station shall include the following  
12    fields:

Field	Length (bits)
NUM_HRPD_NGHBR	6

NUM\_HRPD\_NGHBR occurrences of the following  
subrecord:

{ (NUM\_HRPD\_NGHBR)

HRPD_NGHBR_REC_LEN	8
NGHBR_PN	9
NGHBR_FREQ_INCL	1
NGHBR_BAND	0 or 5
NGHBR_FREQ	0 or 11
PN_ASSOCIATION_IND	1
DATA_ASSOCIATION_IND	1
HRPD_NGHBR_REC_RESERVED	0-7 (as needed)

} (NUM\_HRPD\_NGHBR)

13    NUM\_HRPD\_NGHBR    -    Number of neighbor pilot PN sequences.

14                                    The base station shall set this field to the number of HRPD  
15                                    neighbors included in the message.

16    The base station shall include one occurrence of the following subrecord for each pilot that  
17    a mobile station is to place in its HRPD Neighbor Set.

18    HRPD\_NGHBR\_REC\_LEN - HRPD neighbor record length

19                                    The base station shall set this field to one less than the  
20                                    number of octets included in this HRPD neighbor record  
21                                    including this field.

22                    NGHBR\_PN    -    Neighbor pilot PN sequence offset index.

23                                    The base station shall set this field to the pilot PN sequence  
24                                    offset for this neighbor, in units of 64 PN chips.

1	NGHBR_FREQ_INCL	- Neighbor frequency information included indicator.
2		The base station shall set this field to '1' if the neighbor
3		frequency information is included in this message; otherwise,
4		the base station shall set this field to '0'.
5	NGHBR_BAND	- Neighbor band class.
6		If the NGHBR_FREQ_INCL field is set to '0', the base station
7		shall omit this field; otherwise, the base station shall include
8		this field and set it as follows:
9		The base station shall set this field to the CDMA band class,
10		as specified in [30], corresponding to the CDMA frequency
11		assignment for the CDMA Channel containing this neighbor.
12	NGHBR_FREQ	- Neighbor frequency assignment.
13		If the NGHBR_FREQ_INCL field is set to '0', the base station
14		shall omit this field; otherwise, the base station shall include
15		this field and set it as follows:
16		The base station shall set this field to the CDMA Channel
17		number, in the specified CDMA band class, corresponding to
18		the CDMA frequency assignment for this neighbor.
19	PN_ASSOCIATION_IND	- Neighbor PN association indicator.
20		The base station shall set this field to '1' if the system
21		identified by this system record has the same PN assignment
22		as the 1x system to which this BS belongs; otherwise, the
23		base station shall set this field to '0'.
24	DATA_ASSOCIATION_IND	- Neighbor data association indicator.
25		The base station shall set this field to '1' if the system
26		identified by this system record can reach the same set of
27		PDSNs as the 1x system to which this BS belongs; otherwise,
28		the base station shall set this field to '0'.
29	HRPD_NGHBR_REC_RESERVED	- HRPD neighbor record reserved bits.
30		The base station shall add reserved bits as needed in order to
31		make the length of this record equal to an integer number of
32		octets. The base station shall set these bits to '0'.
33		

## 1 3.7.2.3.2.35 Security Mode Command Message

2 MSG\_TAG: SMCM

Field	Length (bits)
C_SIG_ENCRYPT_MODE	3
ENC_KEY_SIZE	0 or 3
MSG_INT_INFO_INCL	1
CHANGE_KEYS	0 or 1
USE_UAK	0 or 1

3

4 C\_SIG\_ENCRYPT\_MODE - Common channel encryption mode indicator.

5 The base station shall set this field to the common channel  
6 signaling encryption mode, as shown in Table 3.7.4.5-1.

7 ENC\_KEY\_SIZE - Key size used for user information and signaling encryption

8 If C\_SIG\_ENCRYPT\_MODE is equal to '001', or '010', the base  
9 station shall include this field and set this field to the  
10 encryption key\_size as shown in Table 3.7.4.5-2; otherwise,  
11 the base station shall omit this field.

12 MSG\_INT\_INFO\_INCL - Message integrity information included indicator

13 The base station shall set this field to '1' if the base station  
14 supports message integrity; otherwise, the base station shall  
15 set this field to '0'.

16 CHANGE\_KEYS - Change keys indicator

17 If MSG\_INT\_INFO\_INCL is set to '0', the base station shall  
18 omit this field; otherwise, the base station shall include this  
19 field and set it as follows:

20 The base station shall set this field to '0' to command the  
21 mobile station not to update the encryption key and integrity  
22 key. The base station shall set this field to '1' to command the  
23 mobile station to update the encryption key and integrity key  
24 to the latest being generated.

25 USE\_UAK - Use UAK indicator

26 If MSG\_INT\_INFO\_INCL is set to '0', the base station shall  
27 omit this field; otherwise, the base station shall include this  
28 field and set it as follows:

29 If the base station receives an authentication vector with a  
30 UAK, the base station shall set this field to '1' to indicate that  
31 the mobile station is to use UMAC; otherwise, the base  
32 station shall set this field to '0' to indicate that the mobile  
33 station is to use MAC-I.

34

35

## 3.7.2.3.2.36 Universal Page Message

## MSG\_TAG: UPM

When Layer 3 at the base station sends a PDU corresponding to the *Universal Page Message* to Layer 2, it also sends the UPM Common fields to Layer 2. These UPM Common fields and PDUs are used by Layer 2 to assemble the Layer 2 PDU or PDUs corresponding to the *Universal Page Message* (see [4]).

## UPM Common Fields:

Field	Length (bits)
CONFIG_MSG_SEQ	6
ACC_MSG_SEQ	6
READ_NEXT_SLOT	1
READ_NEXT_SLOT_BCAST	1

## PDU Format for a mobile station-addressed page:

Field	Length (bits)
SERVICE_OPTION	16
ADD_MS_RECORD	0 or 8 × EXT_MS_SDU- _LENGTH (see [4])

PDU Format for a mobile station-directed message announcement: There are no Layer 3 fields associated with this record.

## PDU Format for an enhanced broadcast page:



Field	Length (bits)
BCN	3
TIME_OFFSET	10
REPEAT_TIME_OFFSET	0 or 5
ADD_BCAST_RECORD	0 or $8 \times \text{EXT\_BCAST\_SDU\_LENGTH}$ (see [4])

1		
2		
3	CONFIG_MSG_SEQ	- Configuration message sequence number.
4		The base station shall set this field to CONFIG_SEQ
5		(see 3.6.2.2).
6	ACC_MSG_SEQ	- Access parameters message sequence number.
7		The base station shall set this field to ACC_CONFIG_SEQ
8		(see 3.6.2.2).
9	READ_NEXT_SLOT	- Pages carried into next slot indicator.
10		If all messages and records directed to mobile stations
11		operating in the slotted mode and active in this slot, are
12		included in this slot, the base station shall set this field to '0';
13		otherwise, the base station shall set this field to '1'.
14	READ_NEXT_SLOT_BCAST	- Enhanced Broadcast Pages carried into next slot
15		indicator.
16		If all enhanced broadcast pages directed to mobile stations
17		operating in the slotted mode and active in this slot to receive
18		enhanced broadcast pages are included in this slot, the base
19		station shall set this field to '0'; otherwise, the base station
20		shall set this field to '1'.
21	SERVICE_OPTION	- Service option.
22		The base station shall set this field to the service option code
23		shown in [30], corresponding to the requested service option.
24	ADD_MS_RECORD	- Additional mobile station-addressed information record.
25		The base station shall omit this field if
26		EXT_MS_SDU_LENGTH_INCL (see [4]) is set to '0'; otherwise,
27		the base station shall include EXT_MS_SDU_LENGTH (see
28		[4]) octets in this field.
29	BCN	- Broadcast Control Channel Number.
30		If NUM_BCCH_BCAST is equal to '000', base station shall set
31		this field to '000' and this field is to be ignored by the mobile
32		station.
33		Otherwise, the base station shall set this field to the
34		Broadcast Control Channel number of the F-BCCH to which
35		the mobile station is being redirected.

1		The base station shall not set this field to '000'(reserved) or
2		'001'.
3	TIME_OFFSET	- BCCH offset.
4		If NUM_BCCH_BCAST is equal to '000', base station shall set
5		this field to one less than the time offset, in units of 40 ms,
6		from the beginning of the slot in which this message began to
7		the beginning of the Forward Common Control Channel slot
8		to which the mobile station is being directed.
9		Otherwise, the base station shall set this field to one less
10		than the time offset, in units of 40 ms, from the beginning of
11		the slot in which this message began to the beginning of the
12		Broadcast Control Channel slot to which the mobile station is
13		being directed.
14	REPEAT_TIME_OFFSET	- BCCH offset of repeat.
15		If EXT_BCAST_SDU_LENGTH_IND (see [4]) is set to '01' or
16		'11', the base station shall set this field as follows:
17		• If NUM_BCCH_BCAST is equal to '000', the base
18		station shall set this field to one less than the time
19		offset, in units of 40 ms, from the time specified by
20		TIME_OFFSET to the beginning of the Forward
21		Common Control Channel slot to which the mobile
22		station is being directed for a repeat of the broadcast
23		message.
24		• Otherwise, the base station shall set this field to
25		one less than the time offset, in units of 40 ms, from
26		the time specified by TIME_OFFSET to the beginning of
27		the Broadcast Control Channel slot to which the
28		mobile station is being directed for a repeat of the
29		broadcast message.
30		Otherwise, the base station shall omit this field.
31	ADD_BCAST_RECORD	- Additional broadcast information record.
32		The base station shall omit this field if
33		EXT_BCAST_SDU_LENGTH_IND (see [4]) is set to '00' or '01';
34		otherwise, the base station shall include
35		EXT_BCAST_SDU_LENGTH (see [4]) octets in this field.
36		
37		
38		

1 3.7.2.3.2.37 Authentication Request Message

2 MSG\_TAG: AUREQM

3

Field	Length (bits)
RANDA	128
CON_SQN	48
AMF	16
MAC_A	64

4

5           RANDA    -   The Random Challenge Number.  
6                    The base station shall set this field to the value of the  
7                    Random Challenge Number in the authentication vector.

8           CON\_SQN -   Concealed Sequence Number.  
9                    The base station shall set this field to  $SQN \oplus AK$  (Concealed  
10                   Sequence Number), where SQN and AK are the sequence  
11                   number and the anonymity key in the authentication vector,  
12                   respectively.

13           AMF     -   Authentication Management Field.  
14                    The base station shall set this field to the value of the  
15                    Authentication Management Field in the authentication  
16                    vector.

17           MAC\_A   -   Message Authentication Code.  
18                    The base station shall set this field to the value of the  
19                    Message Authentication Code in the authentication vector.

20

## 1 3.7.2.3.2.38 BCMC Service Parameters Message

## 2 MSG\_TAG: BSPM

Field	Length (bits)
PILOT_PN	9
BSPM_MSG_SEQ	6

{ (BSPM COMMON RECORD)

BSPM_COMMON_RECORD_LEN	4
DIFF_BSPM	1
AUTO_REQ_ALLOWED_IND	1
FREQ_CHG_REG_REQUIRED	1
FREQ_CHG_REG_TIMER_IND	0 or 1
FREQ_CHG_REG_TIMER	0 or 3
REGISTRATION_REQ_FLAG_INCL	1
REGISTRATION_REQ_TIMER_PERIOD	0 or 8
BCMC_ON_TRAFFIC_SUP	1
AUTH_SIGNATURE_REQUIRED	1
NON_DEFAULT_VALUE_INCLUDED	0 or 1
ACH_TIME_STAMP_SHORT_LENGTH	0 or 8
TIME_STAMP_LONG_LENGTH	0 or 8
TIME_STAMP_UNIT	0 or 4
NUM_FSCH	7
FSCH_PLCM_SCHEME_IND	2
NUM_BCMC_PROGRAMS	8
USE_TIME	1
ACTION_TIME	0 or 6
FRAMING_TYPE	2
FCS_LENGTH	0 or 2
BSPM_COMMON_RECORD_RESERVED	0 ~ 7 (as needed)

} (BSPM COMMON RECORD)

NUM\_FSCH occurrences of the following variable length record:

{ (NUM\_FSCH)

Field	Length (bits)
FSCH_RECORD_LEN	4
FSCH_BAND_CLASS_INCL	1
FSCH_BAND_CLASS	0 or 5
FSCH_CDMA_FREQ_INCL	1
FSCH_CDMA_FREQ	0 or 11
FSCH_CODE_CHAN	11
FSCH_PLCM_IND	0 or 1
FSCH_PLCM_INDEX	0 or 8
FSCH_MUX_OPTION	16
FSCH_RC	5
FSCH_CODING	1
FSCH_OUTERCODE_INCL	1
FSCH_OUTERCODE_RATE	0 or 3
FSCH_OUTERCODE_OFFSET	0 or 6
FSCH_NUM_BITS_IDX	4
FSCH_FRAME_40_USED	1
FSCH_FRAME_80_USED	1
TDM_STRUCTURE_IND	1
TDM_SLOT_LENGTH	0 or 2
TDM_SUPER_PERIOD_MASK_LEN	0 or 2
TDM_MEGA_PERIOD_MASK_LEN	0 or 2
FSCH_RECORD_RESERVED	0-7 (as needed)

} (NUM\_FSCH)

NUM\_BCMC\_PROGRAMS plus one occurrences of the following variable length record:

{ (NUM\_BCMC\_PROGRAMS+1)

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	BCMC_PROGRAM_ID_LEN+1
BCMC_FLOW_DISCRIMINATOR_LEN	3

Field	Length (bits)
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR_HEADER_RECORD_LEN	4
BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
FLOW_INFO_ON_OTHER_FREQ	1
BSPM_CDMA_FREQ_SAME_AS_PREV	0 or 1
BSPM_BAND_CLASS	0 or 5
BSPM_CDMA_FREQ	0 or 11
REGISTRATION_REQ_FLAG	0 or 1
AUTH_SIGNATURE_REQ_IND	0 or 1
BCMC_FLOW_ON_TRAFFIC_IND	0 or 1
NUM_LPM_ENTRIES	0 or 3
BCMC_FLOW_DISCRIMINATOR_HEADER_RECORD_RESERVED	0-7 (as needed)

NUM\_LPM\_ENTRIES occurrences of the following variable-length record:

*{ (NUM\_LPM\_ENTRIES)*

FSCH_ID	7
TDM_USED_IND	0 or 1
TDM_MASK	0 or 4
TDM_SUPER_PERIOD_MASK_INCL	0 or 1
TDM_SUPER_PERIOD_MASK	variable
TDM_MEGA_PERIOD_MASK_INCL	0 or 1
TDM_MEGA_PERIOD_MASK	variable
BSR_ID	3

Field	Length (bits)
NUM_NGHR	6

NUM\_NGHR occurrences of the following variable length record

{ (NUM\_NGHR)

NGHR_RECORD_LEN	4
NGHR_PN	9
NGHR_BCNC_CONFIG	3
NGHR_BSR_ID	0 or 3
NGHR_FSCH_BAND_CLASS_INCL	0 or 1
NGHR_FSCH_BAND_CLASS	0 or 5
NGHR_FSCH_CDMA_FREQ_INCL	0 or 1
NGHR_FSCH_CDMA_FREQ	0 or 11
NGHR_FSCH_CODE_CHAN_INCL	0 or 1
NGHR_FSCH_CODE_CHAN	0 or 11
NGHR_FSCH_PARAMS_INCL	0 or 1
NGHR_FSCH_PLCM_IND	0 or 1
NGHR_FSCH_PLCM_INDEX	0 or 8
NGHR_FSCH_MUX_OPTION	0 or 16
NGHR_FSCH_RC	0 or 5
NGHR_FSCH_CODING	0 or 1
NGHR_FSCH_OUTERCODE_INCL	0 or 1
NGHR_FSCH_OUTERCODE_RATE	0 or 3
NGHR_FSCH_OUTERCODE_OFFSET	0 or 6
NGHR_FSCH_NUM_BITS_IND	0 or 4
NGHR_FSCH_FRAME_40_USED	0 or 1
NGHR_FSCH_FRAME_80_USED	0 or 1

1

Field	Length (bits)
NGHBR_RECORD_RESERVED	0-7 (as needed)
} (NUM_NGHBR)	
} (NUM_LPM_ENTRIES)	
} (NUM_FLOW_DISCRIMINATOR+1) or 1	
} (NUM_BCMC_PROGRAMS+1)	
BCMC_NUM_BCCH_NGHBR	3
<i>BCMC_NUM_BCCH_NGHBR occurrences of the following variable length record</i>	
{ (BCMC_NUM_BCCH_NGHBR)	
BCMC_BCCH_NGHBR_PN	9
BCMC_SR1_BCCH_NON_TD_INCL	1
BCMC_SR1_NON_TD_FREQ_INCL	0 or 1
BCMC_SR1_CDMA_FREQ_NON_TD	0 or 11
BCMC_SR1_BRAT_NON_TD	0 or 2
BCMC_SR1_CRAT_NON_TD	0 or 1
BCMC_SR1_BCCH_CODE_CHAN_NON_TD	0 or 6
BCMC_SR1_TD_INCL	1
BCMC_SR1_CDMA_FREQ_TD	0 or 11
BCMC_SR1_BRAT_TD	0 or 2
BCMC_SR1_CRAT_TD	0 or 1
BCMC_SR1_BCCH_CODE_CHAN_TD	0 or 6
BCMC_SR1_TD_MODE	0 or 2
BCMC_SR1_TD_POWER_LEVEL	0 or 2
} (BCMC_NUM_BCCH_NGHBR)	

2

- 3           PILOT\_PN    -   Pilot PN sequence offset index.
- 4                        The base station shall set this field to the pilot PN sequence
- 5                        offset for this base station, in units of 64 PN chips.
- 6           BSPM\_MSG\_SEQ   -   BSPM sequence number.
- 7                        The base station shall set this field to the BCMC Service
- 8                        Parameters Message sequence number.
- 9   BSPM\_COMMON\_RECORD\_LEN-   BSPM common part record length.



1		The base station shall set this field to one less the number of
2		octets included in this BSPM common part record including
3		this field.
4	DIFF_BSPM	- Differential BSPM indicator.
5		If this message contains all the information with respect to
6		the last transmitted BCMC Service Parameters Message, the
7		base station shall set this field to '0'; if this message contains
8		only information that changed with respect to the last
9		transmitted BCMC Service Parameters Message, the base
10		station shall set this field to '1'.
11	AUTO_REQ_ALLOWED_IND	- Autonomous BCMC request allowed indicator.
12		The base station shall set this field to '1' to indicate that the
13		mobile station is allowed to request for a BCMC flow that is
14		not included in this message; otherwise, the base station
15		shall set this field to '0'.
16	FREQ_CHG_REG_REQUIRED	- Frequency change BCMC registration required
17		indication.
18		The base station shall set this field to '1' to indicate that the
19		mobile station is to send a Registration Message whenever
20		mobile station changes frequency while monitoring at least
21		one BCMC flow listed on this message; otherwise, the base
22		station shall set this field to '0'.
23	FREQ_CHG_REG_TIMER_IND	- Frequency change registration timer indicator.
24		The base station shall omit this field if the
25		FREQ_CHG_REG_REQUIRED field is set to '0'; otherwise, the
26		base station shall include this field and set it as follows:
27		The base station shall set this field to '1' to indicate frequency
28		change registration timer is enabled; otherwise, the base
29		station shall set this field to '0'.
30	FREQ_CHG_REG_TIMER	- Frequency change registration timer.
31		If the field FREQ_CHG_REG_TIMER_IND is not included or is
32		included and is set to '0', the base station shall omit this
33		field; otherwise, the base station shall include this field and
34		set it as follows:
35		The base station shall set this field to a value as specified in
36		Table 3.7.2.3.2.38-1 to indicate the duration of time within as
37		specified in Table 3.7.2.3.2.38-1 which the mobile station is
38		not to perform another registration due to a frequency
39		change.

**Table 3.7.2.3.2.38-1. Value of Frequency change registration timer**

<b>FREQ_CHG_REG_T IMER Value (binary)</b>	<b>Timer Length (Minutes)</b>
000	Reserved
001	1
010	2
011	5
100	10
101	20
110	30
111	60

**REGISTRATION\_REQ\_FLAG\_INCL** - Registration Required Flag Included.

The base station shall set this field to '1' if the registration is required for at least one BCMC flow listed in this message; otherwise the base station shall set this field to '0'.

**REGISTRATION\_REQ\_TIMER\_PERIOD** - Registration Required Timer Period.

If REGISTRATION\_REQ\_FLAG\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it to log (base 2) of the maximum value of the BCMC registration required timer divided by 80 msec.

**BCMC\_ON\_TRAFFIC\_SUP** - BCMC on traffic channel supported indicator.

The base station shall set this field to '1' to indicate that the BCMC feature is supported on traffic channel; otherwise, the base station shall set this field to '0'.

**AUTH\_SIGNATURE\_REQUIRED** - Authorization signature required indication.

The base station shall set this field to '1' to indicate that the mobile station is to include the authorization signature in the Registration Message, Origination Message, or Page Response Message for at least one of the BCMC flows included in this message; otherwise, the base station shall set this field to '0'.

**NON\_DEFAULT\_VALUE\_INCLUDED** - Non-default values for Authorization signature included indicator.

1		If the AUTH_SIGNATURE_REQUIRED field is set to '0', the
2		base station shall omit this field; otherwise, the base station
3		shall include this field and set it as follows:
4		The base station shall set this field to '0' if default values are
5		to be used to generate the Authorization signature; otherwise,
6		the base station shall set this field to '1'.
7	ACH_TIME_STAMP_SHORT_LENGTH	- Length of time stamp for use on r-csch.
8		If the NON_DEFAULT_VALUE_INCLUDED field is not
9		included or is included and is set to '0', the base station shall
10		omit this field; otherwise, the base station shall include this
11		field and set it as follows:
12		The base station shall set this field to the length of the time
13		stamp, in units of bits, included on the Registration
14		Message, Origination Message, or Page Response Message
15		transmitted on r-csch.
16	TIME_STAMP_LONG_LENGTH	- Length of time stamp.
17		If the NON_DEFAULT_VALUE_INCLUDED field is not
18		included or is included and is set to '0', the base station shall
19		omit this field; otherwise, the base station shall include this
20		field and set it as follows:
21		The base station shall set this field to the length of the time
22		stamp, in units of bits, used to generate the Authorization
23		signature.
24	TIME_STAMP_UNIT	- Unit for time stamp length.
25		If the NON_DEFAULT_VALUE_INCLUDED field is not
26		included or is included and is set to '0', the base station shall
27		omit this field; otherwise, the base station shall include this
28		field and set it as follows:
29		The base station shall set this field to the unit of the time
30		stamp length field as follows: the unit of the time stamp field
31		shall be 2 to the power of the value of this field.
32	NUM_FSCH	- Number of Forward Supplemental Channels.
33		The base station shall set this field to the number of Forward
34		Supplemental Channels being transmitted by this base
35		station in any one of the frequencies.
36	FSCH_PLCM_SCHEME_IND	- Forward Supplemental Channels Public Long Code Mask
37		Scheme Indicator.
38		The base station shall set this field as specified in Table
39		3.7.2.3.2.38-2 to indicate the Forward Supplemental Channel
40		public long code mask scheme used.

**Table 3.7.2.3.2.38-2. Forward Supplemental Channel PLCM scheme used**

<b>FSCH_PLCM_SCHEME_IND (binary)</b>	<b>PLCM scheme used</b>
00	PLCM autonomously generated from BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow on each Forward Supplemental Channel
01	PLCM generated from FSCH_PLCM_INDEX signaled for each Forward Supplemental Channel
10	PLCM scheme individually specified for each Forward Supplemental Channel
11	Reserved

**NUM\_BCMC\_PROGRAMS** - Number of BCMC Programs.

The base station shall set this field to the number of BCMC programs available in this base station in any one of the frequencies minus one.

**USE\_TIME** - Use action time indicator.

If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**ACTION\_TIME** - Action time.

If the USE\_TIME field is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and shall set it to the System Time in units of 80 ms (modulo 64) at which this message takes effect.

**FRAMING\_TYPE** - Framing type.

The base station shall set this field as specified in Table 3.7.2.3.2.38-7 to indicate the framing type used.

1

**Table 3.7.2.3.2.38-7. FRAMING\_TYPE values**

<b>FRAMING_TYPE (binary)</b>	<b>Framing type used</b>
00	HDLC-like
01	Segment-based
10	Reserved
11	Reserved

2

**FCS\_LENGTH** - FCS Length.

3

4

5

The base station shall omit this field if the FRAMING\_TYPE field is set to '00'; otherwise, the base station shall include this field and set it as follows:

6

7

8

The base station shall set this field as specified in Table 3.7.2.3.2.38-8 to indicate the length of FCS included in BCMC payload.

9

**Table 3.7.2.3.2.38-8. FCS\_LENGTH values**

<b>FCS_LENGTH (binary)</b>	<b>Length of FCS (bits)</b>
00	0
01	16
10	Reserved
11	Reserved

10

**BSPM\_COMMON\_RECORD\_RESERVED** - BSPM common part record reserved bits.

11

12

13

14

The base station shall add reserved bits as needed in order to make the length of this BSPM common part record equal to an integer number of octets. The base station shall set these bits to '0'.

15

The base station shall include NUM\_FSCH occurrences of the following variable length record:

16

17

**FSCH\_RECORD\_LEN** - Forward Supplemental Channel record length.

18

19

20

The base station shall set this field to one less the number of octets included in this Forward Supplemental Channel record including this field.

21

**FSCH\_BAND\_CLASS\_INCL** - Forward Supplemental Channel band class included indicator.

22

1			If this Forward Supplemental Channel resides in the same
2			band class as where this message is being transmitted, the
3			base station shall set this field to '0'; otherwise, the base
4			station shall set this field to '1'.
5	FSCH_BAND_CLASS	-	Band class of the Forward Supplemental Channel.
6			If the FSCH_BAND_CLASS_INCL field is set to '0', the base
7			station shall omit this field; otherwise, the base station shall
8			include this field and set it as follows:
9			The base station shall set this field to the CDMA band class,
10			as specified in [30], corresponding to the CDMA frequency
11			assignment containing this Forward Supplemental Channel.
12	FSCH_CDMA_FREQ_INCL	-	Forward Supplemental Channel Frequency included
13			indicator.
14			If this Forward Supplemental Channel resides in the same
15			frequency as where this message is being transmitted, the
16			base station shall set this field to '0'; otherwise, the base
17			station shall set this field to '1'.
18	FSCH_CDMA_FREQ	-	Frequency assignment of the Forward Supplemental
19			Channel.
20			If the FSCH_CDMA_FREQ_INCL field is set to '0', the base
21			station shall omit this field; otherwise, the base station shall
22			include this field and set it as follows:
23			The base station shall set this field to the CDMA Channel
24			number corresponding to the CDMA frequency assignment
25			for the CDMA Channel containing this Forward Supplemental
26			Channel.
27	FSCH_CODE_CHAN	-	Code channel index of the Forward Supplemental Channel.
28			The base station shall set this field to the code channel index
29			of this Forward Supplemental Channel as specified in [2].
30	FSCH_PLCM_IND	-	Forward Supplemental Channel Public Long Code Mask
31			Scheme Indicator.
32			If the FSCH_PLCM_SCHEME_IND field is not set to '10', the
33			base station shall omit this field; otherwise, the base stations
34			shall include this field and set it as follows:
35			If the index to generate PLCM for this Forward Supplemental
36			Channel is signaled in this message, the base station shall
37			set this field to '1'; otherwise if the PLCM for this Forward
38			Supplemental Channel is autonomously generated from
39			BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow
40			on this Forward Supplemental Channel as specified in
41			2.6.13.10.1, the base station shall set this field to '0'.
42	FSCH_PLCM_INDEX	-	Index to generate the Forward Supplemental Channel public
43			long code mask.

1			If the FSCH_PLCM_SCHEME_IND field is set to '01', or the
2			FSCH_PLCM_IND field is included and is set to '1', the base
3			station shall include this field and set it as follows; otherwise,
4			the base station shall omit this field.
5			The base station shall set this field to the index from which
6			the public long code mask for this Forward Supplemental
7			Channel is generated as specified in 2.6.13.10.2.
8	FSCH_MUX_OPTION	-	Multiplex Option of the Forward Supplemental Channel.
9			The base station shall set this field to the multiplex option of
10			this Forward Supplemental Channel as specified in [3].
11	FSCH_RC	-	Radio configuration of the Forward Supplemental Channel.
12			The base station shall set this field to the radio configuration
13			of this Forward Supplemental Channel as specified in [2].
14	FSCH_CODING	-	Coding type of the Forward Supplemental Channel.
15			The base station shall set this field to '1' if Convolutional
16			Coding will be used when the number of channel bits per
17			frame is less than 360 and Turbo Coding when the number of
18			channel bits per frame is equal to or greater than 360. The
19			base station shall set this field to '0' if Convolution Coding
20			will be used for all block sizes.
21	FSCH_OUTERCODE_INCL	-	Forward Supplemental Channel Outer Code included
22			indicator.
23			The base station shall set this field to '1' if the Forward
24			Supplemental Channel outer code information is included in
25			this message; otherwise, the base station shall set this field
26			to '0'.
27	FSCH_OUTERCODE_RATE	-	Outer Code Rate of the Forward Supplemental Channel.
28			If the FSCH_OUTERCODE_INCL field is set to '0', the base
29			station shall omit this field; otherwise, the base station shall
30			include this field and set it as follows:
31			The base station shall set this field to specify the outer code
32			rate of the Forward Supplemental Channel as specified in
33			Table 3.7.2.3.2.38-3

1 **Table 3.7.2.3.2.38-3. Forward Supplemental Channel Outer Code Rate**

<b>FSCH_OUTERCODE_RATE (binary)</b>	<b>FORWARD SUPPLEMENTAL CHANNEL Outer Code Rate</b>	<b>Length of TDM_SUPER_PER IOD_MASK (bits)</b>
000	11/16	11
001	12/16	12
010	13/16	13
011	14/16	14
100-111	Reserved	Reserved

2

3 **FSCH\_OUTERCODE\_OFFSET** - Outer Coding Buffer Offset of the Forward  
4 Supplemental Channel.

5 If the **FSCH\_OUTERCODE\_INCL** field is set to '0', the base  
6 station shall omit this field; otherwise, the base station shall  
7 include this field and set it as follows:

8 The base station shall set this field to specify the outer coding  
9 buffer offset of the Forward Supplemental Channel in units of  
10 20ms as specified in [2]. The base station shall set this field  
11 to a value between 0 and 63 inclusive.

12 **FSCH\_NUM\_BITS\_INDX** - Number of information bits index of the Forward  
13 Supplemental Channel.

14 The base station shall set this field according to Table  
15 3.7.3.3.2.37-4 to indicate the number of information bits per  
16 frame and the length of the CRC field for this Forward  
17 Supplemental Channel.

18 **FSCH\_FRAME\_40\_USED** - Forward Supplemental Channel 40ms frame used indicator.

19 The base station shall set this field to '1' if 40ms frame is  
20 used on this Forward Supplemental Channel; otherwise, the  
21 base station shall set this field to '0'.

22 The base station shall not set both **FSCH\_FRAME\_40\_USED**  
23 and **FSCH\_FRAME\_80\_USED** fields to '1'.

24 **FSCH\_FRAME\_80\_USED** - Forward Supplemental Channel 80ms frame used indicator.

25 The base station shall set this field to '1' if 80ms frame is  
26 used on this Forward Supplemental Channel; otherwise, the  
27 base station shall set this field to '0'.

28 The base station shall not set both **FSCH\_FRAME\_40\_USED**  
29 and **FSCH\_FRAME\_80\_USED** fields to '1'.

30 **TDM\_STRUCTURE\_IND** - TDM structure used indicator.



1 The base station shall set this field to '1' if a time-division  
 2 multiplexing structure (i.e. BCMC TDM Mode) is used on this  
 3 Forward Supplemental Channel; otherwise, the base station  
 4 shall set this field to '0'.

5 **TDM\_SLOT\_LENGTH** - TDM slot length.

6 If the TDM\_STRUCTURE\_IND field is set to '0' or if  
 7 FSCH\_OUTERCODE\_INCL field in this record is set to '1', the  
 8 base station shall omit this field; otherwise, the base station  
 9 shall include this field and shall set it as follows:

10 The base station shall set this field to the length of the TDM  
 11 slot as specified in Table 3.7.2.3.2.38-4.

12 **Table 3.7.2.3.2.38-4. TDM\_SLOT\_LENGTH values**

<b>TDM_SLOT_LENGTH (binary)</b>	<b>Length of the TDM slot</b>
00	20 ms
01	40 ms
10	80 ms
11	Reserved

13

14 **TDM\_SUPER\_PERIOD\_MASK\_LEN** - TDM super period mask length indicator.

15 If the TDM\_STRUCTURE\_IND field is set to '0' or if  
 16 FSCH\_OUTERCODE\_INCL field corresponding to FSCH\_ID  
 17 field included in this record is set to '1', the base station shall  
 18 omit this field; otherwise, the base station shall include this  
 19 field and set it as follows:

20 The base station shall set this field to the TDM super period  
 21 mask length as specified in Table 3.7.2.3.2.38-5.

**Table 3.7.2.3.2.38-5. TDM\_SUPER PERIOD\_MASK\_LEN and TDM\_MEGA\_PERIOD\_MASK\_LEN values**

<b>TDM_SUPER_PERIOD_MASK_LEN or TDM_MEGA_PERIOD_MASK_LEN (binary)</b>	<b>Bits in TDM_SUPER_PERIOD_MASK or TDM_MEGA_PERIOD_MASK</b>
00	4 bits
01	8 bits
10	16 bits
11	Reserved

**TDM\_MEGA\_PERIOD\_MASK\_LEN** - TDM mega period mask length indicator.

If the **TDM\_STRUCTURE\_IND** field is set to '0' or if **FSCH\_OUTERCODE\_INCL** field corresponding to **FSCH\_ID** field included in this record is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the TDM mega period mask length as specified in Table 3.7.2.3.2.38-5.

**FSCH\_RECORD\_RESERVED** - Forward Supplemental Channel record reserved bits.

The base station shall add reserved bits as needed in order to make the length of this Forward Supplemental Channel record equal to an integer number of octets. The base station shall set these bits to '0'.

The base station shall include **NUM\_BCMC\_PROGRAMS** plus one occurrences of the following variable length record:

**BCMC\_PROGRAM\_ID\_LEN** - Length of **BCMC\_PROGRAM\_ID** field.

The base station shall set this field to one less than the length in bits of the **BCMC\_PROGRAM\_ID** of this program.

**BCMC\_PROGRAM\_ID** - BCMC program Identifier.

The length of this field shall be one more than the value of **BCMC\_PROGRAM\_ID\_LEN** bits.

The base station shall set this field to the BCMC program identifier of this program.

**BCMC\_FLOW\_DISCRIMINATOR\_LEN** - Length of **BCMC\_FLOW\_DISCRIMINATOR** field.

The base station shall set this field to the length in bits of the **BCMC\_FLOW\_DISCRIMINATOR** of this program.

- 1 NUM\_FLOW\_DISCRIMINATOR - Number of BCMC flow discriminators.
- 2 The length of this field shall be determined by the value of
- 3 the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if
- 4 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field
- 5 is omitted; otherwise, the length of this field shall be
- 6 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.
- 7 The base station shall set this field to the number of flow
- 8 discriminators included for this program minus one.
- 9 If NUM\_FLOW\_DISCRIMINATOR field is included, the base station shall include
- 10 NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;
- 11 otherwise, the base station shall include 1 occurrence of the following variable length
- 12 record:
- 13 BCMC\_FLOW\_DISCRIMINATOR\_HEADER\_RECORD\_LEN - BCMC flow discriminator
- 14 header record length.
- 15 The base station shall set this field to one less the number of
- 16 octets included in this BCMC flow discriminator header
- 17 record including this field.
- 18 BCMC\_FLOW\_DISCRIMINATOR - BCMC flow discriminator.
- 19 The length of this field shall be determined by the value of
- 20 the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if
- 21 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field
- 22 is omitted; otherwise, the length of this field shall be
- 23 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.
- 24 The base station shall set this field to the BCMC flow
- 25 discriminator of this flow.
- 26 FLOW\_INFO\_ON\_OTHER\_FREQ - BCMC flow information on another frequency
- 27 indicator.
- 28 The base station shall set this field to '1' if the information on
- 29 this BCMC flow is available on another frequency; otherwise,
- 30 the base station shall set this field to '0'.
- 31 BSPM\_CDMA\_FREQ\_SAME\_AS\_PREV - BSPM CDMA Frequency same as previous
- 32 indicator.
- 33 If the FLOW\_INFO\_ON\_OTHER\_FREQ field is set to '0', the
- 34 base station shall omit this field; otherwise, the base station
- 35 shall include this field and set it as follows:
- 36 The base station shall set this field to '1' if the CDMA channel
- 37 number and band class where the BCMC Service Parameters
- 38 Message containing information on this BCMC flow is
- 39 transmitted is the same as the one for the previous BCMC
- 40 flow listed in this message.
- 41 BSPM\_BAND\_CLASS- BSPM band class.

1 If the BSPM\_CDMA\_FREQ\_SAME\_AS\_PREV field is not  
2 included or included and set to '1', the base station shall  
3 omit this field; otherwise, the base station shall include this  
4 field and set it as follows:

5 The base station shall set this field to the CDMA band class  
6 where the BCMC Service Parameters Message containing  
7 information on this BCMC flow is transmitted.

8 **BSPM\_CDMA\_FREQ - BSPM Frequency.**

9 If the BSPM\_CDMA\_FREQ\_SAME\_AS\_PREV field is not  
10 included or included and set to '1', the base station shall omit  
11 this field; otherwise, the base station shall include this field  
12 and set it as follows:

13 The base station shall set this field to the CDMA channel  
14 number where the BCMC Service Parameters Message  
15 containing information on this BCMC flow is transmitted.

16 **REGISTRATION\_REQ\_FLAG - Registration Required Flag.**

17 If FLOW\_INFO\_ON\_OTHER\_FREQ is set to '1' or  
18 REGISTRATION\_REQ\_FLAG\_INCL is set to '0', the base  
19 station shall omit this field; otherwise, the base station shall  
20 include this field and set it as follows:

21 The base station shall set this field to '1' if registration is  
22 required for this BCMC flow. Otherwise, the base station shall  
23 set this field to '0'.

24 **AUTH\_SIGNATURE\_REQ\_IND - Authorization signature required indicator.**

25 If FLOW\_INFO\_ON\_OTHER\_FREQ is set to '1' or the  
26 AUTH\_SIGNATURE\_REQUIRED field is set to '0', the base  
27 station shall omit this field; otherwise, the base station shall  
28 include this field and set it as follows:

29 The base station shall set this field to '1' if the mobile station  
30 is to include the authorization signature in the Registration  
31 Message, Origination Message, or Page Response Message for  
32 this BCMC flow; otherwise, the base station shall set this  
33 field to '0'.

34 **BCMC\_FLOW\_ON\_TRAFFIC\_IND - BCMC flow on traffic channel supported indicator.**

35 If FLOW\_INFO\_ON\_OTHER\_FREQ is set to '1' or  
36 BCMC\_ON\_TRAFFIC\_SUP is set to '0', the base station shall  
37 omit this field; otherwise, the base station shall include this  
38 field and set it as follows:

39 The base station shall set this field to '1' if this BCMC flow is  
40 available on traffic channel; otherwise, the base station shall  
41 set this field to '0'.

42 **NUM\_LPM\_ENTRIES - Number of Logical-to-Physical Mapping Entries.**

43 If the FLOW\_INFO\_ON\_OTHER\_FREQ field is set to '1', the  
44 base station shall omit this field; otherwise, the base station  
45 shall include this field and set it as follows:

1                   The base station shall set this field to the number of logical to  
2                   physical mapping included for this BCMC flow.

3    BCMC\_FLOW\_DISCRIMINATOR\_HEADER\_RECORD\_RESERVED -    BCMC                   flow  
4                   discriminator header record reserved bits.

5                   The base station shall add reserved bits as needed in order to  
6                   make the length of this BCMC flow discriminator header  
7                   record equal to an integer number of octets. The base station  
8                   shall set these bits to '0'.

9    The base station shall include NUM\_LPM\_ENTRIES occurrences of the following variable-  
10   length record:

11                   FSCH\_ID    -   Forward Supplemental Channel Identifier. The base station  
12                                   shall set this field to the identifier corresponding to the  
13                                   Forward Supplemental Channel on which the above BCMC  
14                                   flow is being transmitted. The Forward Supplemental Channel  
15                                   included first in this message is given the FSCH\_ID of  
16                                   '0000000', the second one listed is given the FSCH\_ID of  
17                                   '0000001', and so on.

18                   TDM\_USED\_IND   -   TDM used indicator.

19                                   If the TDM\_STRUCTURE\_IND field for the Forward  
20                                   Supplemental Channel specified by this FSCH\_ID is set to '0',  
21                                   the base station shall omit this field; otherwise, the base  
22                                   station shall include this field and set it as follows:

23                                   The base station shall set this field to '1' if a time-division  
24                                   multiplexing structure (i.e. BCMC TDM Mode) is used on the  
25                                   Forward Supplemental Channel for this flow; otherwise, the  
26                                   base station shall set this field to '0'.

27                   TDM\_MASK    -   TDM mask.

28                                   If the TDM\_USED\_IND field is not included or is included and  
29                                   is set to '0', the base station shall omit this field; otherwise,  
30                                   the base station shall include this field and set it as follows:

31                                   If FSCH\_OUTERCODE\_INCL field corresponding to FSCH\_ID  
32                                   field included in this record is set to '1', the duration of a slot  
33                                   is 20 ms; otherwise, duration of a slot is indicated by  
34                                   TDM\_SLOT\_LENGTH. For each bit of this field, the base  
35                                   station set it to '1' if this flow is assigned to the corresponding  
36                                   slot. For each bit of this field, the base station shall set it to  
37                                   '0' if this flow is not assigned to the corresponding slot.

38    TDM\_SUPER\_PERIOD\_MASK\_INCL -   TDM super period mask included indicator.

39                                   If the TDM\_USED\_IND field is not included or is included and  
40                                   is set to '0', the base station shall omit this field; otherwise,  
41                                   the base station shall include this field and set it as follows:

42                                   The base station set it to '1' if TDM\_SUPER\_PERIOD\_MASK  
43                                   field is included in this message; otherwise, the base station  
44                                   shall set it to '0'.

45    TDM\_SUPER\_PERIOD\_MASK       -   TDM super period mask.

1 If the TDM\_SUPER\_PERIOD\_MASK\_INCL field is not included  
2 or is included and is set to '0', the base station shall omit this  
3 field; otherwise, the base station shall include this field and  
4 set it as follows:

5 If FSCH\_OUTERCODE\_INCL field corresponding to FSCH\_ID  
6 field included in this record is set to '0', then number of bits  
7 included in this field is indicated by  
8 TDM\_SUPER\_PERIOD\_MASK\_LEN field. Otherwise, number  
9 of bits included in this field is set as specified in Table  
10 3.7.2.3.2.38-3, based on FSCH\_OUTERCODE\_RATE field  
11 corresponding to FSCH\_ID field included in this record.

12 Duration of super slot is 4 slots. For each bit of this field, the  
13 base station set it to '1' if the TDM\_MASK specified above  
14 applies to the corresponding super slot. For each bit of this  
15 field, the base station shall set it to '0' if the TDM\_MASK  
16 specified above does not apply to the corresponding super  
17 slot.

18 If FSCH\_OUTERCODE\_INCL field corresponding to FSCH\_ID  
19 field included in this record is set to '1', the super period  
20 mask bits for parity frames (16 - bits included in this field)  
21 are not specified.

22 If TDM\_SUPER\_PERIOD\_MASK is not included in this  
23 message, then it is considered equivalent to  
24 TDM\_SUPER\_PERIOD\_MASK being implicitly included with  
25 all bits set to '1'.

26 TDM\_MEGA\_PERIOD\_MASK\_INCL - TDM mega period mask included indicator.

27 If the TDM\_USED\_IND field is not included or is included and  
28 is set to '0', the base station shall omit this field; otherwise,  
29 the base station shall include this field and set it as follows:

30 The base station set it to '1' if TDM\_MEGA\_PERIOD\_MASK  
31 field is included in this message; otherwise, the base station  
32 shall set it to '0'.

33 TDM\_MEGA\_PERIOD\_MASK - TDM mega period mask.

34 If the TDM\_MEGA\_PERIOD\_MASK\_INCL field is not included  
35 or is included and is set to '0', the base station shall omit this  
36 field; otherwise, the base station shall include this field and  
37 set it as follows:

38 If FSCH\_OUTERCODE\_INCL field corresponding to FSCH\_ID  
39 field included in this record is set to '1', then number of bits  
40 included in this field is indicated by  
41 TDM\_MEGA\_PERIOD\_MASK\_LEN field. Otherwise, number of  
42 bits included in this field is set as specified in Table  
43 3.7.2.3.2.38-6.

**Table 3.7.2.3.2.38-6. Length of TDM\_MEGA\_PERIOD\_MASK**

<b>TDM_SUPER_PERIOD_MASK_INCL (binary)</b>	<b>Length of TDM_MEGA_PERIOD_MASK (bits)</b>
0	8
1	4

If FSCH\_OUTERCODE\_INCL field corresponding to FSCH\_ID field included in this record is set to '1', duration of mega slot is 16 super slots. Otherwise, duration of mega slot is number of bits in TDM\_SUPER\_PERIOD\_MASK times duration of super slot.

For each bit of this field, the base station set it to '1' if the TDM\_SUPER\_PERIOD\_MASK specified above applies to the corresponding mega slot. For each bit of this field, the base station shall set it to '0' if the TDM\_SUPER\_PERIOD\_MASK specified above does not apply to the corresponding mega slot.

**BSR\_ID** - BCMC Service Reference Identifier.

The base station shall set this field to the BCMC Service Reference identifier corresponding to this BCMC flow on this Forward Supplemental Channel.

The base station shall not set this field to a value of 0.

**NUM\_NGHR** - Number of neighbor base stations.

The base station shall set this field to the number of neighbor base stations included in this message for this logical-to-physical mapping entry.

The base station shall include NUM\_NGHR occurrences of the following variable length record.

**NGHBR\_RECORD\_LEN** - Neighbor record length.

The base station shall set this field to one less the number of octets included in this neighbor record including this field.

**NGHBR\_PN** - Neighbor pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this neighbor base station, in units of 64 PN chips.

**NGHBR\_BCMC\_CONFIG** - Neighbor BCMC Configuration.

The base station shall set this field as specified in Table 3.7.2.3.2.38-6 to indicate the configuration of this BCMC flow in this neighbor base station.

1

**Table 3.7.2.3.2.38-6. Neighbor BCMC Configuration Field**

<b>Value (binary)</b>	<b>Neighbor BCMC Configuration</b>
000	The neighbor base station configuration with respect to this BCMC flow is not known or the neighbor base station is not configured to transmit this BCMC flow.
001	The neighbor base station is transmitting this BCMC flow on idle state.  Autonomous soft-handoff of the Forward Supplemental Channel carrying this BCMC flow is not possible with this neighbor base station.
010	The neighbor base station is transmitting this BCMC flow on idle state.  Autonomous soft-handoff of the Forward Supplemental Channel carrying this BCMC flow is possible with this neighbor base station.
011	The neighbor base station supports this BCMC flow on traffic channel.
100-111	Reserved.

2

3 NGHBR\_BSR\_ID - Neighbor BCMC Service Reference Identifier.

4 If the NGHBR\_BCMC\_CONFIG field is set to '000', '010', or  
5 '011', the base station shall omit this field; otherwise, the  
6 base station shall include this field and set it as follows.

7 The base station shall set this field to the BCMC Service  
8 Reference identifier corresponding to this BCMC flow in the  
9 neighbor base station.

10 The base station shall not set this field to a value of 0.

11 NGHBR\_FSCH\_BAND\_CLASS\_INCL - Neighbor Forward Supplemental Channel band  
12 class included indicator.

13 If the NGHBR\_BCMC\_CONFIG field is set to '000' '010', or  
14 '011', the base station shall omit this field; otherwise, the  
15 base station shall include this field and set it as follows.

16 If this F-SCH in the neighbor base station resides in the same  
17 band class as in this base station, the base station shall set  
18 this field to '0'; otherwise, the base station shall set this field  
19 to '1'.

20 NGHBR\_FSCH\_BAND\_CLASS - Band class of the Forward Supplemental Channel in  
21 the neighbor base station.



1		If the NGHBR_FSCH_BAND_CLASS_INCL field is not included
2		in this message or is included and is set to '0', the base
3		station shall omit this field; otherwise, the base station shall
4		include this field and set it as follows:
5		The base station shall set this field to the CDMA band class,
6		as specified in [30], corresponding to the CDMA frequency
7		assignment containing this Forward Supplemental Channel
8		in the neighbor base station.
9	NGHBR_FSCH_CDMA_FREQ_INCL -	Neighbor frequency included indicator.
10		If the NGHBR_BCMC_CONFIG field is set to '000', '010', or
11		'011', the base station shall omit this field; otherwise, the
12		base station shall include this field and set it as follows.
13		If this F-SCH in the neighbor base station resides in the same
14		frequency as in this base station, the base station shall set
15		this field to '0'; otherwise, the base station shall set this field
16		to '1'.
17	NGHBR_FSCH_CDMA_FREQ-	Frequency assignment of the Forward Supplemental
18		Channel in the neighbor base station.
19		If the NGHBR_FSCH_CDMA_FREQ_INCL field is not included
20		in this message or is included and is set to '0', the base
21		station shall omit this field; otherwise, the base station shall
22		include this field and set it as follows.
23		The base station shall set this field to the CDMA Channel
24		number corresponding to the CDMA frequency assignment
25		for the CDMA Channel containing this Forward Supplemental
26		Channel in this neighbor base station.
27	NGHBR_FSCH_CODE_CHAN_INCL -	Neighbor pilot Forward Supplemental Channel
28		Code Channel Index Included Indicator.
29		If the NGHBR_BCMC_CONFIG field is set to '000' or '011' the
30		base station shall omit this field; otherwise, the base station
31		shall include this field and set it as follows.
32		If this F-SCH in the neighbor base station uses the same code
33		channel as in this base station, the base station shall set this
34		field to '0'; otherwise, the base station shall set this field to
35		'1'.
36	NGHBR_FSCH_CODE_CHAN-	Neighbor pilot Forward Supplemental Channel Code
37		Channel Index.
38		If the NGHBR_FSCH_CODE_CHAN_INCL field is not included
39		in this message or is included and is set to '0', the base
40		station shall omit this field; otherwise, the base station shall
41		include this field and set it as follows.
42		The base station shall set this field to the code channel index
43		that the mobile station is to use for this Forward
44		Supplemental Channel on this neighbor base station.
45	NGHBR_FSCH_PARMS_INCL-	Neighbor Forward Supplemental Channel Parameters
46		Included Indicator.

1		If the NGHBR_BCMC_CONFIG field is set to '000', '010', or
2		'011', the base station shall omit this field; otherwise, the
3		base station shall include this field and set it as follows.
4		If this F-SCH in the neighbor base station uses the same
5		physical layer parameters as in this base station, the base
6		station shall set this field to '0'; otherwise, the base station
7		shall set this field to '1'.
8	NGHBR_FSCH_PLCM_IND	- Neighbor Forward Supplemental Channel Public Long
9		Code Mask Scheme Indicator.
10		If the NGHBR_FSCH_PARAMS_INCL field is not included in
11		this message, or is included and is set to '0', the base station
12		shall omit this field; otherwise, the base station shall include
13		this field and set it as follows.
14		If the index to generate PLCM for this Forward Supplemental
15		Channel is signaled in this message, the base station shall
16		set this field to '1'; otherwise if the PLCM for this Forward
17		Supplemental Channel is autonomously generated from
18		BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow
19		on this Forward Supplemental Channel as specified in
20		2.6.13.10.1, the base station shall set this field to '0'.
21	NGHBR_FSCH_PLCM_INDEX	- Index to generate the Forward Supplemental Channel
22		public long code mask.
23		If the NGHBR_FSCH_PLCM_IND field is not included or is
24		included and is set to '0', the base station shall omit this
25		field; otherwise, the base station shall include and set it as
26		follows.
27		The base station shall set this field to the index from which
28		the public long code mask for this Forward Supplemental
29		Channel is generated as specified in 2.6.13.10.2.
30	NGHBR_FSCH_MUX_OPTION	- Multiplex Option of the Forward Supplemental
31		Channel in the neighbor base station.
32		If the NGHBR_FSCH_PARAMS_INCL field is not included in
33		this message or is included and is set to '0', the base station
34		shall omit this field; otherwise, the base station shall include
35		this field and set it as follows.
36		The base station shall set this field to the multiplex option of
37		this Forward Supplemental Channel in the neighbor base
38		station as specified in [3].
39	NGHBR_FSCH_RC	- Radio configuration of the Forward Supplemental Channel in
40		the Neighbor Base Station.
41		If the NGHBR_FSCH_PARAMS_INCL field is not included in
42		this message or is included and is set to '0', the base station
43		shall omit this field; otherwise, the base station shall include
44		this field and set it as follows.

1		The base station shall set this field to the radio configuration
2		to be used by the mobile station for this Forward
3		Supplemental Channel in this neighbor base station as
4		specified in [2].
5	NGHBR_FSCH_CODING -	Coding type of the Forward Supplemental Channel in this
6		neighbor base station.
7		If the NGHBR_FSCH_PARMS_INCL field is not included in
8		this message or is included and is set to '0', the base station
9		shall omit this field; otherwise, the base station shall include
10		this field and set it as follows.
11		The base station shall set this field to '1' if Convolutional
12		Coding will be used when the number of channel bits per
13		frame is less than 360 and Turbo Coding when the number of
14		channel bits per frame is equal to or greater than 360. The
15		base station shall set this field to '0' if Convolution Coding
16		will be used for all block sizes.
17	NGHBR_FSCH_OUTERCODE_INCL -	Forward Supplemental Channel Outer Code
18		included indicator for this neighbor base station.
19		If the NGHBR_FSCH_PARMS_INCL field is not included in
20		this message or is included and is set to '0', the base station
21		shall omit this field; otherwise, the base station shall include
22		this field and set it as follows.
23		The base station shall set this field to '1' if the Forward
24		Supplemental Channel outer code information for this
25		neighbor base station is included in this message; otherwise,
26		the base station shall set this field to '0'.
27	NGHBR_FSCH_OUTERCODE_RATE -	Outer Code Rate of the Forward Supplemental
28		Channel in this neighbor base station.
29		If the FSCH_OUTERCODE_INCL field is not included or is
30		included and set to '0', the base station shall omit this field;
31		otherwise, the base station shall include this field and set it
32		as follows:
33		The base station shall set this field to specify the outer code
34		rate of the Forward Supplemental Channel as specified in
35		Table 3.7.2.3.2.38-3.
36	NGHBR_FSCH_OUTERCODE_OFFSET -	Outer Coding Buffer Offset of the Forward
37		Supplemental Channel in this neighbor base station.
38		If the FSCH_OUTERCODE_INCL field is not included or is
39		included and is set to '0', the base station shall omit this
40		field; otherwise, the base station shall include this field and
41		set it as follows:
42		The base station shall set this field to specify the outer coding
43		buffer offset of the Forward Supplemental Channel in units of
44		20ms as specified in [2]. The base station shall set this field
45		to a value between 0 and 63 inclusive.
46	NGHBR_FSCH_NUM_BITS_IDX -	Number of Information bits index of the Forward
47		Supplemental Channel in the Neighbor Base Station.

1 If the NGHBR\_FSCH\_PARAMS\_INCL field is not included in  
2 this message or is included and is set to '0', the base station  
3 shall omit this field; otherwise, the base station shall include  
4 this field and set it as follows.

5 The base station shall set this field according to Table  
6 3.7.3.3.2.37-4 to indicate the number of information bits per  
7 frame and the length of the CRC field for this Forward  
8 Supplemental Channel in this neighbor base station.

9 NGHBR\_FSCH\_FRAME\_40\_USED - Forward Supplemental Channel 40ms frame used  
10 indicator in the Neighbor Base Station.

11 If the NGHBR\_FSCH\_PARAMS\_INCL field is not included in  
12 this message or is included and is set to '0', the base station  
13 shall omit this field; otherwise, the base station shall include  
14 this field and set it as follows.

15 The base station shall set this field to '1' if 40ms frame is  
16 used on this Forward Supplemental Channel in this neighbor  
17 base station; otherwise, the base station shall set this field to  
18 '0'.

19 The base station shall not set both  
20 NGHBR\_FSCH\_FRAME\_40\_USED and  
21 NGHBR\_FSCH\_FRAME\_80\_USED fields to '1'.

22 NGHBR\_FSCH\_FRAME\_80\_USED - Forward Supplemental Channel 80ms frame used  
23 indicator in the Neighbor Base Station.

24 If the NGHBR\_FSCH\_PARAMS\_INCL field is not included in  
25 this message or is included and is set to '0', the base station  
26 shall omit this field; otherwise, the base station shall include  
27 this field and set it as follows.

28 The base station shall set this field to '1' if 80ms frame is  
29 used on this Forward Supplemental Channel in this neighbor  
30 base station; otherwise, the base station shall set this field to  
31 '0'.

32 The base station shall not set both  
33 NGHBR\_FSCH\_FRAME\_40\_USED and  
34 NGHBR\_FSCH\_FRAME\_80\_USED fields to '1'.

35 NGHBR\_RECORD\_RESERVED - Neighbor record reserved bits.

36 The base station shall add reserved bits as needed in order to  
37 make the length of this neighbor record equal to an integer  
38 number of octets. The base station shall set these bits to '0'.

39 BCMC\_NUM\_BCCH\_NGHR - Number of neighbor base stations that support  
40 Broadcast Control Channel.

41 The base station shall set this field to the number of neighbor  
42 base stations included in this message that support Primary  
43 Broadcast Control Channel and support BCMC on idle state.

44 BCMC\_BCCH\_NGHR\_PN - Neighbor Pilot PN sequence offset index.

45 The base station shall set this field to the pilot PN sequence  
46 offset for this neighbor base station, in units of 64 PN chips.

1	BCMC_SR1_BCCH_NON_TD_INCL	- Common Channel in non TD mode on Spreading
2		Rate 1 information included indicator.
3		The base station shall set this field to '1' if the base station
4		includes common channels (BCCH/F-CCCH/EACH)
5		information in non TD mode; otherwise, the base station
6		shall set this field to '0'.
7	BCMC_SR1_NON_TD_FREQ_INCL	- Non Transmit Diversity frequency included
8		indicator.
9		If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is
10		included and set to '0', the base station shall omit this field;
11		otherwise, the base station shall set this field as follows:
12		The base station shall set this field to '1' if
13		BCMC_SR1_CDMA_FREQ_NON_TD is included in the
14		message. Otherwise, base station shall set this field to '0'.
15	BCMC_SR1_CDMA_FREQ_NON_TD	- Frequency assignment for non-transmit diversity
16		operation.
17		If BCMC_SR1_NON_TD_FREQ_INCL is not included, or is
18		included and set to '0', the base station shall omit this field;
19		otherwise, the base station shall set this field as follows:
20		The base station shall set this field to the CDMA Channel
21		number corresponding to the CDMA frequency assignment
22		for the CDMA Channel containing a Broadcast Control
23		Channel that does not support the TD operation.
24	BCMC_SR1_BRAT_NON_TD	- BCCH data rate in non-TD mode for Spreading Rate 1.
25		If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is
26		included and set to '0', the base station shall omit this field;
27		otherwise, the base station shall set this field as follows:
28		The base station shall set this field to the BRAT field value
29		shown in Table 3.7.2.3.2.26-2 corresponding to the data rate
30		used by the Primary Broadcast Control Channel in the
31		system.
32	BCMC_SR1_CRAT_NON_TD	- BCCH code rate in non Transmit Diversity mode for
33		Spreading Rate 1.
34		If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is
35		included and set to '0', the base station shall omit this field;
36		otherwise, the base station shall set this field as follows:
37		The base station shall set this field to '0' if the BCCH Code
38		Rate is 1/4 (see [2]). The base station shall set this field to '1'
39		if the BCCH code rate is 1/2 (see [2]).
40	BCMC_SR1_BCCH_CODE_CHAN_NON_TD	- Walsh code for the Spreading Rate 1 BCCH
41		in non Transmit Diversity mode.
42		If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is
43		included and set to '0', the base station shall omit this field;
44		otherwise, the base station shall set this field as follows:

1			The base station shall set this field to the Walsh code
2			corresponding to the Spreading Rate 1 BCCH in non
3			Transmit Diversity mode.
4	BCMC_SR1_TD_INCL	-	Spreading Rate 1 Transmit Diversity frequency information
5			included indicator.
6			The base station shall set this field to '1' if
7			BCMC_SR1_CDMA_FREQ_TD, BCMC_SR1_BRAT_TD,
8			BCMC_SR1_CRAT_TD, BCMC_SR1_TD_MODE, and
9			BCMC_SR1_TD_POWER_LEVEL are included in the message;
10			otherwise, the base station shall set this field to '0'.
11	BCMC_SR1_CDMA_FREQ_TD	-	Spreading Rate 1 frequency assignment for Transmit
12			Diversity operation.
13			If BCMC_SR1_TD_INCL is not included, or is included and set
14			to '0', the base station shall omit this field; otherwise, the
15			base station shall set this field as follows:
16			The base station shall set this field to the CDMA Channel
17			number corresponding to the CDMA frequency assignment
18			for the CDMA Channel containing a BCCH Channel that
19			supports the TD operation.
20	BCMC_SR1_BRAT_TD	-	BCCH data rate in Transmit Diversity mode for Spreading
21			Rate 1.
22			If BCMC_SR1_TD_INCL is not included, or is included and set
23			to '0', the base station shall omit this field; otherwise, the
24			base station shall set this field as follows:
25			The base station shall set this field to the BRAT field value
26			shown in Table 3.7.2.3.2.26-2 corresponding to the data rate
27			used by the Primary Broadcast Control Channel in the
28			system.
29	BCMC_SR1_CRAT_TD	-	BCCH code rate in Transmit Diversity mode for Spreading
30			Rate 1.
31			If BCMC_SR1_TD_INCL is not included, or is included and set
32			to '0', the base station shall omit this field; otherwise, the
33			base station shall set this field as follows:
34			The base station shall set this field to '0' if the BCCH Code
35			Rate is 1/4 (see [2]). The base station shall set this field to '1'
36			if the BCCH Code Rate is 1/2 (see [2]).
37	BCMC_SR1_BCCH_CODE_CHAN_TD	-	Walsh code for the Spreading Rate 1 BCCH in
38			Transmit Diversity mode.
39			If BCMC_SR1_TD_INCL is not included, or is included and set
40			to '0', the base station shall omit this field; otherwise, the
41			base station shall set this field as follows:
42			The base station shall set this field to the Walsh code
43			corresponding to the Spreading Rate 1 BCCH in Transmit
44			Diversity mode.
45	BCMC_SR1_TD_MODE	-	Spreading Rate 1 Transmit Diversity Mode.

1 If BCMC\_SR1\_TD\_INCL is not included, or is included and set  
2 to '0', the base station shall omit this field; otherwise, the  
3 base station shall set this field as follows:  
4  
5 The base station shall set this field corresponding to Table  
6 3.7.2.3.2.26-3.  
7  
8 BCMC\_SR1\_TD\_POWER\_LEVEL - Spreading Rate 1 TD transmit power level.  
9  
10 If BCMC\_SR1\_TD\_INCL is not included, or is included and set  
11 to '0', the base station shall omit this field; otherwise, the  
12 base station shall set this field as follows:  
13  
14 The base station shall set this field to the TD transmit power  
level relative to that of the Forward Pilot Channel, as specified  
in Table 3.7.2.3.2.26-4.

## 1 3.7.2.3.2.39 Access Point Identification Message

2 MSG\_TAG: APIDM

3

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
ASSTN_TYPE	3
SID	15
NID	16
AP_ID_LEN	4
AP_ID	16 x AP_ID_LEN
AP_ID_MASK	8
IOS_MSC_ID	24
IOS_CELL_ID	16
HRPD_ACQ_REC_INCL	1
HRPD_PN	0 or 9
HRPD_BAND_CLASS	0 or 5
HRPD_CHANNEL	0 or 11
LOC_REC_TYPE	3
LOC_REC_LEN	5
LOC_REC	8 x LOC_REC_LEN
INTRA_FREQ_HO_HYS_INCL	1
INTRA_FREQ_HO_HYS	0 or 7
INTRA_FREQ_HO_SLOPE_INCL	1
INTRA_FREQ_HO_SLOPE	0 or 6
INTER_FREQ_HO_HYS_INCL	1
INTER_FREQ_HO_HYS	0 or 7
INTER_FREQ_HO_SLOPE_INCL	1
INTER_FREQ_HO_SLOPE	0 or 6
INTER_FREQ_SRCH_TH_INCL	1
INTER_FREQ_SRCH_TH	0 or 5

4

5 PILOT\_PN - Pilot PN sequence offset index.



- 1 The base station shall set this field to the pilot PN sequence  
 2 offset for this base station, in units of 64 PN chips.
- 3 CONFIG\_MSG\_SEQ - Configuration message sequence number.
- 4 The base station shall set this field to CONFIG\_SEQ  
 5 (see 3.6.2.2).
- 6 ASSTN\_TYPE - Association Type.
- 7 The base station shall set this field to the value shown in  
 8 Table 3.7.2.3.2.39-1 corresponding to the configuration of the  
 9 base station.

10 **Table 3.7.2.3.2.39-1. Association Type Field**

Value (binary)	Association Type
000	The base station allows any mobile stations to register and receive any services available at the base station.
001	The base station only allows any mobile stations to register and receive page on the base station.
010	The base station only allows selected mobile stations to register and only provides services to the selected mobile stations.
011-111	Reserved.

- 11
- 12 SID - System identification.
- 13 The base station shall set this field to the system  
 14 identification number for this system (see 2.6.5.2).
- 15 NID - Network identification.
- 16 This field serves as a sub-identifier of a system as defined by  
 17 the owner of the SID.
- 18 The base station shall set this field to the network  
 19 identification number for this network (see 2.6.5.2).
- 20 AP\_ID\_LEN - Access Point identification length.
- 21 The base station shall set this field to the length of the access  
 22 point identification in units of 16 bits.
- 23 AP\_ID - Access Point identification.
- 24 The base station shall set this field to its access point  
 25 identification number.
- 26 AP\_ID\_MASK - Access Point identification mask.
- 27 The base station shall set this field to the number of  
 28 consecutive bits (starting from the most significant bit) of  
 29 AP\_ID which identifies the group of access points.

1	IOS_MSC_ID	-	MSC_ID of the base station.
2			The base station shall set this field to the MSC_ID value that
3			the other base station uses in the network (see [48]) for
4			handoff into this base station.
5	IOS_CELL_ID	-	CELL_ID of the base station.
6			The base station shall set this field to the CELL_ID value that
7			the other base station uses in the network (see [48]) for
8			handoff into this base station.
9	HRPD_ACQ_REC_INCL	-	HRPD Acquisition Record Included.
10			The base station shall set this field to '1' if the message
11			includes HRPD acquisition information. Otherwise, this field
12			shall be set to '0'.
13	HRPD_PN	-	HRPD pilot PN sequence offset index.
14			If the HRPD_ACQ_REC_INCL field is set to '1', then this field
15			is set to the pilot PN sequence offset corresponding to the
16			HRPD pilot at this access point, in units of 64 PN chips.
17			Otherwise, this field shall be omitted.
18	HRPD_BAND_CLASS	-	HRPD Band Class.
19			If the HRPD_ACQ_REC_INCL field is set to '1', then this field
20			is set to the Band Class number corresponding to the
21			frequency assignment of the channel allocated to the HRPD
22			pilot at this access point. Otherwise, this field shall be
23			omitted.
24	HRPD_CHANNEL	-	HRPD Channel.
25			If the HRPD_ACQ_REC_INCL field is set to '1', then this field
26			is set to the channel number corresponding to the Band
27			Class of the HRPD pilot at this access point. Otherwise, this
28			field shall be omitted.
29	LOC_REC_TYPE	-	Location record type.
30			The base station shall set this field based on the type of the
31			LOC_REC field included in this message.
32	LOC_REC_LEN	-	Location record length.
33			The base station shall set this field to the number of octets in
34			the fields included in LOC_REC field. If LOC_REC_TYPE field
35			is set to '000', then this field shall be set to zero.
36	LOC_REC	-	Location record.
37			The Location record fields are determined by the value of
38			LOC_REC_TYPE, as described below.
39	If LOC_REC_TYPE = '000', the LOC_REC field shall be omitted.		
40	If LOC_REC_TYPE = '001', the LOC_REC field shall be:		
41			

BASE_LAT	22
BASE_LONG	23
LOC_UNC_H	4
BASE_HEIGHT	14
LOC_UNC_V	4
Reserved	0-7

If LOC\_REC\_TYPE field is set to '001', the base station shall include the following sub-fields in LOC\_REC field:

BASE\_LAT - Base station latitude.

The base station shall set this field to its latitude in units of 0.25 second, expressed as a two's complement signed number with positive numbers signifying North latitudes. The base station shall set this field to a value in the range - 1296000 to 1296000 inclusive (corresponding to a range of - 90° to +90°). The base station shall set this field to all zeros if its latitude is not known.

BASE\_LONG - Base station longitude.

The base station shall set this field to its longitude in units of 0.25 second, expressed as a two's complement signed number with positive numbers signifying East longitude. The base station shall set this field to a value in the range - 2592000 to 2592000 inclusive (corresponding to a range of - 180° to +180°). The base station shall set this field to all zeros if its longitude is not known.

LOC\_UNC\_H - Horizontal location uncertainty.

The base station shall set this field to the circular horizontal location uncertainty, as specified in Table 3.7.2.3.2.39-2. The value of this field indicates the radius of a circular 95% confidence coverage area.

**Table 3.7.2.3.2.39-2. Horizontal Position Uncertainty**

'0000'	LOC_UNC_H < 20 m
'0001'	20 m • LOC_UNC_H < 40 m
'0010'	40 m • LOC_UNC_H < 70 m
'0011'	70 m • LOC_UNC_H < 100 m
'0100'	100 m • LOC_UNC_H < 200 m
'0101'	200 m • LOC_UNC_H < 400 m
'0110'	400 m • LOC_UNC_H < 700 m
'0111'	700 m • LOC_UNC_H < 1,000 m
'1000'	1,000 m • LOC_UNC_H < 2,000 m

'1001'	2,000 m • LOC_UNC_H < 4,000 m
'1010'	4,000 m • LOC_UNC_H < 7,000 m
'1011'	7,000 m • LOC_UNC_H < 10,000 m
'1100'	10,000 m • LOC_UNC_H < 20,000 m
'1101'	20,000 m • LOC_UNC_H < 40,000 m
'1110'	40,000 m • LOC_UNC_H < 70,000 m
'1111'	70,000 m • LOC_UNC_H

**BASE\_HEIGHT** - Base station height.

The base station shall set this field to the height, above the WGS-84 reference ellipsoid, in units of 1 meter, in the range from -500 m to 15,882 m, where the binary value of the field conveys the height plus 500 m. The base station shall set this field to all ones if its height is not known.

**LOC\_UNC\_V** - Vertical location uncertainty.

The base station set this field to the vertical location uncertainty, as specified in Table 3.7.2.3.2.39-3. The value of this field indicates the one-sigma uncertainty of HEIGHT within the corresponding horizontal coverage area.

**Table 3.7.2.3.2.39-3. Vertical Position Uncertainty**

'0000'	0 < LOC_UNC_V < 1 m
'0001'	1 m • LOC_UNC_V < 2 m
'0010'	2 m • LOC_UNC_V < 4 m
'0011'	4 m • LOC_UNC_V < 7 m
'0100'	7 m • LOC_UNC_V < 10 m
'0101'	10 m • LOC_UNC_V < 20 m
'0110'	20 m • LOC_UNC_V < 40 m
'0111'	40 m • LOC_UNC_V < 70 m
'1000'	70 m • LOC_UNC_V < 100 m
'1001'	100 m • LOC_UNC_V < 200 m
'1010'	200 m • LOC_UNC_V < 400 m
'1011'	400 m • LOC_UNC_V < 700 m
'1100'	700 m • LOC_UNC_V < 1,000 m
'1101'	1,000 m • LOC_UNC_V < 2,000 m
'1110'	2,000 m • LOC_UNC_V < 4,000 m

'1111'	4,000 m • LOC_UNC_V
--------	---------------------

1	
2	INTRA_FREQ_HO_HYS_INCL - Intra-frequency idle handoff hysteresis included.
3	The base station shall set this field to '1' if the message
4	includes intra-frequency idle handoff hysteresis information.
5	Otherwise, this field shall be set to '0'.
6	INTRA_FREQ_HO_HYS - Intra-frequency idle handoff hysteresis.
7	If the INTRA_FREQ_HO_HYS_INCL field is set to '1', then the
8	base station shall set this field to the intra-frequency idle
9	handoff hysteresis value in units of dB (see 2.6.2.1.4.1),
10	expressed as an unsigned binary number.
11	If the INTRA_FREQ_HO_HYS_INCL field is set to '0', then this
12	field shall be omitted.
13	INTRA_FREQ_HO_SLOPE_INCL - Intra-frequency idle handoff slope included.
14	The base station shall set this field to '1' if the message
15	includes intra-frequency idle handoff slope information.
16	Otherwise, this field shall be set to '0'. This field shall not be
17	set to '1' if INTRA_FREQ_HO_HYS_INCL field is not set to '1'.
18	INTRA_FREQ_HO_SLOPE - Intra-frequency idle handoff slope.
19	If the INTRA_FREQ_HO_SLOPE_INCL field is set to '1', then
20	the base station shall set this field to the slope in the intra-
21	frequency idle handoff inequality criterion (see 2.6.2.1.4.1).
22	The base station shall set this field as an unsigned binary
23	number.
24	If the INTRA_FREQ_HO_SLOPE_INCL field is set to '0', then
25	this field shall be omitted.
26	INTER_FREQ_HO_HYS_INCL - Inter-frequency idle handoff hysteresis included.
27	The base station shall set this field to '1' if the message
28	includes inter-frequency idle handoff hysteresis information.
29	Otherwise, this field shall be set to '0'.
30	INTER_FREQ_HO_HYS - Inter-frequency idle handoff hysteresis.
31	If the INTER_FREQ_HO_HYS_INCL field is set to '1', then the
32	base station shall set this field to the inter-frequency idle
33	handoff hysteresis value in units of dB (see 2.6.2.1.4.1),
34	expressed as an unsigned binary number.
35	If the INTER_FREQ_HO_HYS_INCL field is set to '0', then this
36	field shall be omitted.
37	INTER_FREQ_HO_SLOPE_INCL - Inter-frequency idle handoff slope included.
38	The base station shall set this field to '1' if the message
39	includes inter-frequency idle handoff slope information.
40	Otherwise, this field shall be set to '0'. This field shall not be
41	set to '1' if INTER_FREQ_HO_HYS_INCL field is not set to '1'.
42	INTER_FREQ_HO_SLOPE - Inter-frequency idle handoff slope.

If the INTER\_FREQ\_HO\_SLOPE\_INCL field is set to '1', then the base station shall set this field to the slope in the inter-frequency idle handoff inequality criterion (see 2.6.2.1.4.1). The base station shall set this field as an unsigned binary number.

If the INTER\_FREQ\_HO\_SLOPE\_INCL field is set to '0', then this field shall be omitted.

INTER\_FREQ\_SRCH\_TH\_INCL - Inter-frequency idle search threshold included.

The base station shall set this field to '1' if the message includes inter-frequency idle search threshold information. Otherwise, this field shall be set to '0'.

INTER\_FREQ\_SRCH\_TH - Inter-frequency idle search threshold.

If the INTER\_FREQ\_SRCH\_TH\_INCL field is set to '1', then the base station shall set this field to the inter-frequency idle search threshold value (see 2.6.2.1.4.1) in 0.5 dB decrements as specified in Table 3.7.2.3.2.39-4.

**Table 3.7.2.3.2.39-4. Inter-frequency Search Threshold**

INTER_FREQ_SRCH_TH	Inter-frequency search threshold
'00000'	0 dB
'00001'	- 0.5 dB
'00010'	- 1 dB
...	...
'11110'	- 15 dB
'11111'	- 15.5dB

If the INTER\_FREQ\_SRCH\_TH\_INCL field is set to '0', then this field shall be omitted.

RESERVED - Reserved bits.

This field shall contain the number of bits required to make the entire LOC\_REC field an integer number of octets in length. All bits of this field shall be set to zeros.

# 3.7.2.3.2.40 Access Point Identification Text Message

MSG\_TAG: APTIDM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
AP_ID_TEXT_LEN	8

One occurrence of the following AP\_ID\_TEXT field

AP_ID_TEXT	8 x AP_ID_TEXT_LEN
------------	--------------------

3

4 PILOT\_PN - Pilot PN sequence offset index.

5 The base station shall set this field to the pilot PN sequence  
6 offset for this base station, in units of 64 PN chips.

7 CONFIG\_MSG\_SEQ - Configuration message sequence number.

8 The base station shall set this field to CONFIG\_SEQ  
9 (see 3.6.2.2).

10 AP\_ID\_TEXT\_LEN - Access Point Identification Text length.

11 The base station shall set this field to the number of octets in  
12 the AP\_ID\_TEXT field following the AP\_ID\_TEXT\_LEN field.

13 AP\_ID\_TEXT - Access Point Identification Text.

14 The AP\_ID\_TEXT field shall include the following sub-fields:

15

MSG_ENCODING	5
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field

{

CHARi	Variable – see [30]
-------	---------------------

}

Reserved	0-7
----------	-----

16

17 MSG\_ENCODING - Message encoding.

18 See [30].

1			Support of an encoding method does not imply that the entire
2			encodable character set needs to be supported. In general,
3			once the supported character set is determined, various
4			subsets of the character set can be supported. If a message is
5			comprised entirely of characters from a supported subset of a
6			character set, it can be displayed. If a message contains an
7			unsupported character of a character set, it can be discarded.
8	NUM_FIELDS	-	Number of fields.
9			If the MSG_ENCODING field is set to '00101' (Shift-JIS) or
10			'00110' (Korean), this field indicates the total length in bytes
11			of the CHARi field; otherwise this field shall be set to the
12			number of characters included in this occurrence of the
13			encoding-specific-fields.
14	CHARi	-	Character.
15			NUM_FIELDS occurrences of this field shall be included. The
16			base station shall set each occurrence of this field to
17			represent the character string that identifies this base
18			station. The character string shall be included in the order of
19			appearance.
20	RESERVED	-	Reserved bits.
21			This field shall contain the number of bits required to make
22			the entire AP_ID_TEXT field an integer number of octets in
23			length. All bits of this field shall be set to zeros.
24			



1 3.7.2.3.2.41 Access Point Pilot Information Message

2 MSG\_TAG: APPIM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
LIFETIME	16
NUM_APPI_REC	9

NUM\_APPI\_REC occurrences of the following record:

APPI_REC	Variable
----------	----------

3

4 PILOT\_PN - Pilot PN sequence offset index.

5 The base station shall set this field to the pilot PN sequence  
6 offset for this base station, in units of 64 PN chips.

7 CONFIG\_MSG\_SEQ - Configuration message sequence number.

8 The base station shall set this field to CONFIG\_SEQ  
9 (see 3.6.2.2).

10 LIFETIME - Lifetime of the access point pilot information

11 The base station shall set this field to the duration (in  
12 minutes) that the information in this message remains valid  
13 at the mobile station if the mobile station does not receive  
14 another Access Point Pilot Information message.

15 NUM\_APPI\_REC - Number of access point pilot information record.

16 The base station shall set this field based on the number of  
17 access point pilot information record included in this  
18 message.

1 The base station shall include NUM\_APPI\_REC occurrences of the following APPI\_REC  
 2 record.

3

AP_ASSN_TYPE	3
AP_SID_SAME_AS_PREVIOUS	1
AP_NID_SAME_AS_PREVIOUS	1
AP_BAND_SAME_AS_PREVIOUS	1
AP_FREQ_SAME_AS_PREVIOUS	1
AP_PN_REC_SAME_AS_PREVIOUS	1
AP_SID	0 or 15
AP_NID	0 or 16
AP_BAND	0 or 5
AP_FREQ	0 or 11
AP_PN_REC_TYPE	0 or 3
AP_PN_REC_LEN	0 or 5
AP_PN_REC	0 or 8 x AP_PN_REC_LEN
RESERVED	0 – 7 (as needed)

4

5 AP\_ASSN\_TYPE - Access point association type.

6 The base station shall set this field to association type of the  
 7 access points listed in APPI\_REC according to Table  
 8 3.7.2.3.2.41-1.

9 **Table 3.7.2.3.2.41-1. Access Point Association Type Field**

<b>Value (binary)</b>	<b>Access Point Association Type</b>
000	The base station allows any mobile stations to register and receive any services available at the base station.
001	The base station only allows any mobile stations to register and receive page on the base station.
010	The base station only allows selected mobile stations to register and only provides services to the selected mobile stations.
011-110	Reserved.
111	There is no designated association type corresponding to access points in this APPI_REC record.

10

- 1 AP\_SID\_SAME\_AS\_PREVIOUS - The base station shall set this field to '1' if the system  
 2 identification value associated with this record is identical to  
 3 the system identification value in the previous record.  
 4 Otherwise, the base station shall set this field to '0'.
- 5 AP\_NID\_SAME\_AS\_PREVIOUS - The base station shall set this field to '1' if the network  
 6 identification value associated with this record is identical to  
 7 the system identification value in the previous record.  
 8 Otherwise, the base station shall set this field to '0'.
- 9 AP\_BAND\_SAME\_AS\_PREVIOUS -  
 10 The base station shall set this field to '1' if the band class  
 11 value associated with this record is identical to the band  
 12 class value in the previous record. Otherwise, the base  
 13 station shall set this field to '0'.
- 14 AP\_FREQ\_SAME\_AS\_PREVIOUS -  
 15 The base station shall set this field to '1' if the CDMA  
 16 Channel number associated with this record is identical to  
 17 the CDMA Channel number in the previous record.  
 18 Otherwise, the base station shall set this field to '0'.
- 19 AP\_PN\_SAME\_AS\_PREVIOUS -  
 20 The base station shall set this field to '1' if the list of PN  
 21 Offsets associated with this record is identical to the list of PN  
 22 Offsets associated with the previous record. Otherwise, the  
 23 base station shall set this field to '0'.
- 24 AP\_SID - Access Point System identification.  
 25 The base station shall omit this field if the  
 26 AP\_SID\_SAME\_AS\_PREVIOUS field is set to '1'. Otherwise,  
 27 the base station shall set this field to the system  
 28 identification number (see 2.6.5.2) that the following pilot  
 29 information applies to.
- 30 AP\_NID - Access Point Network identification.  
 31 This field serves as a sub-identifier of a system as defined by  
 32 the owner of the SID.  
 33 The base station shall omit this field if the  
 34 AP\_NID\_SAME\_AS\_PREVIOUS field is set to '1'. Otherwise,  
 35 the base station shall set this field to the network  
 36 identification number (see 2.6.5.2) that the following pilot  
 37 information applies to.
- 38 AP\_BAND - Access Point Band class.  
 39 The base station shall omit this field if the  
 40 AP\_BAND\_SAME\_AS\_PREVIOUS field is set to '1'. Otherwise,  
 41 the base station shall set this field according to the band  
 42 class, as defined in [38], of access points listed in this record.
- 43 AP\_FREQ - Access Point Frequency assignment.

1 The base station shall omit this field if the  
 2 AP\_FREQ\_SAME\_AS\_PREVIOUS field is set to '1'. Otherwise,  
 3 the base station shall set this field to the CDMA Channel  
 4 number corresponding to the CDMA frequency assignment  
 5 corresponding to the access points listed in this record.

6 AP\_PN\_REC\_TYPE - Access Point PN Record Type.

7 The base station shall omit this field if the  
 8 AP\_PN\_REC\_SAME\_AS\_PREVIOUS field is set to '1'.  
 9 Otherwise, the base station shall set this field according to  
 10 the AP\_PN\_REC field including in this record.

11 AP\_PN\_REC\_LEN - Access Point PN Record Length.

12 The base station shall omit this field if the  
 13 AP\_PN\_REC\_SAME\_AS\_PREVIOUS field is set to '1'.  
 14 Otherwise, the base station shall set this field to the number  
 15 of octets in the AP\_PN\_REC field following this field.

16 AP\_PN\_REC - Access Point PN Record.

17 The base station shall omit this field if the  
 18 AP\_PN\_REC\_SAME\_AS\_PREVIOUS field is set to '1'.  
 19 Otherwise, the base station shall set this field as follow.

20

21 If the AP\_PN\_REC\_TYPE field is set to '000', then this field  
 22 shall be set as

23

AP_PN_COUNT	7
-------------	---

AP\_PN\_COUNT occurrences of the following field:

AP_PN	9
-------	---

24 AP\_PN\_COUNT - Access Point PN Count.

25 The base station shall set this field to the number of AP\_PN  
 26 fields in this record following this field.

27 AP\_PN - Access point pilot PN sequence offset index.

28 The base station shall set this field to the pilot PN sequence  
 29 offset allocated for access points in this area, in units of 64  
 30 PN chips.

31

32 If the AP\_PN\_REC\_TYPE field is set to '001', then this field  
 33 shall be set as

34

AP_PN_COUNT	8
AP_PN_START	9
AP_PN_INC	4

35 AP\_PN\_COUNT - Access Point PN Count.

1			The base station shall set this field to the number of pilot PN
2			sequence offset in the series listed in this record.
3	AP_PN_START	-	Access point pilot PN sequence offset index.
4			The base station shall set this field to the smallest pilot PN
5			sequence offset, in units of 64 PN chips, in the series listed in
6			this record allocated for access points in this area.
7	AP_PN_INC	-	Access Point Pilot PN sequence offset index increment.
8			The base station shall set this field to the pilot PN sequence
9			increment, in units of 64 PN chips, that such that the pilot
10			PN sequence offsets in the series allocated to the access
11			points in this area are: $AP\_PN\_START + (k \times PILOT\_INC)$
12			where $k = 0, \dots, AP\_PN\_COUNT - 1$ .
13			
14	RESERVED	-	Reserved bits.
15			The base station shall add reserved bits as needed in order to
16			make the total length of the APPI_REC through this
17			RESERVED field equal to an integer number of octets. The
18			base station shall set these bits to '0'.
19			

## 1 3.7.2.3.2.42 General Overhead Information Message

## 2 MSG\_TAG: GOIM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
NUM_GOI_REC	4

NUM\_GOI\_REC occurrences of the following fields

{

GOI_REC_TYPE	8
GOI_REC_LEN	8
GOI_REC	8 x GOI_REC_LEN

}

- 3           PILOT\_PN   - Pilot PN sequence offset index.
- 4                       The base station shall set this field to the pilot PN sequence
- 5                       offset for this base station, in units of 64 PN chips.
- 6       CONFIG\_MSG\_SEQ   - Configuration message sequence number.
- 7                       The base station shall set this field to CONFIG\_SEQ
- 8                       (see 3.6.2.2).
- 9       NUM\_GOI\_REC   - Number of GOI records included in this message.
- 10                      The base station shall set this field to the number of *General*
- 11                      *Overhead Information Message* records included in this
- 12                      message. The base station shall include atleast one General
- 13                      Overhead Information record in this message.
- 14       GOI\_REC\_TYPE   - GOI record type.
- 15                      The base station shall set this field to the type of the *General*
- 16                      *Overhead Information Message* record according to table
- 17                      3.7.2.3.2.42-1 and [30]<sup>12</sup>.

---

<sup>12</sup> Further record types may be defined in [30].

**Table 3.7.2.3.2.42-1. General Overhead Information  
Record Type Field**

<b>Value (binary)</b>	<b>Record Type Description</b>
00000000	The base station shall include the operator name in this record.
00000001	The base station shall include the cell name in this record <sup>13</sup> .
00000010 - 11111111	Reserved.

- GOI\_REC\_LEN - The length of the GOI record length.  
The base station shall set this field to the number of octets in the GOI\_REC field following the GOI\_REC\_LEN.
- GOI\_REC - General Overhead Information record.  
If the GOI\_REC\_TYPE is set to '00000000' or '00000001', the GOI\_REC field shall include the following fields<sup>14</sup>:

MSG_ENCODING	5
NUM_FIELDS	8
NUM_FIELDS occurrences of the following field	
{	
CHARi	Variable – see [30]
}	
Reserved	0-7

- MSG\_ENCODING - Message encoding.  
See [30].  
Support of an encoding method does not imply that the entire encodable character set needs to be supported. In general, once the supported character set is determined, various subsets of the character set can be supported. If a message is comprised entirely of characters from a supported subset of a character set, it can be displayed. If a message contains an unsupported character of a character set, it can be discarded.
- NUM\_FIELDS - Number of fields.

<sup>13</sup> For example, the base station may include a text string identifying the region.

<sup>14</sup> Future GOI records may be defined in [30].

1			If the MSG_ENCODING field is set to '00101' (Shift-JIS) or
2			'00110' (Korean), this field indicates the total length in bytes
3			of the CHARi field; otherwise this field shall be set to the
4			number of characters included in this occurrence of the
5			encoding-specific-fields.
6	CHARi	-	Character.
7			NUM_FIELDS occurrences of this field shall be included. The
8			base station shall set each occurrence of this field to
9			represent the character string that identifies this base
10			station. The character string shall be included in the order of
11			appearance.
12	RESERVED	-	Reserved bits.
13			This field shall contain the number of bits required to make
14			the entire GOI_REC field an integer number of octets in
15			length. All bits of this field shall be set to zeros.
16			



## 1 3.7.2.3.2.43 Flex Duplex CDMA Channel List Message

## 2 MSG\_TAG: FDCCLM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
CAND_BAND_INFO_REQ	1
RC_QPCH_SEL_INCL	1
TD_SEL_INCL	1
CDMA_FREQ_WEIGHT_INCL	1
NUM_CAND_BAND_CLASS	3

{ (NUM\_CAND\_BAND\_CLASS + 1)

CAND_BAND_CLASS	5
SUBCLASS_INFO_INCL	0 or 1
SUBCLASS_REC_LEN	0 or 5

SUBCLASS\_REC\_LEN + 1 occurrences of the following subrecord:

{ (SUBCLASS\_REC\_LEN + 1)

BAND_SUBCLASS_IND	1
-------------------	---

} (SUBCLASS\_REC\_LEN + 1)

TD_MODE	0 or 2
BYPASS_SYS_DET_IND	1
NUM_FREQ	4

NUM\_FREQ occurrences of the following field:

{ (NUM\_FREQ)

CDMA_FREQ	11
REMAINING_FIELD_INCL	1
REV_CDMA_FREQ	0 or 11
RC_QPCH_HASH_IND	0 or 1
TD_HASH_IND	0 or 1
TD_POWER_LEVEL	0 or 2
CDMA_FREQ_WEIGHT	0 or 3

} (NUM\_FREQ)

} (NUM\_CAND\_BAND\_CLASS + 1)

1	PILOT_PN	-	Pilot PN sequence offset index.
2			The base station shall set this field to the pilot PN sequence
3			offset for this base station, in units of 64 PN chips.
4	CONFIG_MSG_SEQ	-	Configuration message sequence number.
5			The base station shall set this field to CONFIG_SEQ
6			(see 3.6.2.2).
7	CAND_BAND_INFO_REQ	-	Candidate band class information request indicator
8			The base station shall set this field to '1' when requesting
9			mobiles to report whether various candidate band class and
10			band subclass (if applicable) combinations are supported;
11			otherwise, the base station shall set this field to '0'.
12			The base station shall not include more than 16 band class-
13			band subclass queries in this message.
14	RC_QPCH_SEL_INCL	-	RC and QPCH Selection included indicator
15			The base station shall set this field to '1' if
16			RC_QPCH_HASH_IND field are included; otherwise, it shall
17			set this field to '0'.
18			If the base station sets this field to '1', the base station shall
19			set the RC_QPCH_HASH_IND field to '1' in at least one of the
20			records.
21	TD_SEL_INCL	-	Transmit diversity selection indicator included.
22			If the base station includes transmit diversity selection
23			information in this message it shall set this field to '1';
24			otherwise, the base station shall set this field to '0'.
25			When the <i>Flex Duplex CDMA Channel List Message</i> is sent on
26			the Paging Channel, the base station shall set this field to '0'.
27	CDMA_FREQ_WEIGHT_INCL	-	CDMA frequency weight included indicator
28			The base station shall set this field to '1' if the
29			CDMA_FREQ_WEIGHT fields are included in this message;
30			otherwise, it shall set this field to '0'.
31	NUM_CAND_BAND_CLASS	-	Number of candidate band classes
32			The base station shall set this field to the number of
33			candidate band classes included in the record minus one.
34	The base station shall include NUM_CAND_BAND_CLASS + 1 occurrences of the following		
35	record:		
36	CAND_BAND_CLASS	-	Candidate band class

1		The base station shall set this field (see [30]) to a band class
2		for which the mobile is to report it's capabilities upon system
3		access. It may be used in conjunction with the
4		BAND_SUBCLASS_IND fields to specify band subclass(es) for
5		which the mobile is to report it's capabilities upon system
6		access.
7	SUBCLASS_INFO_INCL -	Band subclass information included
8		The base station shall omit this field if
9		CAND_BAND_INFO_REQ is set to '0'. Otherwise the base
10		station shall set this field as follows:
11		The base station shall set this field to '0' when no band
12		subclasses are associated with CAND_BAND_CLASS or if the
13		base station requires only the band class capabilities of the
14		mobile station. Otherwise, the base station shall set this field
15		to '1'.
16	SUBCLASS_REC_LEN	- Band subclass subrecord length
17		If SUBCLASS_INFO_INCL is set to '0', the base station shall
18		omit this field; otherwise, the base station shall set this field
19		as follows:
20		The base station shall set this field to the number of band
21		subclass indicator fields included in the subrecord minus
22		one. The number of subclass indicator fields included
23		depends on the highest band subclass being queried for
24		mobile support for the associated CAND_BAND_CLASS (i.e. if
25		the highest band subclass being queried is K, then
26		SUBCLASS_REC_LEN = K).
27	If the SUBCLASS_REC_LEN field is included, the base station shall include	
28	SUBCLASS_REC_LEN +1 occurrences of the following subrecord. The first field included	
29	corresponds to band subclass '0' and the N <sup>th</sup> field included corresponds to band subclass	
30	'N-1'.	
31	BAND_SUBCLASS_IND -	Band subclass indicator
32		The base station shall set this field to '1' if it requires the
33		mobile to report whether it supports this band subclass for
34		the associated CAND_BAND_CLASS; otherwise, the base
35		station shall set this field to '0'.
36		The mobile station is to indicate its capability to support the
37		candidate band class and band subclass (if applicable)
38		combination in the General Extension Message that carries a
39		<i>Registration Message</i> , <i>Origination Message</i> , or a <i>Page</i>
40		<i>Response Message</i> and a Supported Band Class - Subclass
41		record.
42	TD_MODE -	Transmit Diversity Mode.
43		If TD_SEL_INCL is set to '0', the base station shall omit this
44		field; otherwise, the base station shall include this field and
45		set it as follows:

1		The base station shall set this field to the Transmit Diversity
2		mode on the CAND_BAND_CLASS, as specified in Table
3		3.7.2.3.2.26-3.
4	BYPASS_SYS_DET_IND	- Direct to idle allowed indicator.
5		The base station shall set this field to '1' if the mobile station
6		is allowed to go directly to idle state on any CDMA channel
7		belonging to the CAND_BAND_CLASS included in this record.
8	NUM_FREQ	- Number of additional CDMA Frequencies
9		The base station shall set this field to the number of
10		occurrences of the CDMA_FREQ field included hereafter in
11		this record.
12	The base station shall include NUM_FREQ occurrences of the following record:	
13	CDMA_FREQ	- CDMA Channel frequency assignment.
14		Each occurrence of this field shall correspond to a CDMA
15		Channel containing a Paging Channel that is supported by
16		this base station.
17		If this message is sent on the Paging Channel:
18		The base station shall set this field to the CDMA channel
19		number corresponding to the CDMA frequency
20		assignment for a CDMA Channel containing a Paging
21		Channel (see [2]).
22		This CDMA channel shall reside in the band class listed
23		in this CAND_BAND_CLASS record. If
24		SUBCLASS_INFO_INCL is equal to '1', this CDMA channel
25		shall also reside in at least one supported
26		CDMA_SUBCLASS included in this CAND_BAND_CLASS
27		record.
28		If this message is sent on the Primary Broadcast Control
29		Channel:
30		The base station shall set this field to the CDMA Channel
31		number corresponding to the CDMA frequency
32		assignment for a CDMA Channel containing a Primary
33		Broadcast Control Channel and Forward Common Control
34		Channel (see [2]).
35		This CDMA channel resides in the band class listed in
36		this CAND_BAND_CLASS record. If
37		SUBCLASS_INFO_INCL is equal to '1', this CDMA channel
38		shall also reside in at least one supported
39		CDMA_SUBCLASS included in this CAND_BAND_CLASS
40		record.
41		If the base station supports a CDMA frequency
42		assignment without transmit diversity, the base station
43		should not set the first occurrence of this field to a CDMA
44		channel number corresponding to a transmit diversity
45		frequency assignment.
46	REMAINING_FIELD_INCL	- Remaining fields included.

1		If the base station is sending <i>Extended CDMA Channel List</i>
2		<i>Message</i> that includes this CDMA_FREQ and
3		CAND_BAND_CLASS, the base station shall set this bit to '0'.
4		Otherwise, the base station shall set bit to '1'
5	REV_CDMA_FREQ	- If REMAINING_FIELD_INCL is set to '0', the base station shall
6		omit this field. Otherwise, the base station shall set this field
7		to the CDMA channel number corresponding to the CDMA
8		frequency assignment for the Reverse CDMA Channel (see [2])
9		that is paired with the CDMA_FREQ contained in this record.
10		This Reverse CDMA channel resides in the band class listed
11		in this CAND_BAND_CLASS record. If SUBCLASS_INFO_INCL
12		is equal to '1', this CDMA channel shall also reside in at least
13		one supported CDMA_SUBCLASS included in this
14		CAND_BAND_CLASS record.
15	RC_QPCH_HASH_IND	- RC QPCH channel hashing indicator
16		If REMAINING_FIELD_INCL is set to '0' or if
17		RC_QPCH_SEL_INCL is set to '0', the base station shall omit
18		this field; otherwise, the base station shall include this field
19		and set it as follows:
20		The base station shall set this field to '1', if the corresponding
21		CDMA channel is to be selected for channel hashing by
22		mobile stations capable of Radio Configurations greater than
23		two or capable of supporting Quick Paging Channel.
24	TD_HASH_IND	- Transmit diversity hash indicator.
25		If REMAINING_FIELD_INCL is set to '0' or if TD_SEL_INCL is
26		set to '0', the base station shall omit this field; otherwise, the
27		base station shall include this field and set it as follows:
28		If the associated CDMA_FREQ is to be selected for CDMA
29		channel hashing by mobile stations capable of supporting
30		transmit diversity [TD_MODE], the base station shall set the
31		field to '1'; otherwise, the base station shall set this field to
32		'0'.
33	TD_POWER_LEVEL	- Transmit diversity power level.
34		If REMAINING_FIELD_INCL is set to '0', or if TD_HASH_IND is
35		set to '0', the base station shall omit this field; otherwise, the
36		base station shall include this field and set it to the transmit
37		diversity transmission power level relative to that of the
38		Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.
39	CDMA_FREQ_WEIGHT	- CDMA frequency weight
40		If REMAINING_FIELD_INCL is set to '0' or if
41		CDMA_FREQ_WEIGHT_INCL is set to '0', the base station
42		shall omit this field; otherwise, the base station shall include
43		this field and set it as follows:
44		The base station shall set this field to one less than the
45		weight for this CDMA channel to be used in channel hashing
46		by the mobile station.
47		

## 1 3.7.2.3.2.44 General Extension Message

## 2 MSG\_TAG: GEM

Field	Length (bits)
NUM_GE_REC	8

NUM\_GE\_REC occurrences of the following record:

{ (NUM\_GE\_REC)

GE_REC_TYPE	8
GE_REC_LEN	8
GE_REC	8 x GE_REC_LEN

} (NUM\_GE\_REC)

MESSAGE_TYPE	8
MESSAGE_REC	variable

3 NUM\_GE\_REC - Number of General Extension Records included in this message.  
 4 The base station shall set this field to the number of general  
 5 extension records included in this message. Base station shall  
 6 set this field to a value greater than 0.

7 GE\_REC\_TYPE - Type of General Extension Record.  
 8 The base station shall set this field based on the type of record as  
 9 specified in Table 3.7.2.3.2.40-1.

10 **Table 3.7.2.3.2.40-1. General Extension Record Type**  
 11 **values**

GE_REC_TYPE (binary)	Description
00000000	Reverse Channel Information.
00000001	Radio Configuration Parameters Record <sup>15</sup>
00000010-11111111	Reserved

12 GE\_REC\_LEN - Length of the General Extension Record.

---

<sup>15</sup> Base station may use this record to extend CAM/ECAM/MECAM or UHDM/GHDM/EHDM/MUHDM messages instead of sending a RCPM message separately to the mobile station.

1 The base station shall set this field to the length in octets of the  
2 general extension record following the GE\_REC\_LEN field.

3 GE\_REC - General Extension Record.

4 The base station shall set this field according to the previous  
5 occurrence of the GE\_REC\_TYPE in this message.

6 If the GE\_REC\_TYPE is set to '00000000' then the base station shall set the GE\_REC to the  
7 following:

8

BAND_CLASS	5
REV_CHAN	11

9 BAND\_CLASS - Band Class of the Reverse Channel.

10 The base station shall set this field to the Band Class of  
11 the Reverse CDMA channel as specified in [30].

12 REV\_CHAN - Channel number of the reverse link frequency.

13 The base station shall set this field to the CDMA channel  
14 number corresponding to the CDMA frequency assignment  
15 for the reverse CDMA channel (see [2]) that is paired with the  
16 forward CDMA channel included in message carried in the  
17 General Extension Message.

18 If the GE\_REC\_TYPE is set to '00000001' then the base station shall set the GE\_REC to the  
19 fields of the Radio Configuration Parameters Message defined in  
20 3.7.3.3.2.51; followed by a variable length RESERVED field to make  
21 length of the entire GE\_REC record an integer number of octets, with  
22 all bits of the RESERVED field set to 0.

23 MESSAGE\_TYPE - Message type of the message included in the General  
24 Extension Message.

25 This field shall contain the message type value for the  
26 message following this field. When transmitting the general  
27 extension message over f-csch, then base station shall set the  
28 first 2 MSB of this field to '00'. The base station shall set this  
29 field according to [4].

30 MESSAGE\_REC - Message extended through the General Extension message.

31 The base station shall set this field to the message that is  
32 being extended using the *General Extension Message*.

33

## 1 3.7.2.3.2.45 Alternative Technologies Information Message

## 2 MSG\_TAG: ATIM

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
NUM_RADIO_INTERFACE	4

NUM\_RADIO\_INTERFACE occurrences of the following  
Radio Interface record:

{ (NUM\_RADIO\_INTERFACE)

RADIO_INTERFACE_TYPE	4
RADIO_INTERFACE_LEN	10
Radio Interface Type-specific fields	8 x RADIO_INTERFACE_L EN

} (NUM\_RADIO\_INTERFACE)

- 3                   PILOT\_PN    -   Pilot PN sequence offset index.
- 4                                    The base station shall set this field to the pilot PN sequence
- 5                                    offset for this base station, in units of 64 PN chips.
- 6           CONFIG\_MSG\_SEQ   -   Configuration message sequence number.
- 7                                    The base station shall set this field to CONFIG\_SEQ
- 8                                    (see 3.6.2.2 of [2]).
- 9   NUM\_RADIO\_INTERFACE   -   Number of radio interface types.
- 10                                   The base station shall set this field to the number of radio
- 11                                   interface type records included in this message.
- 12   The base station shall include NUM\_RADIO\_INTERFACE occurrences of the following
- 13   record, one occurrence for each radio interface type is included in this message.
- 14   RADIO\_INTERFACE\_TYPE   -   The radio interface type.
- 15                                   The base station shall set this field to the radio interface type
- 16                                   of this record as specified in Table 3.5-1<sup>16</sup>.

---

<sup>16</sup> New RADIO\_INTERFACE\_TYPE values may be defined in [30].



1

**Table 3.5-1. Radio Interface Type**

<b>RADIO_INTERFACE_TYPE (binary)</b>	<b>Descriptions</b>
0010	HRPD
0011	E-UTRAN
0100	WiMAX
Other	Reserved

2 RADIO\_INTERFACE\_LEN - The length of the Radio Interface Type-specific fields.

3 The base station shall set this field to the number of octets in  
4 the Radio Interface Type-specific fields of this record.

5 If RADIO\_INTERFACE\_TYPE is equal to '0010', the base station may include the following  
6 radio interface type-specific fields:

{ (COMMON RECORD)

COMMON_RECORD_LEN	4
SUBNET_COLOR_CODE_INCL	1
SUBNET_COLOR_CODE	0 or 8
COMMON_RECORD_RESERVED	0 ~ 7 (as needed)

} (COMMON RECORD)

NUM_HRPD_NGHBR	6
HRPD_NGHBR_REC_LEN	5

NUM\_HRPD\_NGHBR occurrences of the following  
subrecord:

{ (NUM\_HRPD\_NGHBR)

NGHBR_PN	9
NGHBR_FREQ_SAME_AS_PREV	1
NGHBR_BAND	0 or 5
NGHBR_FREQ	0 or 11
PN_ASSOCIATION_IND	1
DATA_ASSOCIATION_IND	1
NGHBR_SUBNET_COLOR_CODE_I ND	2
NGHBR_SUBNET_COLOR_CODE	0 or 8
HRPD_NGHBR_REC_RESERVED	0-7 (as needed)

} (NUM\_HRPD\_NGHBR)

7 COMMON\_RECORD\_LEN - Length of the common record part.

8 The base station shall set this field to one less than the  
9 length of the common record in octets, including this field.

10 SUBNET\_COLOR\_CODE\_INCL - HRPD Subnet Color Code Included Indicator.

1 If the Subnet Color Code (see [1]) associated with the HRPD sector corresponding to this  
2 pilot is included in this message, the base station shall set  
3 this field to '1'; otherwise, the base station shall set this field  
4 to '0'.

5 SUBNET\_COLOR\_CODE - HRPD Subnet Color Code.

6 If the SUBNET\_COLOR\_CODE\_INCL field is set to '0', the base station shall omit this field;  
7 otherwise, the base station shall include this field and set it  
8 as follows:

9 The base station shall set this field to Subnet Color Code (see [1]) associated with the  
10 HRPD sector corresponding to this pilot.

11 COMMON\_RECORD\_RESERVED - Common record part reserved bits.

12 The base station shall add reserved bits as needed in order to  
13 make the length of the common record equal to an integer  
14 number of octets. The base station shall set these bits to '0'.

15 NUM\_HRPD\_NGHR - Number of HRPD neighbor pilot PN sequences.

16 The base station shall set this field to the number of HRPD  
17 neighbors included in the message.

18 HRPD\_NGHR\_REC\_LEN - HRPD neighbor record length

19 The base station shall set this field to one less than the number of octets included in each  
20 HRPD neighbor records.

21 The base station shall include one occurrence of the following subrecord for each pilot that  
22 a mobile station is to place in its HRPD Neighbor Set.

23 NGHR\_PN - Neighbor pilot PN sequence offset index.

24 The base station shall set this field to the pilot PN sequence  
25 offset for this neighbor, in units of 64 PN chips.

26 NGHR\_FREQ\_SAME\_AS\_PREV - Neighbor frequency information is same as previous  
27 indicator.

28 The base station shall set this field to '1' if the neighbor  
29 frequency information for this record is the same as the  
30 neighbor frequency information for the previous record  
31 included in this message; otherwise, the base station shall  
32 set this field to '0'.

33 NGHR\_BAND - Neighbor band class.

34 If the NGHR\_FREQ\_SAME\_AS\_PREV field is set to '1', the  
35 base station shall omit this field; otherwise, the base station  
36 shall include this field and set it as follows:

37 The base station shall set this field to the CDMA band class,  
38 as specified in [5], corresponding to the CDMA frequency  
39 assignment for the CDMA Channel containing this neighbor.

40 NGHR\_FREQ - Neighbor frequency assignment.

41 If the NGHR\_FREQ\_SAME\_AS\_PREV field is set to '1', the  
42 base station shall omit this field; otherwise, the base station  
43 shall include this field and set it as follows:

1                   The base station shall set this field to the CDMA Channel  
2                   number, in the specified CDMA band class, corresponding to  
3                   the CDMA frequency assignment for this neighbor.

4    PN\_ASSOCIATION\_IND   - Neighbor PN association indicator.

5                   The base station shall set this field to '1' if the system  
6                   identified by this system record has the same PN assignment  
7                   as the MC system to which this base station belongs;  
8                   otherwise, the base station shall set this field to '0'.

9    DATA\_ASSOCIATION\_IND   - Neighbor data association indicator.

10                  The base station shall set this field to '1' if the system  
11                  identified by this system record can reach the same set of  
12                  PDSNs as the MC system to which this base station belongs;  
13                  otherwise, the base station shall set this field to '0'.

14   NGHBR\_SUBNET\_COLOR\_CODE\_IND   - Neighbor HRPD Subnet Color Code Indicator.

15                  If the Subnet Color Code (see [1]) information for this  
16                  neighbor is not included, the base station shall set this field  
17                  to '00'.

18                  If the Subnet Color Code information for this neighbor is  
19                  included and is the same value as included in the  
20                  SUBNET\_COLOR\_CODE field above, the base station shall  
21                  set this field to '01'.

22                  If the Subnet Color Code (see [1]) information for this  
23                  neighbor is included below, the base station shall set this  
24                  field to '10'.

25   NGHBR\_SUBNET\_COLOR\_CODE   - Neighbor HRPD Subnet Color Code.

26                  If the NGHBR\_SUBNET\_COLOR\_CODE\_IND field is not set to  
27                  '10', the base station shall omit this field; otherwise, the base  
28                  station shall include this field and set it as follows:

29                  The base station shall set this field to the Subnet Color Code  
30                  (see [1]) for this neighbor.

31   HRPD\_NGHBR\_REC\_RESERVED   - HRPD neighbor record reserved bits.

32                  The base station shall add reserved bits as needed in order to  
33                  make the length of this record equal to an integer number of  
34                  octets. The base station shall set these bits to '0'.

35                  If RADIO\_INTERFACE\_TYPE is equal to '0011', the base  
36                  station may include the radio interface type-specific fields  
37                  specified in [49].

38                  If RADIO\_INTERFACE\_TYPE is equal to '0100', the base  
39                  station may include the radio interface type-specific fields  
40                  specified in [50].

41

- 1 3.7.3 f-dsch
- 2 During Traffic Channel operation, the base station sends signaling messages to the mobile
- 3 station using the f-dsch.
- 4

1 3.7.3.1 Reserved  
2

1 3.7.3.2 Reserved  
2

**1     3.7.3.3 PDU Formats on the f-dsch**

**2     The signaling messages sent over the f-dsch are summarized in Table 3.7.3.3-1.**

**3**

1

**Table 3.7.3.3-1. f-dsch Messages**

<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>P_REV_IN_USE<sup>17</sup></b>
<i>Order Message</i>	ORDRM	3.7.3.3.2.1	All
<i>Authentication Challenge Message</i>	AUCM	3.7.3.3.2.2	All
<i>Alert With Information Message</i>	AWIM	3.7.3.3.2.3	All
<i>Data Burst Message</i>	DBM	3.7.3.3.2.4	All
<i>Reserved (Previously: Analog Handoff Direction Message)</i>		3.7.3.3.2.6	
<i>In-Traffic System Parameters Message</i>	ITSPM	3.7.3.3.2.7	All
<i>Neighbor List Update Message</i>	NLUM	3.7.3.3.2.8	< 8
<i>Send Burst DTMF Message</i>	BDTMFM	3.7.3.3.2.9	All
<i>Power Control Parameters Message</i>	PCNPM	3.7.3.3.2.10	All
<i>Retrieve Parameters Message</i>	RTPM	3.7.3.3.2.11	All
<i>Set Parameters Message</i>	STPM	3.7.3.3.2.12	All
<i>SSD Update Message</i>	SSDUM	3.7.3.3.2.13	All
<i>Flash With Information Message</i>	FWIM	3.7.3.3.2.14	All
<i>Mobile Station Registered Message</i>	MSRM	3.7.3.3.2.15	All
<i>Status Request Message</i>	STRQM	3.7.3.3.2.16	1, ≥ 3
<i>Extended Handoff Direction Message</i>	EHDM	3.7.3.3.2.17	All
<i>Service Request Message</i>	SRQM	3.7.3.3.2.18	1, ≥ 3
<i>Service Response Message</i>	SRPM	3.7.3.3.2.19	1, ≥ 3
<i>Service Connect Message</i>	SCM	3.7.3.3.2.20	1, ≥ 3
<i>Service Option Control Message</i>	SOCM	3.7.3.3.2.21	1, ≥ 3
<i>TMSI Assignment Message</i>	TASM	3.7.3.3.2.22	1, ≥ 4
<i>Service Redirection Message</i>	SRDM	3.7.3.3.2.23	≥ 4
<i>Supplemental Channel Assignment Message</i>	SCAM	3.7.3.3.2.24	≥ 4
<i>Power Control Message</i>	PCNM	3.7.3.3.2.25	≥ 4

2

---

<sup>17</sup> P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.



<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>P_REV_IN_USE</b>
<i>Extended Neighbor List Update Message</i>	ENLUM	3.7.3.3.2.26	≥ 4
<i>Candidate Frequency Search Request Message</i>	CFSRQM	3.7.3.3.2.27	≥ 4
<i>Candidate Frequency Search Control Message</i>	CFSCNM	3.7.3.3.2.28	≥ 4
<i>Power Up Function Message</i>	PUFM	3.7.3.3.2.29	≥ 4
<i>Power Up Function Completion Message</i>	PUFCM	3.7.3.3.2.30	≥ 4
<i>General Handoff Direction Message</i>	GHDM	3.7.3.3.2.31	≥ 4
<i>Resource Allocation Message</i>	RAM	3.7.3.3.2.32	≥ 6
<i>Resource Allocation Mini Message</i>	RAMM	3.7.3.3.2.33	≥ 6
<i>Extended Release Message</i>	ERM	3.7.3.3.2.34	≥ 6
<i>Extended Release Mini Message</i>	ERMM	3.7.3.3.2.35	≥ 6
<i>Universal Handoff Direction Message</i>	UHDM	3.7.3.3.2.36	≥ 6
<i>Extended Supplemental Channel Assignment Message</i>	ESCAM	3.7.3.3.2.37	≥ 6
<i>Forward Supplemental Channel Assignment Mini Message</i>	FSCAMM	3.7.3.3.2.38	≥ 6
<i>Reverse Supplemental Channel Assignment Mini Message</i>	RSCAMM	3.7.3.3.2.39	≥ 6
<i>Mobile Assisted Burst Operation Parameters Message</i>	MABOPM	3.7.3.3.2.40	≥ 6
<i>User Zone Reject Message</i>	UZRM	3.7.3.3.2.41	≥ 6
<i>User Zone Update Message</i>	UZUM	3.7.3.3.2.42	≥ 6
<i>Call Assignment Message</i>	CLAM	3.7.3.3.2.43	≥ 7
<i>Extended Alert With Information Message</i>	EAWIM	3.7.3.3.2.44	≥ 7
<i>Extended Flash With Information Message</i>	EFWIM	3.7.3.3.2.45	≥ 7
<i>Security Mode Command Message</i>	SMCM	3.7.3.3.2.46	≥ 7
<i>Base Station Status Response Message</i>	BSSRSPM	3.7.3.3.2.47	≥ 7
<i>Authentication Request Message</i>	AUREQM	3.7.3.3.2.48	≥ 10
<i>Rate Change Message</i>	RATCHGM	3.7.3.3.2.49	≥ 9
<i>In-Traffic BCMC Service Parameters Message</i>	ITBSPM	3.7.3.3.2.50	≥ 11
<i>MEID Universal Handoff Direction Message</i>	MUHDM	See [47]	≥ 6 but < 9

<b>Message Name</b>	<b>MSG_TAG</b>	<b>Section Number</b>	<b>P_REV_IN_USE</b>
<i>Radio Configuration Parameters Message</i>	RCPM	3.7.3.3.2.51	≥ 12
<i>Handoff Supplementary Information Solicit Message</i>	HOSISM	3.7.3.3.2.52	≥ 12
<i>General Extension Message</i>	GEM	3.7.3.3.2.53	≥ 12

- 1 3.7.3.3.1 Reserved
- 2 3.7.3.3.2 Message Body Contents
- 3 The following sections specify the contents of the message body for each message that may
- 4 be sent on the f-dsch.
- 5

## 1 3.7.3.3.2.1 Order Message

2 MSG\_TAG: ORDRM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	6
ORDER	6
ADD_RECORD_LEN	3
Order-specific fields (if used)	$8 \times \text{ADD\_RECORD\_LEN}$
CON_REF_INCL	0 or 1
CON_REF	0 or 8

4

5 USE\_TIME - Use action time indicator.

6 This field indicates whether an explicit action time is  
7 specified in this order.8 If an explicit action time can be specified for this order code,  
9 as shown in Table 3.7.4-1, the base station may set this field  
10 to '1'; otherwise, the base station shall set this field to '0'.

11 ACTION\_TIME - Action time.

12 If the USE\_TIME field is set to '1', the base station shall set  
13 this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$   
14 ms, in units of 80 ms (modulo 64), at which the order is to  
15 take effect. If the USE\_TIME field is set to '0', the base station  
16 shall set this field to '000000'.

17 ORDER - Order code.

18 The base station shall set this field to the ORDER code for  
19 this type of *Order Message* (see 3.7.4).

20 ADD\_RECORD\_LEN - Additional record length.

21 The base station shall set this field to the number of octets in  
22 the order-specific fields included in this message.

23 Order-specific fields - Order-specific fields.

24 The base station shall include order-specific fields as  
25 specified in 3.7.4.

26 CON\_REF\_INCL - Connection reference included indicator.

27 If the order carried by this message is not a Call Control order

1 (see 3.6.8), the base station shall omit this field; otherwise, the  
2 base station shall include this field and set it as follows:  
3 The base station shall set this field to '1' if the connection  
4 reference field is included in this message; otherwise, it shall set  
5 this field to '0'.  
6 CON\_REF - Connection reference.  
7 If the CON\_REF\_INCL field is not included or is included but is  
8 set to '0', the base station shall omit this field; otherwise, the  
9 base station shall include this field and shall set it to the value of  
10 the connection reference assigned to the service option  
11 connection of the call, to which this message corresponds.  
12

1    3.7.3.3.2.2 Authentication Challenge Message

2    MSG\_TAG: AUCM

3

Field	Length (bits)
RANDU	24
GEN_CMEAKEY	1

4

5            RANDU    -    Random challenge data.

6                      The base station shall set this field as specified in 2.3.12.1.4.

7            GEN\_CMEAKEY - Generate CMEAKEY indicator.

8                      The base station shall set this field to '1' if it wants the MS to  
9                      generate the CMEAKEY during the Unique Challenge-  
10                     Response procedure (see 2.3.12.1.4); otherwise, the base  
11                     station shall set this field to '0'.

12

13

14

3.7.3.3.2.3 Alert With Information Message

MSG\_TAG: AWIM

Field	Length (bits)
-------	---------------

Zero or more occurrences of the following record:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	$8 \times \text{RECORD\_LEN}$

}

The base station shall include occurrences of the following three-field record as specified in 3.7.5.

- RECORD\_TYPE - Information record type.  
The base station shall set this field as specified in 3.7.5.
- RECORD\_LEN - Information record length.  
The base station shall set this field to the number of octets in the type-specific fields included in this record.
- Type-specific fields - Type-specific fields.  
The base station shall include type-specific fields as specified in 3.7.5.

## 1 3.7.3.3.2.4 Data Burst Message

2 MSG\_TAG: DBM

3

Field	Length (bits)
MSG_NUMBER	8
BURST_TYPE	6
NUM_MSGS	8
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	8
-------------------	---

} (NUM\_FIELDS)

4

5 MSG\_NUMBER - Message number.

6 The base station shall set this field to the number of this  
7 message within the data burst stream.

8 BURST\_TYPE - Data burst type.

9 The base station shall set the value of this field for the type of  
10 this data burst as defined in [30]. If the base station sets this  
11 field equal to '111110', it shall set the first two CHAR<sub>i</sub> fields of  
12 this message equal to the  
13 EXTENDED\_BURST\_TYPE\_INTERNATIONAL field as  
14 described in the definition of CHAR<sub>i</sub> below. If the base  
15 station sets this field equal to '111111', it shall set the first  
16 two CHAR<sub>i</sub> fields of this message equal to the  
17 EXTENDED\_BURST\_TYPE as described in the definition of  
18 CHAR<sub>i</sub> below.

19 NUM\_MSGS - Number of messages in the data burst stream.

20 The base station shall set this field to the number of  
21 messages in this data burst stream.

22 NUM\_FIELDS - Number of characters in this message.

23 The base station shall set this field to the number of  
24 occurrences of the CHAR<sub>i</sub> field included in this message.

25 CHAR<sub>i</sub> - Character.

26 The base station shall include NUM\_FIELDS occurrences of  
27 this field. The base station shall set these fields to the  
28 corresponding octet of the data burst stream.

If the BURST\_TYPE field of this message is equal to '111110', the first two CHARi octets shall represent a 16 bit EXTENDED\_BURST\_TYPE\_INTERNATIONAL field, which is encoded as shown below. The first ten bits of this field contain a binary mapping of the Mobile Country Code (MCC) associated with the national standards organization administering the use of the remaining octets of the message. Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the EXTENDED\_BURST\_TYPE\_INTERNATIONAL field shall specify the COUNTRY\_BURST\_TYPE. The base station shall set the value of the COUNTRY\_BURST\_TYPE according to the type of this data burst as defined in standards governed by the country where this data burst type is to be used.

Field	Length (bits)
Mobile Country Code	10
COUNTRY_BURST_TYPE	6
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$

If the BURST\_TYPE field of this message is equal to '111111', the first two CHARi octets shall represent a single, 16 bit, EXTENDED\_BURST\_TYPE field, as shown below. The base station shall set the value of the EXTENDED\_BURST\_TYPE field according to the type of this data burst as defined in [30].

Field	Length (bits)
EXTENDED_BURST_TYPE (first two CHARi fields)	16
Remaining CHARi fields	$8 \times (\text{NUM\_FIELDS} - 2)$



- 1 3.7.3.3.2.5 Reserved
- 2 This page intentionally left blank.
- 3

- 1 3.7.3.3.2.6 Reserved
- 2 This page intentionally left blank.
- 3

1 3.7.3.3.2.7 In-Traffic System Parameters Message

2 MSG\_TAG: ITSPM

3

Field	Length (bits)
SID	15
NID	16
SRCH_WIN_A	4
SRCH_WIN_N	4
SRCH_WIN_R	4
T_ADD	6
T_DROP	6
T_COMP	4
T_TDROP	4
NGHBR_MAX_AGE	4
P_REV	8
SOFT_SLOPE	6
ADD_INTERCEPT	6
DROP_INTERCEPT	6
PACKET_ZONE_ID	8
EXTENSION	1
T_MULCHAN	0 or 3
BEGIN_PREAMBLE	0 or 3
RESUME_PREAMBLE	0 or 3
T_SLOTTED_INCL	1
T_SLOTTED	0 or 8
ENC_SUPPORTED	1
SIG_ENCRYPT_SUP	0 or 8
UI_ENCRYPT_SUP	0 or 8

4

Field	Length (bits)
CS_SUPPORTED	1
CHM_SUPPORTED	1
CDMA_OFF_TIME_REP_SUP_IND	1
CDMA_OFF_TIME_REP_THRESH OLD_UNIT	0 or 1
CDMA_OFF_TIME_REP_THRESH OLD	0 or 3
T_TDROP_RANGE_INCL	1
T_TDROP_RANGE	0 or 4
FOR_PDCH_SUPPORTED	1
PDCH_CHM_SUPPORTED	0 or 1
SDB_SUPPORTED	1
MOB_QOS	0 or 1
MS_INIT_POS_LOC_SUP_IND	1
PZ_HYST_ENABLED	0 or 1
PZ_HYST_INFO_INCL	0 or 1
PZ_HYST_LIST_LEN	0 or 4
PZ_HYST_ACT_TIMER	0 or 8
PZ_HYST_TIMER_MUL	0 or 3
PZ_HYST_TIMER_EXP	0 or 5
BCMC_ON_TRAFFIC_SUP	1
AUTO_REQ_TRAF_ALLOWED_IND	0 or 1
REV_PDCH_SUPPORTED	0 or 1
MAX_ADD_SERV_INSTANCE	0 or 3
USE_CH_CFG_RRM	1

1  
2  
3  
4  
5  
6  
7  
8  
9

- SID** - System identification.
- The base station shall set this field to the system identification number for this wireless system (see 2.6.5.2).
- NID** - Network identification.
- This field serves as a sub-identifier of a system as defined by the owner of the SID.
- The base station shall set this field to the network identification number for this network (see 2.6.5.2).

1	SRCH_WIN_A	- Search window size for the Active Set and Candidate Set.
2		The base station shall set this field to the window size
3		parameter shown in Table 2.6.6.2.1-1 corresponding to the
4		number of PN chips that the mobile station is to search for
5		pilots in the Active Set and Candidate Set.
6	SRCH_WIN_N	- Search window size for the Neighbor Set.
7		The base station shall set this field to the window size
8		parameter shown in Table 2.6.6.2.1-1 corresponding to the
9		number of PN chips that the mobile station is to search for
10		pilots in the Neighbor Set.
11	SRCH_WIN_R	- Search window size for the Remaining Set.
12		The base station shall set this field to the window size
13		parameter shown in Table 2.6.6.2.1-1 corresponding to the
14		number of PN chips that the mobile station is to search for
15		pilots in the Remaining Set.
16	T_ADD	- Pilot detection threshold.
17		This value is used by the mobile station to trigger the transfer
18		of a pilot from the Neighbor Set or Remaining Set to the
19		Candidate Set (see 2.6.6.2.6) and to trigger the sending of the
20		<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
21		<i>Strength Measurement Message</i> initiating the handoff process
22		(see 2.6.6.2.5.2).
23		The base station shall set this field to the pilot detection
24		threshold, expressed as an unsigned binary number equal to
25		$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
26	T_DROP	- Pilot drop threshold.
27		This value is used by the mobile station to start a handoff
28		drop timer for pilots in the Active Set and the Candidate Set
29		(see 2.6.6.2.3).
30		The base station shall set this field to the pilot drop
31		threshold, expressed as an unsigned binary number equal to
32		$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
33	T_COMP	- Active Set versus Candidate Set comparison threshold.
34		The mobile station transmits a <i>Pilot Strength Measurement</i>
35		<i>Message</i> or an <i>Extended Pilot Strength Measurement Message</i>
36		when the strength of a pilot in the Candidate Set exceeds that
37		of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
38		The base station shall set this field to the threshold
39		Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB.
40	T_TDROP	- Drop timer value.

1			Timer value after which an action is taken by the mobile
2			station for a pilot that is a member of the Active Set or
3			Candidate Set, and whose strength has not become greater
4			than T_DROP. If the pilot is a member of the Active Set, a
5			<i>Pilot Strength Measurement Message</i> or an <i>Extended Pilot</i>
6			<i>Strength Measurement Message</i> is issued. If the pilot is a
7			member of the Candidate Set, it will be moved to the Neighbor
8			Set.
9			The base station shall set this field to the T_TDROP value
10			shown in Table 2.6.6.2.3-1 corresponding to the drop timer
11			value to be used by the mobile station.
12	NGHBR_MAX_AGE	-	Maximum age for retention of Neighbor Set members.
13			The mobile station drops neighbor set members whose AGE
14			count exceeds this field.
15			The base station shall set this field to the Neighbor Set
16			maximum age retention value (see 2.6.6.2.6.3).
17	P_REV	-	Protocol revision level.
18			The base station shall set this field to the base station
19			protocol revision level.
20	SOFT_SLOPE	-	The slope in the inequality criterion for adding a pilot to the
21			Active Set, or dropping a pilot from the Active Set (see
22			2.6.6.2.3 and 2.6.6.2.5.2).
23			The base station shall set this field as an unsigned binary
24			number.
25	ADD_INTERCEPT	-	The intercept in the inequality criterion for adding a pilot to
26			the Active Set (see 2.6.6.2.5.2).
27			The base station shall set this field as a two's complement
28			signed binary number, in units of 0.5 dB.
29	DROP_INTERCEPT	-	The intercept in the inequality criterion for dropping a pilot
30			from the Active Set (see 2.6.6.2.3).
31			The base station shall set this field as a two's complement
32			signed binary number, in units of 0.5 dB.
33	PACKET_ZONE_ID	-	Packet data services zone identifier.
34			If the base station supports a packet data service zone, the
35			base station shall set this field to its non-zero packet data
36			services zone identifier.
37			If the base station does not support a packet data service
38			zone, the base station shall set this field to '00000000'.
39	EXTENSION	-	Indicator that extension fields are present.
40			If Reverse Supplemental Code Channel or Reverse Supple-
41			mental Channel system parameters are included in this
42			message, the base station shall set this field to '1'; otherwise,
43			the base station shall set this field to '0'.
44	T_MULCHAN	-	<i>Supplemental Channel Request Message</i> pilot strength
45			reporting offset.

1			If EXTENSION is set to '1', the base station shall include this
2			field and set this field to the threshold offset that the mobile
3			station is to use when reporting neighbor pilot strength
4			measurements in a <i>Supplemental Channel Request Message</i> .
5			The mobile station is to interpret this field as an offset to
6			T_ADD ranging from 0.5 dB (corresponding to T_MULCHAN =
7			'000') to 4.0 dB (corresponding to T_MULCHAN = '111') in 0.5
8			dB increments.
9	BEGIN_PREAMBLE	-	Number of preamble frames on Reverse Supplemental Code
10			Channels at the beginning of transmission on Reverse
11			Supplemental Code Channel.
12			If EXTENSION is set to '1', the base station shall include this
13			field and set this field to the number of Reverse Supplemental
14			Code Channel preamble frames that the mobile station is to
15			send when beginning transmission on Reverse Supplemental
16			Code Channels.
17	RESUME_PREAMBLE	-	Number of preamble frames on Reverse Supplemental Code
18			Channels at the resumption of transmission.
19			If EXTENSION is set to '1', the base station shall include this
20			field and set this field to the number of Reverse Supplemental
21			Code Channel preamble frames that the mobile station is to
22			send when resuming transmission on a Reverse
23			Supplemental Code Channel following an autonomous
24			suspension of transmission on an allocated Supplemental
25			Code Channel.
26	T_SLOTTED_INCL	-	Slotted timer value included indicator.
27			The base station shall set this field to '1' if the slotted timer
28			value is included; otherwise, the base station shall set this
29			field to '0'.
30	T_SLOTTED	-	Slotted timer value
31			If T_SLOTTED_INCL is set to '1', the base station shall
32			include this field and set this field to the value of the
33			TMS_Slotted timer to be used by the mobile station in units of
34			80 ms; otherwise, the base station shall omit this field.
35	ENC_SUPPORTED	-	Encryption fields included.
36			The base station shall set this field to '1' in the encryption
37			related fields are included; otherwise the base station shall
38			set this field to '0'.
39	SIG_ENCRYPT_SUP	-	Signaling Encryption supported indicator.
40			If ENC_SUPPORTED is equal to '1', the base station shall
41			include this field; otherwise, the base station shall omit this
42			field. If this field is included, this field indicates which
43			signaling encryption algorithms are supported by the base
44			station.

1		This field consists of the subfields shown in Table
2		2.7.1.3.2.1-5.
3		If this field is included, the base station shall set the
4		subfields as follows:
5		The base station shall set the CMEA subfield to '1'.
6		The base station shall set each other subfield to '1' if the
7		corresponding signaling algorithm is supported by the base
8		station; otherwise, the base station shall set the subfield to
9		'0'.
10		The base station shall set the RESERVED subfield to '00000'.
11	UI_ENCRYPT_SUP	- User information Encryption supported indicator.
12		If ENC_SUPPORTED is equal to '1', the base station shall
13		include this field; otherwise, the base station shall omit this
14		field. If this field is included, the base station shall set this
15		field to indicate the supported user information encryption
16		algorithms.
17		This field consists of the subfields shown in Table
18		2.7.1.3.2.4-9.
19		The base station shall set each subfield to '1' if the
20		corresponding user information encryption algorithm is
21		supported by the base station; otherwise, the base station
22		shall set the subfield to '0'.
23	CS_SUPPORTED	- Concurrent Services supported indicator.
24		If the base station supports concurrent services, the base
25		station shall set this field to '1'; otherwise, the base station
26		shall set this field to '0'.
27	CHM_SUPPORTED	- Control Hold Mode supported indicator.
28		The base station shall set this field to '1' to indicate that the
29		base station supports the Control Hold Mode; otherwise, the
30		base station shall set this field to '0'.
31	CDMA_OFF_TIME_REP_SUP_IND	- CDMA off time report supported indicator.
32		If the base station supports mobile station report for CDMA
33		off time information using the <i>CDMA Off Time Report</i>
34		<i>Message</i> , the base station shall set this field to '1'; otherwise,
35		the base station shall set this field to '0'.
36	CDMA_OFF_TIME_REP_THRESHOLD_UNIT	- CDMA off time report threshold unit
37		If CDMA_OFF_TIME_REP_SUP_IND is set to '0', the base
38		station shall omit this field; otherwise, the base station shall
39		include this field and set it as follows:
40		The base station shall set this field to the time unit used in
41		CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table
42		3.7.2.3.2.13-5
43	CDMA_OFF_TIME_REP_THRESHOLD	- CDMA off time report threshold



1		If CDMA_OFF_TIME_REP_SUP_IND is set to '0', the base
2		station shall omit this field; otherwise, the base station shall
3		include this field and set it as follows:
4		The base station shall set this field to the time in units of
5		CDMA_OFF_TIME_REP_THRESHOLD_UNIT such that if the
6		mobile station goes away from the CDMA traffic channel
7		longer than this value, the mobile station is to send a <i>CDMA</i>
8		<i>Off Time Report Message</i> .
9	T_TDROP_RANGE_INCL -	Drop timer range value included indicator.
10		The base station shall set this field to '1' if the
11		T_TDROP_RANGE field is included in this message;
12		otherwise, the base station shall set this field to '0'.
13	T_TDROP_RANGE -	Drop timer range value.
14		Timer range value to use in association with the T_TDROP
15		parameter when determining the drop timer expiration.
16		If T_TDROP_RANGE_INCL is set to '0', the base station shall
17		omit this field; otherwise, the base station shall set this field
18		to the T_TDROP_RANGE value shown in Table 2.6.6.2.3-2
19		corresponding to the timer expiration range value to be used
20		by the mobile station.
21	FOR_PDCH_SUPPORTED -	Forward Packet Data Channel supported indicator.
22		If the base station supports Forward Packet Data Channel, the
23		base station shall set this field to '1'; otherwise, the base station
24		shall set this field to '0'.
25	PDCH_CHM_SUPPORTED -	PDCH Control Hold Mode supported indicator.
26		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
27		omit this field; otherwise, the base station shall include this
28		field and set it as follows:
29		The base station shall set this field to '1' to indicate that the
30		base station supports the PDCH Control Hold Mode; otherwise,
31		the base station shall set this field to '0'.
32	SDB_SUPPORTED -	Short Data Burst supported indicator.
33		The base station shall set this field to '1' if the mobile station
34		is permitted to send a Short Data Burst; otherwise, the base
35		station shall set this field to '0'.
36	MOB_QOS -	Indicator granting permission to the mobile station to request
37		QoS parameter settings in the <i>Origination Message</i> ,
38		<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
39		<i>Message</i> .
40		If CS_SUPPORTED is equal to '0', the base station shall omit
41		this field; otherwise the base station shall include this field
42		and shall set it as follows:
43		The base station shall set this field to '1', if the mobile station
44		is allowed to include a QoS record in the <i>Origination Message</i> ,
45		<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
46		<i>Message</i> ; otherwise, the base station shall set this field to '0'.

1	MS_INIT_POS_LOC_SUP_IND	-	Mobile station initiated position location
2			determination supported indicator.
3			If the base station supports mobile station initiated position
4			determination, the base station shall set this field to '1';
5			otherwise, the base station shall set this field to '0'.
6	PZ_HYST_ENABLED	-	Packet zone hysteresis enabled.
7			If the PACKET_ZONE_ID field is set to '00000000', the base
8			station shall omit this field; otherwise, the base station shall
9			include this field and set it as follows:
10			If the packet zone hysteresis feature is to be enabled at the
11			mobile station, the base station shall set this field to '1';
12			otherwise, the base station shall set this field to '0'.
13	PZ_HYST_INFO_INCL	-	Packet zone hysteresis information included indicator.
14			If the PZ_HYST_ENABLED field is included and is set to '1',
15			the base station shall include this field and set it as follows;
16			otherwise, the base station shall omit this field.
17			If the base includes the PZ_HYST_LIST_LEN,
18			PZ_HYST_ACT_TIMER and packet zone hysteresis timer
19			related fields, the base station shall set this field to '1';
20			otherwise, the base station shall set this field to '0'.
21	PZ_HYST_LIST_LEN	-	Packet zone hysteresis list length.
22			If the PZ_HYST_INFO_INCL field is included and is set to '1',
23			the base station shall include this field and set it as follows;
24			otherwise, the base station shall omit this field.
25			The base station shall set this field to the length of the packet
26			zone hysteresis list. This field shall be within the range '0001'
27			through '1111', inclusive.
28	PZ_HYST_ACT_TIMER	-	Packet zone hysteresis activation timer.
29			If the PZ_HYST_INFO_INCL field is included and is set to '1',
30			the base station shall include this field and set it as follows;
31			otherwise, the base station shall omit this field.
32			The base station shall set to the value of the packet zone
33			hysteresis activation timer (in units of seconds). This field
34			shall be within the range '00000001' through '11111111',
35			inclusive.
36	PZ_HYST_TIMER_MUL	-	Packet zone hysteresis timer multiplier.
37			If the PZ_HYST_INFO_INCL field is included and is set to '1',
38			the base station shall include this field and set it as follows;
39			otherwise, the base station shall omit this field.
40			The base station shall set the field to x, where $x \times 8^y$
41			seconds is the value of the hysteresis timer and y is the value
42			indicated in the PZ_HYST_TIMER_EXP field. The base station
43			shall set this field to a value that is between 1 and 7
44			inclusive. The value 0 is reserved.
45	PZ_HYST_TIMER_EXP	-	Packet zone hysteresis timer exponent.

1		If the PZ_HYST_INFO_INCL field is included and is set to '1',
2		the base station shall include this field and set it as follows;
3		otherwise, the base station shall omit this field.
4		The base station shall set the field to $y$ , where $x \times 8^y$
5		seconds is the value of the hysteresis timer and $x$ is the value
6		indicated in the PZ_HYST_TIMER_MUL field. The base station
7		shall set this field to a value that is between 0 and 4
8		inclusive. All the other values are reserved.
9	BCMC_ON_TRAFFIC_SUP	- BCMC on traffic channel supported indicator.
10		The base station shall set this field to '1' to indicate that the
11		BCMC feature is supported on traffic channel; otherwise, the
12		base station shall set this field to '0'.
13	AUTO_REQ_TRAF_ALLOWED_IND	- Autonomous BCMC request on traffic channel
14		allowed indicator.
15		If the BCMC_ON_TRAFFIC_SUP field is set to '0', the base
16		station shall omit this field; otherwise, the base station shall
17		include this field and set it as follows:
18		The base station shall set this field to '1' to indicate that the
19		mobile station is allowed to request for a BCMC flow
20		autonomously on traffic; otherwise, the base station shall set
21		this field to '0'.
22	REV_PDCH_SUPPORTED-	Reverse Packet Data Channel supported indicator.
23		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
24		omit this field; otherwise, the base station shall include this
25		field and set it as follows.
26		If the base station supports the Reverse Packet Data Channel
27		(R-PDCH), the base station shall set this field to '1';
28		otherwise, the base station shall set this field to '0'.
29	MAX_ADD_SERV_INSTANCE-	Maximum number of additional service reference
30		identifiers allowed in origination
31		If the CS_SUPPORTED field is set to '0', the base station shall
32		omit this field; otherwise, the base station shall include this
33		field and set it as follows:
34		The base station shall set this field to the maximum number
35		of additional service reference identifiers that can be included
36		in the <i>Origination Message</i> or <i>Enhanced Origination Message</i> .
37	USE_CH_CFG_RRM	- Channel configuration request allowed indicator.
38		The base station shall set this field to '1' to indicate that the
39		mobile station is permitted to include the CH_IND and
40		EXT_CH_IND fields in the <i>Resource Request Message</i> , and the
41		<i>Resource Request Mini Message</i> ; otherwise, the base station
42		shall set this field to '0'.
43		
44		

## 3.7.3.3.2.8 Neighbor List Update Message

MSG\_TAG: NLUM

Field	Length (bits)
PILOT_INC	4

One or more occurrences of the following field:

{	
NGHBR_PN	9
}	

**PILOT\_INC** - Pilot PN sequence offset index increment.

The mobile station searches for Remaining Set pilots at pilot PN sequence offset index values that are multiples of this value.

The base station shall set this field to the pilot PN sequence increment, in units of 64 PN chips, that the mobile station is to use for searching the Remaining Set. The base station should set this field to the largest increment such that the pilot PN sequence offsets of all its neighbor base stations are integer multiples of that increment.

**NGHBR\_PN** - Neighbor pilot PN sequence offset index.

The base station shall include one occurrence of this field for each pilot in its neighbor list. The base station shall set this field to the pilot's PN sequence offset, in units of 64 PN chips. The base station shall include no more than 20 occurrences of this field.

## 1 3.7.3.3.2.9 Send Burst DTMF Message

2 MSG\_TAG: BDTMFM

3

Field	Length (bits)
NUM_DIGITS	8
DTMF_ON_LENGTH	3
DTMF_OFF_LENGTH	3

NUM\_DIGITS occurrences of the following field:

{ (NUM\_DIGITS)

DIGIT <sub>i</sub>	4
--------------------	---

} (NUM\_DIGITS)

CON_REF_INCL	1
CON_REF	0 or 8

4

5 NUM\_DIGITS - Number of DTMF digits.

6 The base station shall set this field to the number of DTMF  
7 digits included in this message.

8 DTMF\_ON\_LENGTH - DTMF pulse width code.

9 The base station shall set this field to the DTMF\_ON\_LENGTH  
10 value shown in Table 2.7.2.3.2.7-1 corresponding to the  
11 requested pulse width of the DTMF pulse to be generated by  
12 the mobile station.

13 DTMF\_OFF\_LENGTH - DTMF interdigit interval code.

14 The base station shall set this field to the  
15 DTMF\_OFF\_LENGTH value shown in Table 2.7.2.3.2.7-2  
16 corresponding to the requested minimum interdigit interval  
17 between DTMF pulses to be generated by the mobile station.

18 DIGIT<sub>i</sub> - DTMF digit.

19 The base station shall include one occurrence of this field for  
20 each DTMF digit to be generated by the mobile station. The  
21 base station shall set each occurrence of this field to the code  
22 value shown in Table 2.7.1.3.2.4-4 corresponding to the  
23 dialed digit.

24 CON\_REF\_INCL - Connection reference included indicator.

25 The base station shall set this field to '1' if the connection  
26 reference field is included in this message; otherwise, it shall  
27 set this field to '0'.

1                    CON\_REF    –    Connection reference.

2                                    If the CON\_REF\_INCL field is set to '0', the base station shall  
3                                    omit this field; otherwise, the base station shall include this  
4                                    field and shall set it to the value of the connection reference  
5                                    assigned to the service option connection of the call, to which  
6                                    this message corresponds.

7

## 1 3.7.3.3.2.10 Power Control Parameters Message

2 MSG\_TAG: PCNPM

3

Field	Length (bits)
PWR_REP_THRESH	5
PWR_REP_FRAMES	4
PWR_THRESH_ENABLE	1
PWR_PERIOD_ENABLE	1
PWR_REP_DELAY	5

4

5 PWR\_REP\_THRESH - Power control reporting threshold.

6 The base station shall set this field to the number of bad  
7 frames (see [2]) to be received in a measurement period on the  
8 channel which carries the Power Control Subchannel before  
9 the mobile station is to generate a *Power Measurement Report*  
10 *Message* (see 2.6.4.1.1). If the base station sets  
11 PWR\_THRESH\_ENABLE to '1', it shall not set this field to  
12 '00000'.

13 PWR\_REP\_FRAMES - Power control reporting frame count.

14 The base station shall set this field to the value such that the  
15 number given by

$$\lfloor 2^{(PWR\_REP\_FRAMES/2)} \times 5 \rfloor \text{ frames}$$

17 is the number of frames over which the mobile station is to  
18 count frame errors.

19 PWR\_THRESH\_ENABLE - Threshold report mode indicator.

20 If the mobile station is to generate threshold *Power*  
21 *Measurement Report Messages*, the base station shall set this  
22 field to '1'. If the mobile station is not to generate threshold  
23 *Power Measurement Report Messages*, the base station shall  
24 set this field to '0'.

25 PWR\_PERIOD\_ENABLE - Periodic report mode indicator.

26 If the mobile station is to generate periodic *Power*  
27 *Measurement Report Messages*, the base station shall set this  
28 field to '1'. If the mobile station is not to generate periodic  
29 *Power Measurement Report Messages*, the base station shall  
30 set this field to '0'.

31 PWR\_REP\_DELAY - Power report delay.

32 The period that the mobile station waits following a *Power*  
33 *Measurement Report Message* before restarting frame  
34 counting for power control purposes.

1	
2	The base station shall set this field to the power report delay
3	value, in units of 4 frames (see 2.6.4.1.1).



1 3.7.3.3.2.11 Retrieve Parameters Message

2 MSG\_TAG: RTPM

3

Field	Length (bits)
-------	---------------

One or more occurrences of the following field:

{

PARAMETER_ID	16
--------------	----

}

4

5       PARAMETER\_ID   -   Parameter identification.

6       The base station can request the mobile station to report any  
7       parameter specified in Table E-1.

8       The base station shall include one occurrence of this field for  
9       each parameter requested. The base station shall set this  
10      field to the parameter identification number specified in  
11      Table E-1 corresponding to the parameter requested.

12

## 3.7.3.3.2.12 Set Parameters Message

MSG\_TAG: STPM

Field	Length (bits)
-------	---------------

One or more occurrences of the following record:

{

PARAMETER_ID	16
PARAMETER_LEN	10
PARAMETER	PARAMETER_LEN + 1

}

The base station shall include one occurrence of the following three-field record for each parameter to be set.

PARAMETER\_ID - Parameter identification.

The base station shall set this field to the identification shown in Table E-1 corresponding to the settable parameter to be set.

PARAMETER\_LEN - Parameter length.

The base station shall set this field to the length shown in Table E-1 corresponding to the parameter to be set.

PARAMETER - Parameter value.

The base station shall set this field to the value of the parameter specified by the PARAMETER\_ID field.

1    3.7.3.3.2.13 SSD Update Message

2    MSG\_TAG: SSDUM

3

Field	Length (bits)
RANDSSD	56

4

5            RANDSSD    -    Random data.

6                            The base station shall set this field as specified in 2.3.12.1.5.

7

1 3.7.3.3.2.14 Flash With Information Message

2 MSG\_TAG: FWIM

3

Field	Length (bits)
One or more occurrences of the following record:	
{	
RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN
}	

4

5 The base station shall include occurrences of the following three-field record as specified  
6 in 3.7.5.

- 7

RECORD\_TYPE

-

Information record type.
- 8

The base station shall set this field as specified in 3.7.5.
- 9

RECORD\_LEN

-

Information record length.
- 10

The base station shall set this field to the number of octets in
- 11

the type-specific fields included in this record.
- 12

Type-specific fields

-

Type-specific fields.
- 13

The base station shall include type-specific fields as specified
- 14

in 3.7.5.

15

1 3.7.3.3.2.15 Mobile Station Registered Message

2 MSG\_TAG: MSRM

3

Field	Length (bits)
SID	15
NID	16
REG_ZONE	12
TOTAL_ZONES	3
ZONE_TIMER	3
MULT_SIDS	1
MULT_NIDS	1
BASE_LAT	22
BASE_LONG	23
REG_DIST	11

4

5                   SID    -   System identification.

6                               The base station shall set this field to the system  
7                               identification number for this system.

8                   NID    -   Network identification.

9                               This field serves as a sub-identifier of a system as defined by  
10                              the owner of the SID.

11                             The base station shall set this field to the network  
12                             identification number for this network. The NID value of  
13                             65,535 is reserved.

14               REG\_ZONE   -   Registration zone.

15                             The base station shall set this field to its registration zone  
16                             number (see 2.6.5.1.5).

17               TOTAL\_ZONES   -   Number of registration zones to be retained.

18                             The base station shall set this field to the number of  
19                             registration zones the mobile station is to retain for purposes  
20                             of zone-based registration (see 2.6.5.1.5).

21                             If zone-based registration is to be disabled, the base station  
22                             shall set this field to '000'.

23               ZONE\_TIMER   -   Zone timer length.

24                             The base station shall set this field to the ZONE\_TIMER value  
25                             shown in Table 3.7.2.3.2.1-1 corresponding to the length of  
26                             the zone registration timer to be used by mobile stations.

1	MULT_SIDS	-	Multiple SID storage indicator.
2			If mobile stations may store entries of SID_NID_LIST
3			containing different SIDs, the base station shall set this field
4			to '1'; otherwise the base station shall set this field to '0'.
5	MULT_NIDS	-	Multiple NID storage indicator.
6			If mobile stations may store multiple entries of SID_NID_LIST
7			having the same SID (with different NIDs), the base station
8			shall set this field to '1'; otherwise the base station shall set
9			this field to '0'.
10	BASE_LAT	-	Base station latitude.
11			The base station shall set this field to its latitude in units of
12			0.25 second, expressed as a two's complement signed
13			number with positive numbers signifying North latitudes.
14			The base station shall set this field to a value in the range -
15			1296000 to 1296000 inclusive (corresponding to a range of -
16			90° to +90°).
17	BASE_LONG	-	Base station longitude.
18			The base station shall set this field to its longitude in units of
19			0.25 second, expressed as a two's complement signed
20			number with positive numbers signifying East longitude. The
21			base station shall set this field to a value in the range -
22			2592000 to 2592000 inclusive (corresponding to a range of -
23			180° to +180°).
24	REG_DIST	-	Registration distance.
25			If mobile stations are to perform distance-based registration,
26			the base station shall set this field to the non-zero "distance"
27			beyond which the mobile station is to re-register (see
28			2.6.5.1.4). If mobile stations are not to perform distance-
29			based registration, the base station shall set this field to 0.
30			

1 3.7.3.3.2.16 Status Request Message

2 MSG\_TAG: STRQM

3

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields	$8 \times \text{QUAL\_INFO\_LEN}$
NUM_FIELDS	4

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

RECORD_TYPE	8
-------------	---

} (NUM\_FIELDS)

4

5 QUAL\_INFO\_TYPE - Qualification information type.

6 The base station shall set this field to the value shown in  
7 Table 3.7.2.3.2.15-1 to show the inclusion of qualification  
8 information in the type-specific fields.

9 QUAL\_INFO\_LEN - Qualification information length.

10 The base station shall set this field to the number of octets  
11 included in the type-specific fields of the qualification  
12 information.

13 Type-specific fields - Type-specific fields.

14 The base station shall set these fields to the qualification  
15 information according to the QUAL\_INFO\_TYPE field.

16 If QUAL\_INFO\_TYPE is equal to '00000000', the type-specific  
17 fields are omitted.

18 If QUAL\_INFO\_TYPE is equal to '00000001', the base station  
19 shall use the following fixed-length format for the type-  
20 specific fields:

Type-specific Field	Length (bits)
BAND_CLASS	5
RESERVED	3

21

22 If QUAL\_INFO\_TYPE is equal to '00000010', the base station  
23 shall use the following fixed-length format for the type-  
24 specific fields:

Type-specific Field	Length (bits)
BAND_CLASS	5
OP_MODE	8
RESERVED	3

- 1
- 2       BAND\_CLASS   -   Band class.
- 3                    The base station shall set this field to the CDMA band class,
- 4                    as specified in [30].
- 5       OP\_MODE    -   Operating mode.
- 6                    The base station shall set this field as shown in
- 7                    Table 3.7.2.3.2.15-3 to specify the operating mode
- 8                    qualification information.
- 9       RESERVED   -   Reserved bits.
- 10                   The base station shall set this field to '000'.
- 11       NUM\_FIELDS   -   Number of requested record fields in this message.
- 12                    The base station shall set this field to the number of
- 13                    occurrences of RECORD\_TYPE in this message.
- 14   The base station shall only request the status information records qualified by the
- 15   included qualification information (see Table 2.7.4-1) in this message. The base station
- 16   shall include one occurrence of the following field for each information record that is
- 17   requested:
- 18       RECORD\_TYPE   -   Information record type.
- 19                    The base station shall set this field to the record type value
- 20                    shown in Table 2.7.4-1 corresponding to the information
- 21                    record requested.
- 22



## 1 3.7.3.3.2.17 Extended Handoff Direction Message

2 MSG\_TAG: EHDM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	6
HDM_SEQ	2
SEARCH_INCLUDED	1
SRCH_WIN_A	0 or 4
T_ADD	0 or 6
T_DROP	0 or 6
T_COMP	0 or 4
T_TDROP	0 or 4
HARD_INCLUDED	1
FRAME_OFFSET	0 or 4
PRIVATE_LCM	0 or 1
RESET_L2	0 or 1
RESET_FPC	0 or 1
SERV_NEG_TYPE	0 or 1
ENCRYPT_MODE	0 or 2
NOM_PWR_EXT	0 or 1
NOM_PWR	0 or 4
NUM_PREAMBLE	0 or 3
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11

4

(continues on next page)

5

1

Field	Length (bits)
ADD_LENGTH	3
Additional fields	$8 \times \text{ADD\_LENGTH}$

One or more occurrences of the following record:

{

PILOT_PN	9
PWR_COMB_IND	1
CODE_CHAN	8

}

2

3

USE\_TIME - Use action time indicator.

4

This field indicates whether an explicit action time is specified in this message.

5

6

If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

7

8

9

ACTION\_TIME - Action time.

10

If the USE\_TIME field is set to '1', the base station shall set this field to the System Time minus  $\text{FRAME\_OFFSET}_s \times 1.25$  ms, in units of 80 ms (modulo 64), at which the handoff is to take effect. If the USE\_TIME field is set to '0', the base station shall set this field to '000000'.

11

12

13

14

15

HDM\_SEQ - *Extended Handoff Direction Message* sequence number.

16

This field is used by the mobile station in the *Power Measurement Report Message* to identify the order in which the reported pilot strengths are sent.

17

18

19

The base station shall set this field as specified in 2.6.6.2.2.2.

20

SEARCH\_INCLUDED - Pilot search parameters included.

21

If the mobile station is to change its pilot search parameters, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

22

23

24

SRCH\_WIN\_A - Search window size for the Active Set and Candidate Set.

25

If SEARCH\_INCLUDED is set to '1', the base station shall include the field SRCH\_WIN\_A and set this field to the window size parameter shown in Table 2.6.6.2.1-1 corresponding to the number of PN chips that the mobile station is to search for pilots in the Active Set and Candidate Set; otherwise, the base station shall omit this field.

26

27

28

29

30

31

T\_ADD - Pilot detection threshold.

1			This value is used by the mobile station to trigger the transfer
2			of a pilot from the Neighbor Set or Remaining Set to the
3			Candidate Set (see 2.6.6.2.6) and to trigger the sending of the
4			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
5			<i>Strength Measurement Message</i> initiating the handoff process
6			(see 2.6.6.2.5.2).
7			If SEARCH_INCLUDED is set to '1', the base station shall
8			include the field T_ADD and set this field to the pilot
9			detection threshold, expressed as an unsigned binary
10			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ ; otherwise, the base
11			station shall omit this field.
12	T_DROP	-	Pilot drop threshold.
13			This value is used by mobile stations to start a handoff drop
14			timer for pilots in the Active Set and the Candidate Set (see
15			2.6.6.2.3).
16			If SEARCH_INCLUDED is set to '1', the base station shall
17			include the field T_DROP and set this field to the pilot drop
18			threshold, expressed as an unsigned binary number equal to
19			$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ ; otherwise, the base station shall omit
20			this field.
21	T_COMP	-	Active Set versus Candidate Set comparison threshold.
22			The mobile station transmits a <i>Pilot Strength Measurement</i>
23			<i>Message</i> or an <i>Extended Pilot Strength Measurement Message</i>
24			when the strength of a pilot in the Candidate Set exceeds that
25			of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
26			If SEARCH_INCLUDED is set to '1', the base station shall
27			include the field T_COMP and set this field to the threshold
28			Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB;
29			otherwise, the base station shall omit this field.
30	T_TDROPP	-	Drop timer value.
31			Timer value after which an action is taken by the mobile
32			station for a pilot that is a member of the Active Set or
33			Candidate Set, and whose strength has not become greater
34			than T_DROP. If the pilot is a member of the Active Set, a
35			<i>Pilot Strength Measurement Message</i> or an <i>Extended Pilot</i>
36			<i>Strength Measurement Message</i> is issued. If the pilot is a
37			member of the Candidate Set, it will be moved to the Neighbor
38			Set.
39			If SEARCH_INCLUDED is set to '1', the base station shall
40			include the field T_TDROPP and set this field to the T_TDROPP
41			value shown in Table 2.6.6.2.3-1 corresponding to the drop
42			timer value to be used by the mobile station; otherwise, the
43			base station shall omit this field.
44	HARD_INCLUDED	-	Hard handoff parameters included.

1			If the mobile station is to change FRAME_OFFSET,
2			PRIVATE_LCM, ENCRYPT_MODE, SERV_NEG_TYPE,
3			NOM_PWR_EXT, NUM_PREAMBLE, NOM_PWR,
4			BAND_CLASS, or CDMA_FREQ, or the mobile station is to
5			perform a reset of the acknowledgment procedures, or the
6			mobile station is to reset Forward Traffic Channel power
7			control counters, the base station shall set this field to '1';
8			otherwise, the base station shall set this field to '0'.
9	FRAME_OFFSET	-	Frame offset.
10			The Forward and Reverse Traffic Channel frames are delayed
11			FRAME_OFFSET $\times$ 1.25 ms relative to system timing (see [2]).
12			If HARD_INCLUDED is set to '1', the base station shall
13			include the field FRAME_OFFSET and set it to the Forward
14			and Reverse Traffic Channel frame offset; otherwise, the base
15			station shall omit this field.
16	PRIVATE_LCM	-	Private long code mask indicator.
17			This field is used to change the long code mask after a hard
18			handoff.
19			If HARD_INCLUDED is set to '1', the base station shall
20			include the field PRIVATE_LCM and set it as described below;
21			otherwise, the base station shall omit this field.
22			If the private long code mask is to be used after the handoff,
23			the base station shall set this field to '1'; otherwise, the base
24			station shall set this field to '0'.
25	RESET_L2	-	Reset acknowledgment procedures command.
26			This field is used to reset acknowledgment processing in the
27			mobile station.
28			If HARD_INCLUDED is set to '1', the base station shall
29			include the field RESET_L2 and set it as described below;
30			otherwise, the base station shall omit this field.
31			If the field is included and the mobile station is to reset its
32			acknowledgment procedures, the base station shall set this
33			field to '1'; otherwise, the base station shall set this field to
34			'0'.
35	RESET_FPC	-	Reset Forward Traffic Channel power control.
36			This field is used to reset the Forward Traffic Channel power
37			control counters.
38			If HARD_INCLUDED is set to '1', the base station shall
39			include the field RESET_FPC and set it as described below;
40			otherwise, the base station shall omit this field.
41			The base station shall set this field to '0' if the Forward Traffic
42			Channel power control counters are to be maintained after
43			completion of the handoff. If the counters are to be initialized
44			as specified in 2.6.4.1.1.1, then the base station shall set this
45			field to '1'.

1	SERV_NEG_TYPE	-	Service negotiation type.
2			If HARD_INCLUDED is set to '1', the base station shall
3			include the field SERV_NEG_TYPE and set it as described
4			below; otherwise, the base station shall omit this field.
5			If the mobile station is to use service negotiation, the base
6			station shall set this field to '1'. If the mobile station is to use
7			service option negotiation, the base station shall set this field
8			to '0'.
9	ENCRYPT_MODE	-	Message encryption mode.
10			If HARD_INCLUDED is set to '1', the base station shall
11			include the field ENCRYPT_MODE and set it to the
12			ENCRYPT_MODE value shown in Table 3.7.2.3.2.8-2
13			corresponding to the encrypting mode that is to be used for
14			messages sent on the Forward and Reverse Traffic Channels,
15			as specified in 2.3.12.2; otherwise, the base station shall omit
16			this field.
17	NOM_PWR_EXT	-	Extended nominal transmit power.
18			If HARD_INCLUDED is set to '1', the base station shall
19			include this field and set it as described below; otherwise, the
20			base station shall omit this field.
21			If the mobile station is being handed off to a base station
22			operating in Band Class 0 or Band Class 3, the base station
23			shall set this field to '0'; otherwise, it shall set this field as
24			follows:
25			If the correction factor to be used by the mobile station in the
26			open loop power estimate is between -24 dB and -9 dB
27			inclusive, the base station shall set this field to '1'; otherwise
28			(the correction factor is in the range -8 dB to 7 dB inclusive),
29			the base station shall set this field to '0'.
30	NOM_PWR	-	Nominal transmit power offset.
31			If HARD_INCLUDED is set to '1', the base station shall
32			include the field NOM_PWR and set it to the correction factor
33			to be used by the mobile station in the open loop power
34			estimate, expressed as a two's complement value in units of 1
35			dB (see [2]); otherwise, the base station shall omit this field.
36	NUM_PREAMBLE	-	Traffic Channel preamble length.
37			If HARD_INCLUDED is set to '0', the base station shall omit
38			the NUM_PREAMBLE field; otherwise, the base station shall
39			include this field and set it to the length of Traffic Channel
40			preamble that the mobile station is to send when performing
41			a handoff; as follows:

If, after the handoff, radio configuration 1 or radio configuration 2 is to be used, the base station shall set NUM\_PREAMBLE to the Traffic Channel preamble length in 20 ms units; otherwise, the base station shall set NUM\_PREAMBLE to the value shown in Table 3.7.3.3.2.17-1 corresponding to the Traffic Channel preamble length in 1.25 ms units.

**Table 3.7.3.3.2.17-1. Traffic Channel Preamble Length**

<b>NUM_PREAMBLE or RESQ_NUM_PREAM BLE (binary)</b>	<b>Preamble Length in 1.25 ms Increments</b>
000	0
001	2
010	4
011	6
100	8
101	10
110	12
111	16

**BAND\_CLASS** - Band class.

If HARD\_INCLUDED is set to '1', the base station shall include the field BAND\_CLASS and set it to the CDMA band class corresponding to the CDMA frequency assignment for the CDMA Channel as specified in [30]; otherwise, the base station shall omit this field.

**CDMA\_FREQ** - Frequency assignment.

If HARD\_INCLUDED is set to '1', the base station shall include the field CDMA\_FREQ and set it to the CDMA Channel number, in the specified CDMA band class, corresponding to the CDMA frequency assignment for the CDMA Channel as specified in [2]; otherwise, the base station shall omit this field.

**ADD\_LENGTH** - Number of octets in the additional fields.

The base station shall set this field to the number of octets included in the Additional fields. If Additional fields are not included in this message, the base station shall set this field to '000'.

**Additional fields** - Additional fields.

If the ADD\_LENGTH field is not equal to '000', the base station shall include the following fields as additional fields.

Field	Length (bits)
P_REV	8

1

2

P\_REV - Protocol revision level.

3

4

5

The base station shall set this field to the base station protocol revision level that the mobile station is to use after completion of the handoff.

6

7

The base station shall include one occurrence of the following three-field record for each member of the mobile station's new Active Set.

9

PILOT\_PN - Pilot PN sequence offset index.

10

11

The base station shall set this field to the pilot PN sequence offset for this pilot in units of 64 PN chips.

12

PWR\_COMB\_IND - Power control symbol combining indicator.

13

14

15

16

17

18

If the Forward Traffic Channel associated with this pilot will carry the same closed-loop power control subchannel bits as that of the previous pilot in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'. For the first occurrence of this record in the message, the base station shall set this field to '0'.

19

CODE\_CHAN - Code channel index.

20

21

22

23

24

25

26

27

28

29

The base station shall set this field to the code channel index (see [2]) that the mobile station is to use as the Forward Fundamental Channel associated with this pilot. If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base station shall set this field in the range 1 to 63 inclusive. If Radio Configuration 4, 6, 8, 11, or 12 is used, the base station shall set this field in the range 1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the base station shall set this field in the range 1 to 255 inclusive.

## 3.7.3.3.2.18 Service Request Message

MSG\_TAG: SRQM

Field	Length (bits)
SERV_REQ_SEQ	3
REQ_PURPOSE	4
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN

SERV\_REQ\_SEQ - Service request sequence number.

The base station shall set this field to the service request sequence number pertaining to this request message as specified in 3.6.4.1.2.1.1.

REQ\_PURPOSE - Request purpose.

The base station shall set this field to the appropriate REQ\_PURPOSE code from Table 3.7.3.3.2.18-1 to indicate the purpose of the message.

**Table 3.7.3.3.2.18-1. REQ\_PURPOSE Codes**

REQ_PURPOSE (binary)	Meaning
0001	Indicates that the purpose of this message is to reject a proposed service configuration.
0010	Indicates that the purpose of this message is to propose a service configuration.
All other REQ_PURPOSE codes are reserved.	



1	RECORD_TYPE	-	Information record type.
2			If REQ_PURPOSE is set to '0010', the base station shall
3			include this field and set it as follows; otherwise, the base
4			station shall omit this field.
5			The base station shall set this field to the record type value
6			shown in Table 3.7.5-1 corresponding to the Service
7			Configuration information record.
8	RECORD_LEN	-	Information record length.
9			If REQ_PURPOSE is set to '0010', the base station shall
10			include this field and set it as follows; otherwise, the base
11			station shall omit this field.
12			The base station shall set this field to the number of octets
13			included in the type-specific fields of the Service
14			Configuration information record.
15	Type-specific fields	-	Type-specific fields.
16			If REQ_PURPOSE is set to '0010', the base station shall
17			include this field and set it as follows; otherwise, the base
18			station shall omit this field.
19			The base station shall set these fields as specified in 3.7.5.7
20			for the Service Configuration information record.
21			
22			

## 3.7.3.3.2.19 Service Response Message

MSG\_TAG: SRPM

Field	Length (bits)
SERV_REQ_SEQ	3
RESP_PURPOSE	4
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN

SERV\_REQ\_SEQ - Service request sequence number.

The base station shall set this field to the value of the SERV\_REQ\_SEQ field in the *Service Request Message* to which it is responding.

RESP\_PURPOSE - Response purpose.

The base station shall set this field to the appropriate RESP\_PURPOSE code from Table 3.7.3.3.2.19-1 to indicate the purpose of the message.

**Table 3.7.3.3.2.19-1. RESP\_PURPOSE Codes**

RESP_PURPOSE (binary)	Meaning
0001	Indicates that the purpose of the message is to reject a proposed service configuration.
0010	Indicates that the purpose of the message is to propose a service configuration.
All other RESP_PURPOSE codes are reserved.	

1	RECORD_TYPE	-	Information record type.
2			If RSP_PURPOSE is set to '0010', the base station shall
3			include this field and set it as follows; otherwise, the base
4			station shall omit this field.
5			The base station shall set this field to the record type value
6			shown in Table 3.7.5-1 corresponding to the Service
7			Configuration information record.
8	RECORD_LEN	-	Information record length.
9			If RSP_PURPOSE is set to '0010', the base station shall
10			include this field and set it as follows; otherwise, the base
11			station shall omit this field.
12			The base station shall set this field to the number of octets
13			included in the type-specific fields of the Service
14			Configuration information record.
15	Type-specific fields	-	Type-specific fields.
16			If RSP_PURPOSE is set to '0010', the base station shall
17			include this field and set it as follows; otherwise, the base
18			station shall omit this field.
19			The base station shall set these fields as specified in 3.7.5.7
20			for the Service Configuration information record.
21			

1 3.7.3.3.2.20 Service Connect Message

2 MSG\_TAG: SCM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	6
SERV_CON_SEQ	3
RESERVED	2
USE_OLD_SERV_CONFIG	2
SR_ID	0 or 3
SR_ID_RESTORE_BITMAP	0 or 6
SYNC_ID_INCL	1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN

(continues on next page)

4

Field	Length (bits)
CC_INFO_INCL	0 or 1
NUM_CALLS_ASSIGN	0 or 8

NUM\_CALLS\_ASSIGN occurrences of the following record:

{ (NUM\_CALLS\_ASSIGN)

CON_REF	8
RESPONSE_IND	1
TAG	0 or 4
BYPASS_ALERT_ANSWER	0 or 1

} (NUM\_CALLS\_ASSIGN)

USE_TYPE0_PLCM	1
SYNC_ID_BS_INITIATED_IND	0 or 1
SR_ID_RELEASE_BITMAP_INCL	0 or 1
SR_ID_RELEASE_BITMAP	0 or 6

- 1
- 2           USE\_TIME   -   Use action time indicator.
- 3                       This field indicates whether an explicit action time is
- 4                       specified in this message.
- 5                       If an explicit action time is specified in this message, the base
- 6                       station shall set this field to '1'; otherwise, the base station
- 7                       shall set this field to '0'.
- 8           ACTION\_TIME -   Action time.
- 9                       If the USE\_TIME field is set to '1', the base station shall set
- 10                      this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$
- 11                      ms, in units of 80 ms (modulo 64), at which the specified
- 12                      service configuration is to take effect. If the USE\_TIME field
- 13                      is set to '0', the base station shall set this field to '000000'.
- 14           SERV\_CON\_SEQ -   Connect sequence number.
- 15                       The base station shall set this field to the connect sequence
- 16                       number pertaining to this connect message as specified in
- 17                       3.6.4.1.2.1.2.
- 18           RESERVED   -   Reserved bits.
- 19                       The base station shall set this field to '00'.

1	USE_OLD_SERV_CONFIG	- Use stored service configuration indicator.
2		This field may be used by the base station to instruct the
3		mobile station to use the stored service configuration (that is,
4		both the Service Configuration information record and the
5		Non-negotiable Service Configuration information record).
6		If MOB_P_REV is less than seven, the base station shall set
7		this field to '00'.
8		If the base station had sent an <i>Extended Channel Assignment</i>
9		<i>Message</i> with GRANTED_MODE set to '11' or a service
10		configuration has been sent successfully to the mobile
11		station upon entering the <i>Traffic Channel Substate</i> , the base
12		station shall not set this field to '01' or '10'; otherwise, the
13		base station shall set this field according to Table
14		3.7.3.3.2.20-1.
15		

1

**Table 3.7.3.3.2.20-1. USE\_OLD\_SERV\_CONFIG values**

<b>USE_OLD_SERV_CONFIG Field (binary)</b>	<b>Description</b>
00	Mobile Station is to use the SCR and NNSCR included in this message
01	Mobile Station is to use the stored service configuration, where all service option connections are to be restored.
10	Mobile Station is to use the stored service configuration but with the modifications specified by the SCR and NNSCR included in this message
11	Mobile Station is to restore the service option connection record(s) indicated via the SR_ID or SR_ID_RESTORE_BITMAP field and release the service option connection record(s) indicated via the SR_ID_RELEASE_BITMAP.

2

3

SR\_ID – Service reference identifier.

4

5

6

If the USE\_OLD\_SERV\_CONFIG field is not set to '11', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

1			If the mobile station is to restore all remaining service option
2			connections from the stored service configuration, the base
3			station shall set this field to '111'; if the mobile station is to
4			restore more than one but not all remaining service option
5			connections from the stored service configuration, the base
6			station shall set this field to '000'; otherwise, the base station
7			shall set this field to the service reference identifier
8			corresponding to the service option connection to be restored.
9	SR_ID_RESTORE_BITMAP	-	Bitmap of service reference identifiers to be restored.
10			If the SR_ID field is included and set to '000', the base station
11			shall include this field and set it as follows; otherwise, the
12			base station shall omit this field.
13			This field consists of the subfields defined in Table
14			3.7.2.3.2.21-6. The base station shall set a subfield to '1' to
15			indicate that the mobile station is to restore the service option
16			connection of the corresponding service reference identifier;
17			otherwise, the base station shall set the subfield to '0' to
18			indicated that the service option connection of the
19			corresponding service reference identifier is not affected.
20	SYNC_ID_INCL	-	Service Configuration synchronization identifier included
21			indicator.
22			The base station shall set this field to '1' if the SYNC_ID field
23			is included in this message; otherwise, the base station shall
24			set this field to '0'.
25			If MOB_P_REV is less than seven or if MOB_P_REV is less
26			than 11 and USE_OLD_SERV_CONFIG field is set to '01' or
27			'11', the base station shall set this field to '0'.
28	SYNC_ID_LEN	-	Service Configuration synchronization identifier length.
29			If the SYNC_ID_INCL field is set to '0', the base station shall
30			omit this field; otherwise, the base station shall include this
31			field and set it as follows:



1			The base station shall set this field to the length (in octets) of
2			the SYNC_ID field included in this message. The base station
3			shall set this field to a value larger than zero.
4	SYNC_ID	-	Service Configuration synchronization identifier.
5			If the SYNC_ID_INCL field is set to '0', the base station shall
6			omit this field; otherwise, the base station shall include this
7			field and set it as follows:
8			The base station shall set this field to the synchronization
9			identifier corresponding to the service configuration conveyed
10			by this message.
11	RECORD_TYPE	-	Information record type.
12			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base
13			station shall omit this field; otherwise the base station shall
14			include this field and set it as follows.
15			The base station shall set this field to the record type value
16			shown in Table 3.7.5-1 corresponding to the Service
17			Configuration information record.
18	RECORD_LEN	-	Information record length.
19			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base
20			station shall omit this field; otherwise the base station shall
21			include this field and set it as follows.
22			The base station shall set this field to the number of octets
23			included in the type-specific fields of the Service
24			Configuration information record.
25	Type-specific fields	-	Type-specific fields.
26			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base
27			station shall omit this field; otherwise the base station shall
28			include this field and set it as follows.
29			The base station shall set these fields as specified in 3.7.5.7
30			for the Service Configuration information record.
31	RECORD_TYPE	-	Information record type.
32			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base
33			station shall omit this field; otherwise the base station shall
34			include this field and set it as follows.
35			The base station shall set this field to the record type value
36			shown in Table 3.7.5-1 corresponding to the Non-Negotiable
37			Service Configuration information record.
38	RECORD_LEN	-	Information record length.
39			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base
40			station shall omit this field; otherwise the base station shall
41			include this field and set it as follows.

1			The base station shall set this field to the number of octets
2			included in the type-specific fields of the Non-Negotiable
3			Service Configuration information record.
4	Type-specific fields	-	Type-specific fields.
5			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base
6			station shall omit this field; otherwise the base station shall
7			include this field and set it as follows.
8			The base station shall set these fields as specified in 3.7.5.20
9			for the Non-Negotiable Service Configuration information
10			record.
11	CC_INFO_INCL	-	Call Control information included indicator.
12			If the USE_OLD_SERV_CONFIG field is set to '01', '10', or '11',
13			the base station shall omit this field; otherwise, the base
14			station shall include this field and set it as follows:
15			The base station shall set this field to '1' if Call Control
16			related parameters (to assign new call(s)) are included in this
17			message; otherwise, the base station shall set this field to '0'.
18	NUM_CALLS_ASSIGN	-	Number of call assignments.
19			If the CC_INFO_INCL field is not included or is included but
20			is set to '0', the base station shall omit this field; otherwise,
21			the base station shall include this field and set it as follows:
22			The base station shall set this field to the number of new call
23			assignments included in this message.
24	The base station shall include NUM_CALLS_ASSIGN occurrences of the following variable		
25	length record.		
26	CON_REF	-	Connection reference.
27			The base station shall set this field to the connection
28			reference of the service option connection corresponding to
29			this call.
30	RESPONSE_IND	-	Response indicator.
31			The base station shall set this field to '1' if this call
32			assignment is a response to an <i>Enhanced Origination</i>
33			<i>Message</i> from the mobile station; otherwise, the base station
34			shall set this field to '0'.
35	TAG	-	Transaction identifier.

1		If the RESPONSE_IND field is set to '0', the base station shall
2		omit this field; otherwise, the base station shall include this
3		field and set it as follows:
4		The base station shall set this field to the value of the TAG
5		field received in the <i>Enhanced Origination Message</i> to which
6		this call assignment is the response.
7	BYPASS_ALERT_ANSWER	- Bypass alert indicator.
8		If the RESPONSE_IND field is set to '1', the base station shall
9		omit this field; otherwise, the base station shall include this
10		field and set it as follows:
11		If the mobile station is to bypass the Waiting for Order
12		Substate and the Waiting for Mobile Station Answer Substate
13		for this call, the base station shall set this field to '1';
14		otherwise, the base station shall set this field to '0'.
15	USE_TYPE0_PLCM	- Use TYPE0 PLCM indicator.
16		If the mobile station is to start using the PLCM defined by
17		PLCM_TYPE of '0000' when P_REV_IN_USE is less than 11 or
18		'0100' when P_REV_IN_USE is greater than or equal to 11
19		(see Table 3.7.2.3.2.21-5), the base station shall set this field
20		to '1'. If the mobile station is to continue using the current
21		long code mask, the base station shall set this field to '0'.
22	SYNC_ID_BS_INITIATED_IND	- SYNC_ID base station initiated indicator.
23		If the SYNC_ID_INCL field is set to '1' and the
24		USE_OLD_SERV_CONFIG field is included and is set to '10',
25		then the base station shall include this field and set it as
26		follows; otherwise, the base station shall omit this field.
27		If the SYNC_ID included in this message is initiated by the
28		base station and is to be used by mobile station to restore the
29		stored configuration, then the base station shall set this field
30		to '1'; otherwise the base station shall set this field to '0'.
31	SR_ID_RELEASE_BITMAP_INCL	- SR_ID release bitmap included indicator.
32		If the USE_OLD_SERV_CONFIG field is not set to '11', the
33		base station shall omit this field; otherwise, the base station
34		shall include this field and set it as follows:
35		If SR_ID_RELEASE_BITMAP is included, base station shall
36		set this field to '1'; otherwise, base station shall set this field
37		to '0'.
38	SR_ID_RELEASE_BITMAP	- SR_ID release bitmap.
39		If the SR_ID_RELEASE_BITMAP_INCL field is not included or
40		is included and is set to '0', the base station shall omit this
41		field; otherwise, the base station shall include this field and
42		set it as follows:

This field consists of the subfields defined in Table 3.7.3.3.2.20-2. The base station shall set a subfield to '1' to indicate that the mobile station is to release the service option connection of the corresponding service reference identifier; otherwise, the base station shall set the subfield to '0' to indicated that the service option connection of the corresponding service reference identifier is not affected.

The base station shall not indicate the mobile station to restore and release the same SR\_ID using this message.

**Table 3.7.3.3.2.20-2. SR\_ID\_RELEASE\_BITMAP Subfields.**

Subfield	Length (bits)	Subfield Description
SR_ID_1	1	sr_id 1 to be released
SR_ID_2	1	sr_id 2 to be released
SR_ID_3	1	sr_id 3 to be released
SR_ID_4	1	sr_id 4 to be released
SR_ID_5	1	sr_id 5 to be released
SR_ID_6	1	sr_id 6 to be released

### 1 3.7.3.3.2.21 Service Option Control Message

2 MSG\_TAG: SOCM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	6
CON_REF	8
SERVICE_OPTION	16
CTL_REC_LEN	8
Type-specific fields	$8 \times \text{CTL\_REC\_LEN}$

4

5 USE\_TIME - Use action time indicator.

6 This field indicates whether an explicit action time is  
7 specified in this message.

8 If an explicit action time is specified in this message, the base  
9 station shall set this field to '1'; otherwise, the base station  
10 shall set this field to '0'.

11 ACTION\_TIME - Action time.

12 If the USE\_TIME field is set to '1', the base station shall set  
13 this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$   
14 ms, in units of 80 ms (modulo 64), at which the message is to  
15 take effect. If the USE\_TIME field is set to '0', the base station  
16 shall set this field to '000000'.

17 CON\_REF - Service option connection reference.

18 The base station shall set this field to the reference for the  
19 service option connection.

20 SERVICE\_OPTION - Service option.

21 The base station shall set this field to the service option in  
22 use with the service option connection.

23 CTL\_REC\_LEN - Service option control record length.

24 The base station shall set this field to the number of octets  
25 included in the type-specific fields of this service option  
26 control record.

27 Type-specific fields - Type-specific fields.

28 The base station shall set these fields as specified by the  
29 requirements for the service option, which are defined  
30 external to this specification. See relevant service option  
31 specification.

32

1 3.7.3.3.2.22 TMSI Assignment Message

2 MSG\_TAG: TASM

3

Field	Length (bits)
TMSI_ZONE_LEN	4
TMSI_ZONE	$8 \times \text{TMSI\_ZONE\_LEN}$
TMSI_CODE	32
TMSI_EXP_TIME	24

4

5 TMSI\_ZONE\_LEN - TMSI zone length.  
6 The base station shall set this field to the number of octets  
7 included in the TMSI\_ZONE. The base station shall set this  
8 field to a value in the range 1 to 8 inclusive.

9 TMSI\_ZONE - TMSI zone.  
10 The base station shall set this field to the TMSI zone number,  
11 as specified in [27].

12 TMSI\_CODE - Temporary mobile station identity code.  
13 The base station shall set this field to the 32-bit TMSI code  
14 assigned to the mobile station.  
15 If the base station is to deassign the TMSI, the base station  
16 shall set all the bits in this field to '1'.

17 TMSI\_EXP\_TIME - TMSI expiration time.  
18 The base station shall set this field to the System Time in the  
19 units of  $80 \text{ ms} \times 2^{12}$  when the TMSI is to expire.  
20

## 1 3.7.3.3.2.23 Service Redirection Message

2 MSG\_TAG: SRDM

3

Field	Length (bits)
RETURN_IF_FAIL	1
DELETE_TMSI	1
REDIRECT_TYPE	1

One or more occurrences of the following field:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

}

4

5 RETURN\_IF\_FAIL - Return if fail indicator.

6 The base station shall set this field to '1' if the mobile station  
7 is required to return to the system from which it is being  
8 redirected upon failure to obtain service using the redirection  
9 criteria specified in this message; otherwise, the base station  
10 shall set this field to '0'.

11 DELETE\_TMSI - Delete TMSI indicator.

12 The base station shall set this field to '1' if the mobile station  
13 is required to delete the TMSI assigned to the mobile station;  
14 otherwise, the base station shall set this field to '0'.

15 REDIRECT\_TYPE - Redirect indicator.

16 The base station shall set this field to the REDIRECT\_TYPE value  
17 shown in Table 3.7.2.3.2.16-1 corresponding to the redirection  
18 type.

19 The base station shall include one occurrence of the following record:

20 RECORD\_TYPE - Redirection record type.

21 The base station shall set this field to the RECORD\_TYPE value  
22 shown in Table 3.7.2.3.2.16-2 corresponding to the type of  
23 redirection specified by this record.

24 RECORD\_LEN - Redirection record length.

25 If RECORD\_TYPE equals to '00000000', the base station shall  
26 set this field to '00000000'; otherwise, the base station shall  
27 set this field to the number of octets in the type-specific fields  
28 of this redirection record.

1      Type-specific fields      -      Redirection record type-specific fields.

2                   The base station shall include type-specific fields based on  
3                   the RECORD TYPE of this redirection record.

4 If RECORD\_TYPE is equal to '00000000', the base station shall not include the type-  
5 specific fields.

6 If RECORD\_TYPE is equal to '00000010', the base station shall include the following fields:

Subfield	Length (bits)
BAND_CLASS	5
EXPECTED_SID	15
EXPECTED_NID	16
RESERVED	4
NUM_CHANS	4

NUM\_CHANS occurrences of the following field:

{ (NUM\_CHANS)

CDMA_CHAN	11
-----------	----

} (NUM\_CHANS)

RESERVED	0-7 (as needed)
----------	-----------------

8

**9**            **BAND\_CLASS**     -   Band class.

10 The base station shall set this field to the CDMA band class, as  
11 specified in [30].

**12**            **EXPECTED\_SID**        -    Expected SID.

13 If the base station is redirecting the mobile station to a  
14 specific system, the base station shall set this field to the SID  
15 of that system; otherwise, the base station shall set this field  
16 to 0.

17            EXPECTED\_NID       -    Expected NID.

18 If the base station is redirecting the mobile station to a  
19 specific network, the base station shall set this field to the  
20 NID of that network; otherwise, the base station shall set this  
21 field to 65535.

22 RESERVED - Reserved bits.

23 The base station shall set this field to '0000'.

24            NUM\_CHANS    -    Number of CDMA Channels.

25 The base station shall set this field to the number of  
26 occurrences of the CDMA CHAN field in this record.



1	CDMA_CHAN	-	CDMA Channel number.
2			For each CDMA Channel on which the mobile station is to
3			attempt to acquire a CDMA system, the base station shall
4			include one occurrence of this field specifying the associated
5			CDMA Channel number.
6	RESERVED	-	Reserved bits.
7			The base station shall add reserved bits as needed in order to
8			make the length of the entire record equal to an integer
9			number of octets. The base station shall set these bits to '0'.
10			

## 1 3.7.3.3.2.24 Supplemental Channel Assignment Message

2 MSG\_TAG: SCAM

3

Field	Length (bits)
USE_RETRY_DELAY	1
RETRY_DELAY	0 or 8
REV_INCLUDED	1

Include the following record only if REV\_INCLUDED is set to '1':

{

REV_DTX_DURATION	4
EXPL_REV_START_TIME	1
REV_START_TIME	0 or 6
USE_REV_DURATION	1
REV_DURATION	0 or 8
USE_REV_HDM_SEQ	1
REV_LINKED_HDM_SEQ	0 or 2
NUM_REV_CODES	3
USE_T_ADD_ABORT	1
USE_SCRM_SEQ_NUM	1
SCRM_SEQ_NUM	0 or 4
REV_PARMES_INCLUDED	1
T_MULCHAN	0 or 3
BEGIN_PREAMBLE	0 or 3
RESUME_PREAMBLE	0 or 3

}

FOR_INCLUDED	1
--------------	---

(continues on next page)

4

5

1

Field	Length (bits)
-------	---------------

Include the following record only if FOR\_INCLUDED is set to '1':

{

FOR_SUP_CONFIG	2
EXPL_FOR_START_TIME	0 or 1
FOR_START_TIME	0 or 6
USE_FOR_DURATION	1
FOR_DURATION	0 or 8
USE_FOR_HDM_SEQ	0 or 1
FOR_LINKED_HDM_SEQ	0 or 2

Include the following fields and records only if  
FOR\_INCLUDED is set to '1' and  
FOR\_SUP\_CONFIG is set to '10' or '11':

NUM_SUP_PILOTS	3
NUM_FOR_SUP	3

Include NUM\_SUP\_PILOTS occurrences of the following  
record only if FOR\_INCLUDED is set to '1' and  
FOR\_SUP\_CONFIG is set to '10' or '11':

{ (NUM\_SUP\_PILOTS)

PILOT_PN	9
EXPL_CODE_CHAN	1

If EXPL\_CODE\_CHAN is set to '1', for each PILOT\_PN  
include NUM\_FOR\_SUP occurrences of the following field:

{ (NUM\_FOR\_SUP)

SUP_CODE_CHAN	0 or 8
---------------	--------

} (NUM\_FOR\_SUP)

If EXPL\_CODE\_CHAN is set to '0', the following field is  
included:

BASE_CODE_CHAN	0 or 8
----------------	--------

} (NUM\_SUP\_PILOTS)

}

2

3      USE\_RETRY\_DELAY      -      Assign or Retry Indicator.

1		The base station shall set this field to '1' to indicate that this
2		message contains a retry delay time; otherwise, the base
3		station shall set this field to '0' to indicate that no
4		RETRY_DELAY has been included.
5	RETRY_DELAY	- <i>Supplemental Channel Request Message</i> retry delay.
6		If USE_RETRY_DELAY is set to '1', the base station shall
7		include and set this field to the duration of the delay interval
8		in units of 320 ms (4 frames) from the next 80 ms system
9		time boundary during which the mobile station is not
10		permitted to send a <i>Supplemental Channel Request Message</i> .
11		The base station shall set RETRY_DELAY to '11111111' to
12		indicate that the mobile station is to refrain from sending
13		<i>Supplemental Channel Request Messages</i> indefinitely.
14	REV_INCLUDED	- Reverse Supplemental Code Channel configuration indicator.
15		The base station shall set this field to '1' to indicate that this
16		message contains assignment information for Reverse
17		Supplemental Code Channels; otherwise, the base station
18		shall set this field to '0'.
19	If REV_INCLUDED is set to '1', then the base station shall include the following fields,	
20	otherwise the base station shall omit the following fields:	
21	REV_DTX_DURATION	- Reverse Discontinuous Transmission Duration.
22		The base station shall set this field to the maximum duration
23		of time in units of 20 ms that the mobile station is allowed to
24		stop transmission on a Reverse Supplemental Code Channel
25		within the reverse assignment duration. The base station
26		shall set this field to '0000' if the mobile station is to stop
27		using a Reverse Supplemental Code Channel once it has
28		stopped transmitting on that Reverse Supplemental Code
29		Channel. The base station shall set this field to '1111' if the
30		mobile station is allowed to resume transmission on a
31		Reverse Supplemental Code Channel at any time within the
32		reverse assignment duration.
33	EXPL_REV_START_TIME	- Explicit Reverse Supplemental Code Channel assignment
34		start time indicator.
35		This field indicates whether a start time for the specified
36		Reverse Supplemental Code Channel Assignment is specified
37		in this message. If a REV_START_TIME is specified in this
38		message, the base station shall set this field to '1'; otherwise,
39		the base station shall set this field to '0'. If
40		EXPL_REV_START_TIME is set to '1', then the base station
41		shall set USE_REV_HDM_SEQ to '0'.
42	REV_START_TIME	- Explicit start time for Reverse Supplemental Code Channel
43		assignment.

1			If EXPL_REV_START_TIME is included and set to '1', the base
2			station shall include and set this field to the System Time, in
3			units of 80 ms (modulo 64), at which the mobile station may
4			start transmitting on the specified number of Reverse
5			Supplemental Code Channels. If EXPL_REV_START_TIME is
6			omitted or set to '0', the base station shall omit this field.
7	USE_REV_DURATION	-	Use reverse duration indicator.
8			The base station shall set this field to '1' if the
9			REV_DURATION field is included in the message; otherwise,
10			the base station shall set this field to '0'. If the mobile station
11			is granted permission to transmit on Reverse Supplemental
12			Code Channels (i.e., NUM_REV_CODES is not '000') then a
13			value of '0' for this field indicates an infinite Reverse
14			Supplemental Code Channel assignment duration (i.e., the
15			mobile station may transmit on Reverse Supplemental Code
16			Channels until it receives a subsequent <i>Supplemental</i>
17			<i>Channel Assignment Message</i> or a <i>General Handoff Direction</i>
18			<i>Message</i> that specifies an updated REV_DURATION or an
19			updated value of NUM_REV_CODES).
20	REV_DURATION	-	Duration of Reverse Supplemental Code Channel assignment.
21			The base station shall include this field only if the
22			USE_REV_DURATION field is included and set to '1'. If this
23			field is included, this field indicates the allocated duration, in
24			units of 80 ms, during which the mobile station may transmit
25			on Reverse Supplemental Code Channels.
26	USE_REV_HDM_SEQ	-	Use Reverse <i>General Handoff Direction Message</i> sequence
27			number indicator.
28			The base station shall set this field to '1' to indicate that this
29			Reverse Supplemental Code Channel assignment shall take
30			effect at the same time as a corresponding <i>General Handoff</i>
31			<i>Direction Message</i> ; otherwise, the base station shall set this
32			field to '0'. If USE_REV_HDM_SEQ is set to '1', then the base
33			station shall set EXPL_REV_START_TIME to '0'.
34	REV_LINKED_HDM_SEQ	-	Sequence number of the reverse linked <i>General Handoff</i>
35			<i>Direction Message</i> .
36			If USE_REV_HDM_SEQ is included and set to '1', then the
37			base station shall set this field to the sequence number of the
38			<i>General Handoff Direction Message</i> (HDM_SEQ) to which this
39			Reverse Supplemental Code Channel assignment is linked.
40	NUM_REV_CODES	-	Number of Reverse Supplemental Code Channels.
41			The base station shall set this field to the number of Reverse
42			Supplemental Code Channels that are assigned to the mobile
43			station.
44	USE_T_ADD_ABORT	-	Reverse use T_ADD abort indicator.
45			The base station shall set this field to '1' to indicate that the
46			mobile station is to utilize the T_ADD Reverse Supplemental
47			Code Channel abort feature for this reverse assignment;
48			otherwise, the base station shall set this field to '0'.

1	USE_SCRM_SEQ_NUM	-	Use <i>Supplemental Channel Request Message</i> sequence number indicator.
2			
3			The base station shall set this field to '1' if the
4			SCRM_SEQ_NUM field is included in this message; otherwise,
5			the base station shall set this field to '0'.
6	SCRM_SEQ_NUM	-	<i>Supplemental Channel Request Message</i> sequence number.
7			If USE_SCRM_SEQ_NUM is set to '1', the base station shall
8			set this field to the sequence number corresponding to the
9			SCRM_SEQ_NUM field in a <i>Supplemental Channel Request</i>
10			<i>Message</i> to which the mobile station is to match this
11			message; otherwise, the base station shall omit this field.
12	REV_PARMS_INCLUDED	-	Reverse additional parameters included flag.
13			The base station shall set this field to '1' if the following three
14			fields (T_MULCHAN, BEGIN_PREAMBLE, and
15			RESUME_PREAMBLE) are included in this message;
16			otherwise, the base station shall set this field to '0'.
17	T_MULCHAN	-	<i>Supplemental Channel Request Message</i> pilot strength
18			reporting offset.
19			If REV_PARMS_INCLUDED is set to '1', the base station shall
20			include this field and set this field to the threshold offset that
21			the mobile station is to use when reporting neighbor pilot
22			strength measurements in a <i>Supplemental Channel Request</i>
23			<i>Message</i> . The mobile station is to interpret this field as an
24			offset to T_ADD ranging from 0.5 dB (corresponding to
25			T_MULCHAN = '000') to 4.0 dB (corresponding to
26			T_MULCHAN = '111') in 0.5 dB increments.
27	BEGIN_PREAMBLE	-	Number of preamble frames on Reverse Supplemental Code
28			Channels at the beginning of transmission on Reverse
29			Supplemental Code Channel.
30			If REV_PARMS_INCLUDED is set to '1', the base station shall
31			include this field and set this field to the number of Reverse
32			Supplemental Code Channel preamble frames that the mobile
33			station is to send when beginning transmission on Reverse
34			Supplemental Code Channels.
35	RESUME_PREAMBLE	-	Number of preamble frames on Reverse Supplemental Code
36			Channels at the resumption of transmission.
37			If REV_PARMS_INCLUDED is set to '1', the base station shall
38			include this field and set this field to the number of Reverse
39			Supplemental Code Channel preamble frames that the mobile
40			station is to send when resuming transmission on a Reverse
41			Supplemental Code Channel following an autonomous
42			suspension of transmission on an allocated Supplemental
43			Code Channel.
44	FOR_INCLUDED	-	Forward Supplemental Code Channel configuration indicator.

1		The base station shall set this field to '1' to indicate that this
2		message contains assignment information for Forward
3		Supplemental Code Channels; otherwise, the base station
4		shall set this field to '0'.
5		If FOR_INCLUDED is set to '1', then the base station shall
6		include the remaining fields in this message, otherwise the
7		base station shall omit all of the following except for
8		RESERVED.
9	FOR_SUP_CONFIG	- Forward Supplemental Code Channel configuration indicator.
10		The base station shall set this field to '00' to indicate that the
11		mobile station is to stop processing the Forward
12		Supplemental Code Channels at the implicit action time of
13		the message.
14		The base station shall set this field to '01' to indicate that the
15		mobile station is to start processing the Forward
16		Supplemental Code Channels in the Code Channel List at the
17		implicit, explicit, or linked start time specified by this
18		message (see 2.6.6.2.5.1).
19		The base station shall set this field to '10' if the Forward
20		Supplemental Code Channels are specified in the message
21		and the mobile station is to update its Code Channel List and
22		stop processing the Forward Supplemental Code Channels at
23		the implicit action time of the message.
24		The base station shall set this field to '11' if the Forward
25		Supplemental Code Channels are specified in the message
26		and the mobile station is to start processing the Forward
27		Supplemental Code Channels at the implicit, explicit, or
28		linked start time specified by this message (see 2.6.6.2.5.1).
29	EXPL_FOR_START_TIME	- Explicit forward start time indicator.
30		This field indicates whether an explicit Forward
31		Supplemental Code Channel start time is specified in this
32		message.
33		The base station shall include this field only if
34		FOR_SUP_CONFIG is set to '01' or '11'. If a FOR_START_TIME
35		is specified in this message, the base station shall set this
36		field to '1'; otherwise, the base station shall set this field to
37		'0'. If EXPL_FOR_START_TIME is set to '1', then the base
38		station shall set USE_FOR_HDM_SEQ to '0'.
39	The following field is included only if EXPL_FOR_START_TIME is included and set to '1':	
40	FOR_START_TIME	- Start time of the Forward Supplemental Code Channel
41		assignment.

1			The base station shall include this field only if
2			FOR_SUP_CONFIG is set to '01' or '11'. If the
3			EXPL_FOR_START_TIME field is set to '1', the base station
4			shall set this field to the System Time, in units of 80 ms
5			(modulo 64), at which the mobile station is to start
6			processing the Forward Supplemental Code Channels. If
7			EXPL_FOR_START_TIME is set to '0', the base station shall
8			omit this field.
9	USE_FOR_DURATION	-	Use forward duration indicator.
10			The base station shall set this field to '1' if FOR_DURATION is
11			included in the message; otherwise, the base station shall set
12			this field to '0'.
13			If FOR_SUP_CONFIG is set to '01' or '11', then the base
14			station may set this field to '0' to indicate that the mobile
15			station is to be assigned an infinite Forward Supplemental
16			Code Channel assignment duration (i.e., the mobile station is
17			to continue processing Forward Supplemental Code Channels
18			until it receives a subsequent <i>Supplemental Channel</i>
19			<i>Assignment Message</i> or a <i>General Handoff Direction Message</i>
20			that specifies an updated FOR_DURATION). Otherwise, the
21			base station may set this field to '1' to indicate that the
22			mobile station is to be given a Forward Supplemental Code
23			Channel assignment for the duration specified by the
24			FOR_DURATION field.
25			If FOR_SUP_CONFIG is set to '00' or '10', then the base
26			station shall set USE_FOR_DURATION to '0'.
27	FOR_DURATION	-	Duration of Forward Supplemental Code Channel
28			assignment.
29			The base station shall include this field only if
30			USE_FOR_DURATION is included and set to '1'. If this field is
31			included, this field indicates allocated duration, in units of 80
32			ms, during which the mobile station is to process the
33			Forward Supplemental Code Channels.
34	USE_FOR_HDM_SEQ	-	Use Forward <i>General Handoff Direction Message</i> sequence
35			number indicator.
36			This field indicates whether processing of the Forward
37			Supplemental Code Channels shall take effect at the same
38			time as a corresponding <i>General Handoff Direction Message</i> .
39			The base station shall include this field only if
40			FOR_SUP_CONFIG is equal to '01' or '11'. If this message is
41			linked with a <i>General Handoff Direction Message</i> , the base
42			station shall set this field to '1'; otherwise, the base station
43			shall set this field to '0'. If USE_FOR_HDM_SEQ is set to '1',
44			then the base station shall set EXPL_FOR_START_TIME to '0'.
45	FOR_LINKED_HDM_SEQ	-	Sequence number of the <i>General Handoff Direction Message</i> .



1			If the USE_FOR_HDM_SEQ field is included and set to '1', the
2			base station shall set this field to the sequence number of the
3			<i>General Handoff Direction Message</i> (HDM_SEQ) to which this
4			Forward Supplemental Code Channel assignment is linked;
5			otherwise, if USE_FOR_HDM_SEQ is not included or is set to
6			'0', then base station shall omit this field.
7	NUM_SUP_PILOTS	-	Number of pilots in the Active Set which have at least one
8			associated Supplemental Code Channel.
9			If FOR_SUP_CONFIG is included and is set to '10' or '11', the
10			base station shall include this field and shall set this field to
11			the number of pilots for which there is at least one associated
12			Supplemental Code Channel. This field shall not be included
13			if FOR_SUP_CONFIG is omitted or is set to '01' or '00'.
14	NUM_FOR_SUP	-	Number of Forward Supplemental Code Channels.
15			If FOR_SUP_CONFIG is included and is set to '10' or '11', the
16			base station shall include this field and shall set this field to
17			the number of Forward Supplemental Code Channels
18			assigned to the mobile station. NUM_FOR_SUP shall not
19			exceed the maximum number of Forward Supplemental Code
20			Channels for the negotiated multiplex option. This field shall
21			not be included if FOR_SUP_CONFIG is omitted or is set to
22			'01' or '00'.
23	If FOR_SUP_CONFIG is included and is set to '10' or '11', the base station shall include		
24	NUM_SUP_PILOTS occurrences of the following record, one for each pilot for which there is		
25	at least one associated Supplemental Code Channel:		
26	PILOT_PN	-	Pilot PN sequence offset index.
27			The base station shall set this field to the pilot PN sequence
28			offset for this pilot in units of 64 PN chips.
29	EXPL_CODE_CHAN	-	Explicit code channel indicator
30			The base station shall set this field to '1' to indicate explicit
31			assignment of each Forward Supplemental Code Channel.
32			The base station shall set this field to '0' if the mobile station
33			is to use NUM_FOR_SUP successive code channels beginning
34			with index BASE_CODE_CHAN (i.e., BASE_CODE_CHAN
35			through BASE_CODE_CHAN + NUM_FOR_SUP - 1). In both
36			cases (i.e., the explicit code channel list format and range
37			format), the order of the code channel indices is the same for
38			all the pilots specified in this message (i.e., the <i>i</i> <sup>th</sup> code
39			channel index in the list for each pilot PN sequence offset
40			indicates the appropriate code channel to be used for the <i>i</i> <sup>th</sup>
41			Forward Supplemental Code Channel).
42	If EXPL_CODE_CHAN is set to '1', then the base station shall include NUM_FOR_SUP		
43	occurrences of the following field, one for each pilot which has been included:		
44	SUP_CODE_CHAN	-	Supplemental Code Channel index.

1                   The base station shall set this field to the code channel index  
2                   (see [2]) in the range 1 to 63 inclusive of the Supplemental  
3                   Code Channel associated with this pilot.

4   If EXPL\_CODE\_CHAN is set to '0', then the base station shall include the following field:

5       BASE\_CODE\_CHAN    -   Base code channel index.

6                   If EXPL\_CODE\_CHAN is equal to '0', the base station shall  
7                   include this field and set it to the base code channel index  
8                   (see [2]) in the range of 1 to (63 - NUM\_FOR\_SUP + 1),  
9                   inclusive, that the mobile station is to use as the first  
10                  Forward Supplemental Code Channel associated with this  
11                  pilot. The mobile station is to use NUM\_FOR\_SUP successive  
12                  code channels beginning with index BASE\_CODE\_CHAN (i.e.,  
13                  BASE\_CODE\_CHAN through BASE\_CODE\_CHAN +  
14                  NUM\_FOR\_SUP - 1) for the Forward Supplemental Code  
15                  Channels associated with this pilot.

16                  The base station shall not include this field if  
17                  EXPL\_CODE\_CHAN is equal to '1' or if EXPL\_CODE\_CHAN is  
18                  not included.

19

## 1 3.7.3.3.2.25 Power Control Message

2 MSG\_TAG: PCNM

3

Field	Length (bits)
PWR_CNTL_STEP	3
USE_TIME	1
ACTION_TIME	0 or 6
FPC_INCL	1
FPC_MODE	0 or 3
FPC_PRI_CHAN	0 or 1
FPC_OLPC_FCH_INCL	0 or 1
FPC_FCH_FER	0 or 5
FPC_FCH_MIN_SETPT	0 or 8
FPC_FCH_MAX_SETPT	0 or 8
FPC_OLPC_DCCH_INCL	0 or 1
FPC_DCCH_FER	0 or 5
FPC_DCCH_MIN_SETPT	0 or 8
FPC_DCCH_MAX_SETPT	0 or 8
FPC_SEC_CHAN	0 or 1
NUM_SUP	0 or 2

Include NUM\_SUP occurrence of the following record:

{ (NUM\_SUP)

SCH_ID	1
FPC_SCH_FER	5
FPC_SCH_MIN_SETPT	8
FPC_SCH_MAX_SETPT	8

} (NUM\_SUP)

FPC_THRESH_INCL	0 or 1
-----------------	--------

(continues on next page)

4

5

1

Field	Length (bits)
FPC_SETPT_THRESH	0 or 8
FPC_THRESH_SCH_INCL	0 or 1
FPC_SETPT_THRESH_SCH	0 or 8
RPC_INCL	1
RPC_NUM_REC	0 or 2

If RPC INCL is set to '1', RPC\_NUM\_REC occurrences of the following record:

{ (RPC\_NUM\_REC)

RPC_ADJ_REC_TYPE	4
RPC_ADJ_REC_LEN	5
EXT_RPC_ADJ_REC_LEN	0 or 10
Type-specific fields	8× RPC_ADJ_REC_LEN, or 8 × EXT_RPC_ADJ_REC_LEN

} (RPC\_NUM\_REC)

REV_PDCH_PARMS_INCL	1
REV_PDCH_NUM_ARQ_ROUNDS_NORMAL	0 or 2
REV_PDCH_NUM_ARQ_ROUNDS_BOOST	0 or 2
FPC_BCMC_CHAN	0 or 1

2

3

PWR\_CNTL\_STEP - Power control step size

4

5

6

7

8

The base station shall set this field to the closed loop power control step size parameter shown in Table 3.7.3.3.2.25-1 corresponding to the power control step size that the mobile station is to use for closed loop power control.

**Table 3.7.3.3.2.25-1. Closed Loop Power Control  
Step Size**

<b>PWR_CNTL_STEP (binary)</b>	<b>Power Control Step Size (dB nominal)</b>
000	1
001	0.5
010	0.25
All other PWR_CNTL_STEP values are reserved.	

**USE\_TIME** - Use action time indicator.

This field indicates whether an ACTION\_TIME is specified in this message.

If an ACTION\_TIME is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**ACTION\_TIME** - Action time.

If the USE\_TIME field is set to '1', the base station shall set this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$  ms, in units of 80 ms (modulo 64), at which the message is to take effect. If the USE\_TIME field is set to '0', the base station shall omit this field.

**FPC\_INCL** - Forward Link Power Control parameter included indicator.

If the forward power control related information is included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**FPC\_MODE** - Forward Power Control Operation Mode Indicator

If FPC\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set the value to the forward power control operation mode (see [2]).

**FPC\_PRI\_CHAN** - Power Control Subchannel indicator.

If FPC\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to '0' if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to '1' if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.

If only the Fundamental Channel is assigned, the base station shall set this field to '0'. If only the Dedicated Control Channel is assigned, the base station shall set this field to '1'.

If the F-CPCCH is assigned, the base station will multiplex the Power Control Subchannel on the F-CPCCH; otherwise:

If this field is set to '0', the base station will multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station will multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

**FPC\_OLPC\_FCH\_INCL** - Fundamental Channel Outer Loop Power Control parameter included indicator.

If FPC\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the forward link fundamental channel outer loop power control parameters are included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**FPC\_FCH\_FER** - Fundamental channel target Frame Error Rate.

If FPC\_OLPC\_FCH\_INCL is included and set to '1', the base station shall set this field to the target Frame Error Rate on the Forward Fundamental Channel, as specified in Table 3.7.3.3.2.25-2; otherwise, the base station shall omit this field.

**Table 3.7.3.3.2.25-2. Target Frame Error Rate**

<b>FER (Binary)</b>	<b>Frame Error Rate</b>
00000	0.2%
00001-10100	0.5% -10% (in units of 0.5%)
10101-11001	11% - 15% (in units of 1.0%)
11010-11110	18% - 30% (in units of 3.0%)
11111	Reserved

**FPC\_FCH\_MIN\_SETPT** - Minimum Fundamental Channel Outer Loop Eb/Nt setpoint

If FPC\_OLPC\_FCH\_INCL is included and set to '1', the base station shall set this field to minimum Fundamental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise, the base station shall omit this field.

The base station shall set this field to '11111111', when it directs the mobile station to set this Eb/Nt setpoint to the current setpoint used at the mobile station on this channel.

**FPC\_FCH\_MAX\_SETPT** - Maximum Fundamental Channel Outer Loop Eb/Nt setpoint

If FPC\_OLPC\_FCH\_INCL is included and set to '1', the base station shall set this field to maximum Fundamental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise, the base station shall omit this field.

1		The base station shall set this field to '11111111', when it
2		directs the mobile station to set this Eb/Nt setpoint to the
3		current setpoint used at the mobile station on this channel.
4	FPC_OLPC_DCCH_INCL -	Dedicated Control Channel Outer Loop Power Control
5		parameter included indicator.
6		If FPC_INCL is set to '0', the base station shall omit this field;
7		otherwise, the base station shall set this field as follows:
8		If the forward link Dedicated Control Channel outer loop
9		power control parameters are included in this message, the
10		base station shall set this field to '1'; otherwise, the base
11		station shall set this field to '0'.
12	FPC_DCCH_FER -	Dedicated Control Channel target Frame Error Rate.
13		If FPC_OLPC_DCCH_INCL is included and set to '1', the base
14		station shall set this field to the target Frame Error Rate on
15		the Forward Dedicated Control Channel, as specified in Table
16		3.7.3.3.2.25-2; otherwise, the base station shall omit this
17		field.
18	FPC_DCCH_MIN_SETPT -	Minimum Dedicated Control Channel Outer Loop Eb/Nt
19		setpoint.
20		If FPC_OLPC_DCCH_INCL is included and set to '1', the base
21		station shall set this field to minimum Dedicated Control
22		Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB;
23		otherwise, the base station shall omit this field.
24		The base station shall set this field to '11111111', when it
25		directs the mobile station to set this Eb/Nt setpoint to the
26		current setpoint used at the mobile station on this channel.
27	FPC_DCCH_MAX_SETPT -	Maximum Dedicated Control Channel Outer Loop Eb/Nt
28		setpoint.
29		If FPC_OLPC_DCCH_INCL is included and set to '1', the base
30		station shall set this field to maximum Dedicated Control
31		Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB;
32		otherwise, the base station shall omit this field.
33		The base station shall set this field to '11111111', when it
34		directs the mobile station to set this Eb/Nt setpoint to the
35		current setpoint used at the mobile station on this channel.
36	FPC_SEC_CHAN -	Master Supplemental channel index.
37		If FPC_INCL is set to '1' and FPC_MODE is set to '001', '010',
38		'101', or '110', the base station shall set this field to the
39		master Supplemental Channel index; otherwise, the base
40		station shall omit this field.
41	NUM_SUP -	Number of Supplemental Channels.
42		If FPC_INCL is set to '0', the base station shall omit this field;
43		otherwise, the base station shall set this field to the total
44		number of the Supplemental Channels.
45	The base station shall include NUM_SUP occurrences of the following record:	

1	SCH_ID	-	Supplemental channel index.
2			The base station shall set this field to the Supplemental
3			Channel index.
4	FPC_SCH_FER	-	Supplemental channel target Frame Error Rate.
5			The base station shall set this field to the target Frame Error
6			Rate on the Supplemental Channel, as specified in Table
7			3.7.3.3.2.25-2.
8	FPC_SCH_MIN_SETPT	-	Minimum Supplemental Channel outer loop Eb/Nt setpoint.
9			The base station shall set this field to minimum
10			Supplemental Channel Outer Loop Eb/Nt setpoint, in units
11			of 0.125 dB.
12			The base station shall set this field to '1111111', when it
13			directs the mobile station to set this Eb/Nt setpoint to the
14			current setpoint used at the mobile station on this channel.
15	FPC_SCH_MAX_SETPT	-	Maximum Supplemental Channel outer loop Eb/Nt setpoint.
16			The base station shall set this field to maximum
17			Supplemental Channel Outer Loop Eb/Nt setpoint, in units
18			of 0.125 dB.
19			The base station shall set this field to '1111111', when it
20			directs the mobile station to set this Eb/Nt setpoint to the
21			current setpoint used at the mobile station on this channel.
22	FPC_THRESH_INCL	-	Setpoint Report Threshold included indicator.
23			If FPC_INCL is set to '0', the base station shall omit this field;
24			otherwise, the base station shall set this field as follows:
25			If FPC_SETPT_THRESH is included in this message, the base
26			station shall set this field to '1'; otherwise, the base station
27			shall set this field to '0'.
28	FPC_SETPT_THRESH	-	Setpoint Report Threshold.
29			If FPC_THRESH_INCL is set to '1', the base station shall set
30			the value to FPC_SETPT_THRESH (in units of 0.125 dB)
31			above which the outer loop report message will be sent by the
32			mobile station; otherwise, the base station shall omit this
33			field.
34	FPC_THRESH_SCH_INCL	-	SCH Setpoint Report Threshold included indicator.
35			If FPC_INCL is set to '0', the base station shall omit this field;
36			otherwise, the base station shall set this field as follows:
37			If FPC_SETPT_THRESH_SCH is included in this message, the
38			base station shall set this field to '1'; otherwise, the base
39			station shall set this field to '0'.
40	FPC_SETPT_THRESH_SCH	-	SCH Setpoint Report Threshold.



1 If FPC\_THRESH\_SCH\_INCL is set to '1', the base station shall  
 2 set the value to FPC\_SETPT\_THRESH\_SCH (in units of 0.125  
 3 dB) above which the outer loop report message will be sent by  
 4 the mobile station; otherwise, the base station shall omit this  
 5 field.

6 **RPC\_INCL** - Reverse Link Power Control parameter included indicator.  
 7 If the reverse power control related information is included in  
 8 this message, the base station shall set this field to '1';  
 9 otherwise, the base station shall set this field to '0'.

10 **RPC\_NUM\_REC** - Number of records for Reverse Link Power Control.  
 11 If RPC\_INCL is set to '0', the base station shall omit this field;  
 12 otherwise, the base station shall set this field to one less than  
 13 the number of records included in this message.

14 If **RPC\_NUM\_REC** is included in this message, the base station shall include  
 15 **RPC\_NUM\_REC** occurrences of the following record:

16 **RPC\_ADJ\_REC\_TYPE** - Reverse Link Power Control adjustment record type.  
 17 The base station shall set this field to the value shown in  
 18 Table 3.7.3.3.2.25-3 corresponding to the type of adjustment  
 19 that is to be used.

20 **Table 3.7.3.3.2.25-3. RPC\_ADJ\_REC\_TYPE and**  
 21 **RPC\_ADJ\_REC\_LEN fields**

<b>Description</b>	<b>RPC_ADJ_REC_TYPE (binary)</b>	<b>RPC_ADJ_REC_LEN</b>
Reverse Channel Adjustment Gain	0000	2-7
Attribute Adjustment Gain for Basic Rates	0001	2-26
Attribute Adjustment Gain for Higher Rates	0010	2-31
Attribute Adjustment Gain for R-CQICH	0011	2-6
Attribute Adjustment Gain for R-PDCCH	0100	13-936
All other values are reserved.		

22  
 23 **RPC\_ADJ\_REC\_LEN** - Reverse Link Power Control adjustment record length.  
 24 If **RPC\_ADJ\_REC\_TYPE** is not equal to '0100', the base  
 25 station shall set this field to the number of octets in the type-  
 26 specific fields of this adjustment record as given in Table  
 27 3.7.3.3.2.25-3.

28 If **RPC\_ADJ\_REC\_TYPE** is equal to '0100', the base station  
 29 shall set this field to '0000'.

1	EXT_RPC_ADJ_REC_LEN-	Reverse Link Power Control adjustment record length.
2		If RPC_ADJ_REC_TYPE is not equal to '0100', the base
3		station shall omit this field; otherwise, the base station shall
4		include this field and set it as follows.
5		If RPC_ADJ_REC_TYPE is equal to '0100', the base station
6		shall set this field to the number of octets in the type-specific
7		fields of this adjustment record as given in Table
8		3.7.3.3.2.25-3.
9	Type-specific fields -	Reverse Link Power Control adjustment record type-specific
10		fields.
11		The base station shall include type-specific fields based on
12		the RPC_ADJ_REC_TYPE of this adjustment record, as
13		specified as below.
14		

1 If RPC\_ADJ\_REC\_TYPE is equal to '0000', the base station shall set type-specific fields as  
 2 specified in Table 3.7.3.3.2.25-4.

3 **Table 3.7.3.3.2.25-4. Type Specific Fields for**  
 4 **RECORD\_TYPE = '0000'**

Fields	Length (Bits)
FCH_INCL	1
FCH_CHAN_ADJ_GAIN	0 or 8
DCCH_INCL	1
DCCH_CHAN_ADJ_GAIN	0 or 8
SCH0_INCL	1
SCH0_CHAN_ADJ_GAIN	0 or 8
SCH1_INCL	1
SCH1_CHAN_ADJ_GAIN	0 or 8
REV_ACKCH_INCL	1
REV_ACKCH_CHAN_ADJ_GAIN	0 or 8
REV_CQICH_INCL	1
REV_CQICH_CHAN_ADJ_GAIN	0 or 8
RESERVED	0-7 (if needed)

5

6

7 FCH\_INCL - FCH channel adjustment gain included indicator.

8 If FCH\_CHAN\_ADJ\_GAIN is included in this message, the  
 9 base station shall set this field to '1'; otherwise, the base  
 10 station shall set this field to '0'.

11 FCH\_CHAN\_ADJ\_GAIN - Channel adjustment gain for Reverse Fundamental Channel.

12 If FCH\_INCL is set to '0', the base station shall omit this field;  
 13 otherwise, the base station shall set each field to the value of  
 14 the gain adjustment that the mobile station is to make for the  
 15 Reverse Fundamental Channel. The base station shall set  
 16 this field to the correction factor expressed as a two's  
 17 complement value in units of 0.125 dB. The base station  
 18 shall set the value in the range from -48 to 48 inclusive.

19 DCCH\_INCL - DCCH channel adjustment gain included indicator.

20 If DCCH\_CHAN\_ADJ\_GAIN is included in this message, the  
 21 base station shall set this field to '1'; otherwise, the base  
 22 station shall set this field to '0'.

23 DCCH\_CHAN\_ADJ\_GAIN - Channel adjustment gain for the Reverse Dedicated Control  
 24 Channel.

1			If DCCH_INCL is set to '0', the base station shall omit this
2			field; otherwise, the base station shall set each field to the
3			value of the gain adjustment that the mobile station is to
4			make for the Reverse Dedicated Control Channel. The base
5			station shall set this field to the correction factor expressed
6			as a two's complement value in units of 0.125 dB. The base
7			station shall set the value in the range from -48 to 48
8			inclusive.
9	SCH0_INCL	-	SCH0 channel adjustment gain included indicator.
10			If SCH0_CHAN_ADJ_GAIN is included in this message, the
11			base station shall set this field to '1'; otherwise, the base
12			station shall set this field to '0'.
13	SCH0_CHAN_ADJ_GAIN	-	Channel adjustment gain for Reverse Supplemental Channel
14			0.
15			If SCH0_INCL is set to '0', the base station shall omit this
16			field; otherwise, the base station shall set each field to the
17			value of the gain adjustment that the mobile station is to
18			make for the Reverse Supplemental Channel 0. The base
19			station shall set this field to the correction factor expressed
20			as a two's complement value in units of 0.125 dB. The base
21			station shall set the value in the range from -48 to 48
22			inclusive.
23	SCH1_INCL	-	SCH1 channel adjustment gain included indicator.
24			If SCH1_CHAN_ADJ_GAIN is included in this message, the
25			base station shall set this field to '1'; otherwise, the base
26			station shall set this field to '0'.
27	SCH1_CHAN_ADJ_GAIN	-	Channel adjustment gain for Reverse Supplemental Channel
28			1.
29			If SCH1_INCL is set to '0', the base station shall omit this
30			field; otherwise, the base station shall set each field to the
31			value of the gain adjustment that the mobile station is to
32			make for the Supplemental Channel 1. The base station shall
33			set this field to the correction factor expressed as a two's
34			complement value in units of 0.125 dB. The base station
35			shall set the value in the range from -48 to 48 inclusive.
36	REV_ACKCH_INCL	-	Reverse Acknowledgment Channel channel adjustment gain
37			included indicator.
38			If REV_ACKCH_CHAN_ADJ_GAIN is included in this message,
39			the base station shall set this field to '1'; otherwise, the base
40			station shall set this field to '0'.
41	REV_ACKCH_CHAN_ADJ_GAIN	-	Channel adjustment gain for Reverse
42			Acknowledgment Channel.

1 If REV\_ACKCH\_INCL is set to '0', the base station shall omit  
2 this field; otherwise, the base station shall set each field to  
3 the value of the gain adjustment that the mobile station is to  
4 make for the Reverse Acknowledgment Channel. The base  
5 station shall set this field to the correction factor expressed  
6 as a two's complement value in units of 0.125 dB. The base  
7 station shall set the value in the range from -24 to 24  
8 inclusive.

9 REV\_CQICH\_INCL - Reverse Channel Quality Indicator Channel channel  
10 adjustment gain included indicator.

11 If REV\_CQICH\_CHAN\_ADJ\_GAIN is included in this message,  
12 the base station shall set this field to '1'; otherwise, the base  
13 station shall set this field to '0'.

14 REV\_CQICH\_CHAN\_ADJ\_GAIN - Channel adjustment gain for Reverse Channel Quality  
15 Indicator Channel.

16 If REV\_CQICH\_INCL is set to '0', the base station shall omit  
17 this field; otherwise, the base station shall set each field to  
18 the value of the gain adjustment that the mobile station is to  
19 make for the Reverse Channel Quality Indicator Channel.  
20 The base station shall set this field to the correction factor  
21 expressed as a two's complement value in units of 0.125 dB.  
22 The base station shall set the value in the range from -16 to  
23 16 inclusive.

24 RESERVED - Reserved bits.

25 The base station shall add reserved bits as needed in order to  
26 make the length of the entire record equal to an integer  
27 number of octets. The base station shall set these bits to '0'.

28 If RPC\_ADJ\_REC\_TYPE is equal to '0001', the base station shall set type-specific fields as  
29 specified in Table 3.7.3.3.2.25-5.

**Table 3.7.3.3.2.25-5. Type Specific Fields for  
RECORD\_TYPE = '0001'**

<b>Fields</b>	<b>Length (Bits)</b>
RL_ATT_ADJ_GAIN_TYPE	1
RC3_RC5_20MS_INCL	1
RL_ATT_ADJ_GAIN_1500	0 or 8
RL_ATT_ADJ_GAIN_2700	0 or 8
RL_ATT_ADJ_GAIN_4800	0 or 8
RL_ATT_ADJ_GAIN_9600	0 or 8
RC4_RC6_20MS_INCL	1
RL_ATT_ADJ_GAIN_1800	0 or 8
RL_ATT_ADJ_GAIN_3600	0 or 8
RL_ATT_ADJ_GAIN_7200	0 or 8
RL_ATT_ADJ_GAIN_14400	0 or 8
5MS_INCL	1
RL_ATT_ADJ_GAIN_9600_5MS	0 or 8
RC3_RC5_40MS_INCL	1
RL_ATT_ADJ_GAIN_1350_40MS	0 or 8
RL_ATT_ADJ_GAIN_2400_40MS	0 or 8
RL_ATT_ADJ_GAIN_4800_40MS	0 or 8
RL_ATT_ADJ_GAIN_9600_40MS	0 or 8
RC4_RC6_40MS_INCL	1
RL_ATT_ADJ_GAIN_1800_40MS	0 or 8
RL_ATT_ADJ_GAIN_3600_40MS	0 or 8
RL_ATT_ADJ_GAIN_7200_40MS	0 or 8
RL_ATT_ADJ_GAIN_14400_40MS	0 or 8
RC3_RC5_80MS_INCL	1
RL_ATT_ADJ_GAIN_1200_80MS	0 or 8
RL_ATT_ADJ_GAIN_2400_80MS	0 or 8
RL_ATT_ADJ_GAIN_4800_80MS	0 or 8

(continues on next page)

Fields	Length (Bits)
RL_ATT_ADJ_GAIN_9600_80MS	0 or 8
RC4_RC6_80MS_INCL	1
RL_ATT_ADJ_GAIN_1800_80MS	0 or 8
RL_ATT_ADJ_GAIN_3600_80MS	0 or 8
RL_ATT_ADJ_GAIN_7200_80MS	0 or 8
RL_ATT_ADJ_GAIN_14400_80MS	0 or 8

1

RESERVED	0-7 (if needed)
----------	-----------------

2

3 RL\_ATT\_ADJ\_GAIN\_TYPE - Reverse Link Attribute Adjustment Gain value type  
4 indicator.

5 If the following fields are set to the nominal attribute gain  
6 adjustment values that the mobile station is to use for the  
7 transmission attributes (relative to Nominal\_Attribute\_Gain  
8 specified in [2]), the base station shall set this field to '0'. If  
9 the following fields are set to the pilot reference level  
10 adjustment values that the mobile station is to use for the  
11 transmission attributes (relative to Pilot\_Reference\_Level  
12 specified in [2]), the base station shall set this field to '1'.

13 RC3\_RC5\_20MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
14 Configuration 3 or 5 of 20 ms frame included indicator.

15 If Reverse Link Attribute adjustment Gain for Radio  
16 Configuration 3 or 5 of 20 ms frame is included in this  
17 message, the base station shall set this field to '1'; otherwise,  
18 the base station shall set this field to '0'.

19 RL\_ATT\_ADJ\_GAIN\_1500- Reverse Link Attribute Adjustment Gain for the transmission  
20 rate 1500 bits/s.

21 If RC3\_RC5\_20MS\_INCL is set to '0', the base station shall  
22 omit this field.

23 If RC3\_RC5\_20MS\_INCL is set to '1' and  
24 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
25 set this field to the value of the nominal attribute gain  
26 adjustment that the mobile station is to make for the  
27 transmission attributes with transmission rate 1500 bits/s,  
28 convolutional code and 20ms frame. The base station shall  
29 set the value in the range from -48 to 48 inclusive.

30 If RC3\_RC5\_20MS\_INCL is set to '1' and  
31 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
32 set this field to the value of the pilot reference level  
33 adjustment that the mobile station is to make for the  
34 transmission attributes with transmission rate 1500 bits/s,  
35 convolutional code and 20ms frame.

1		The base station shall set this field to the correction factor
2		expressed as a two's complement value in units of 0.125 dB.
3	RL_ATT_ADJ_GAIN_2700-	Reverse Link Attribute Adjustment Gain for the transmission
4		rate 2700 bits/s.
5		If RC3_RC5_20MS_INCL is set to '0', the base station shall
6		omit this field.
7		If RC3_RC5_20MS_INCL is set to '1' and
8		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
9		set this field to the value of the nominal attribute gain
10		adjustment that the mobile station is to make for the
11		transmission attributes with transmission rate 2700 bits/s,
12		convolutional code and 20ms frame. The base station shall
13		set the value in the range from -48 to 48 inclusive.
14		If RC3_RC5_20MS_INCL is set to '1' and
15		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
16		set this field to the value of the pilot reference level
17		adjustment that the mobile station is to make for the
18		transmission attributes with transmission rate 2700 bits/s,
19		convolutional code and 20ms frame.
20		The base station shall set this field to the correction factor
21		expressed as a two's complement value in units of 0.125 dB.
22	RL_ATT_ADJ_GAIN_4800-	Reverse Link Attribute Gain Adjustment for the transmission
23		rate 4800 bits/s.
24		If RC3_RC5_20MS_INCL is set to '0', the base station shall
25		omit this field.
26		If RC3_RC5_20MS_INCL is set to '1' and
27		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
28		set this field to the value of the nominal attribute gain
29		adjustment that the mobile station is to make for the
30		transmission attributes with transmission rate 4800 bits/s,
31		convolutional code and 20ms frame. The base station shall
32		set the value in the range from -48 to 48 inclusive.
33		If RC3_RC5_20MS_INCL is set to '1' and
34		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
35		set this field to the value of the pilot reference level
36		adjustment that the mobile station is to make for the
37		transmission attributes with transmission rate 4800 bits/s,
38		convolutional code and 20ms frame.
39		The base station shall set this field to the correction factor
40		expressed as a two's complement value in units of 0.125 dB.
41	RL_ATT_ADJ_GAIN_9600-	Reverse Link Attribute Gain Adjustment for the transmission
42		rate 9600 bits/s.
43		If RC3_RC5_20MS_INCL is set to '0', the base station shall
44		omit this field.



1		If RC3_RC5_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
3		set this field to the value of the nominal attribute gain
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 9600 bits/s,
6		convolutional code and 20ms frame. The base station shall
7		set the value in the range from -48 to 48 inclusive.
8		If RC3_RC5_20MS_INCL is set to '1' and
9		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
10		set this field to the value of the pilot reference level
11		adjustment that the mobile station is to make for the
12		transmission attributes with transmission rate 9600 bits/s,
13		convolutional code and 20ms frame.
14		The base station shall set this field to the correction factor
15		expressed as a two's complement value in units of 0.125 dB.
16	RC4_RC6_20MS_INCL -	Reverse Link Attribute Adjustment Gain for Radio
17		Configuration 4 or 6 of 20ms frame included indicator.
18		If Reverse Link Attribute Adjustment Gain for Radio
19		Configuration 4 or 6 of 20ms frame is included in this
20		message, the base station shall set this field to '1'; otherwise,
21		the base station shall set this field to '0'.
22	RL_ATT_ADJ_GAIN_1800-	Reverse Link Attribute Gain Adjustment for the transmission
23		rate 1800 bits/s.
24		If RC4_RC6_20MS_INCL is set to '0', the base station shall
25		omit this field.
26		If RC4_RC6_20MS_INCL is set to '1' and
27		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
28		set this field to the value of the nominal attribute gain
29		adjustment that the mobile station is to make for the
30		transmission attributes with transmission rate 1800 bits/s,
31		convolutional code and 20ms frame. The base station shall
32		set the value in the range from -48 to 48 inclusive.
33		If RC4_RC6_20MS_INCL is set to '1' and
34		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
35		set this field to the value of the pilot reference level
36		adjustment that the mobile station is to make for the
37		transmission attributes with transmission rate 1800 bits/s,
38		convolutional code and 20ms frame.
39		The base station shall set this field to the correction factor
40		expressed as a two's complement value in units of 0.125 dB.
41	RL_ATT_ADJ_GAIN_3600-	Reverse Link Attribute Adjustment Gain for the transmission
42		rate 3600 bits/s.
43		If RC4_RC6_20MS_INCL is set to '0', the base station shall
44		omit this field.

1		If RC4_RC6_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
3		set this field to the value of the nominal attribute gain
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 3600 bits/s,
6		convolutional code and 20ms frame. The base station shall
7		set the value in the range from -48 to 48 inclusive.
8		If RC4_RC6_20MS_INCL is set to '1' and
9		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
10		set this field to the value of the pilot reference level
11		adjustment that the mobile station is to make for the
12		transmission attributes with transmission rate 3600 bits/s,
13		convolutional code and 20ms frame.
14		The base station shall set this field to the correction factor
15		expressed as a two's complement value in units of 0.125 dB.
16	RL_ATT_ADJ_GAIN_7200-	Reverse Link Attribute Adjustment Gain for the transmission
17		rate 7200 bits/s.
18		If RC4_RC6_20MS_INCL is set to '0', the base station shall
19		omit this field.
20		If RC4_RC6_20MS_INCL is set to '1' and
21		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
22		set this field to the value of the nominal attribute gain
23		adjustment that the mobile station is to make for the
24		transmission attributes with transmission rate 7200 bits/s,
25		convolutional code and 20ms frame. The base station shall
26		set the value in the range from -48 to 48 inclusive.
27		If RC4_RC6_20MS_INCL is set to '1' and
28		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
29		this field to the value of the pilot reference level adjustment
30		that the mobile station is to make for the transmission
31		attributes with transmission rate 7200 bits/s, convolutional
32		code and 20ms frame.
33		The base station shall set this field to the correction factor
34		expressed as a two's complement value in units of 0.125 dB.
35	RL_ATT_ADJ_GAIN_14400-	Reverse Link Attribute Adjustment Gain for the transmission
36		rate 14400 bits/s.
37		If RC4_RC6_20MS_INCL is set to '0', the base station shall
38		omit this field.
39		If RC4_RC6_20MS_INCL is set to '1' and
40		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
41		set this field to the value of the nominal gain adjustment that
42		the mobile station is to make for the transmission attributes
43		with transmission rate 14400 bits/s, convolutional code and
44		20ms frame. The base station shall set the value in the range
45		from -48 to 48 inclusive.

1		If RC4_RC6_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
3		set this field to the value of the pilot reference level
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 14400 bits/s,
6		convolutional code and 20ms frame.
7		The base station shall set this field to the correction factor
8		expressed as a two's complement value in units of 0.125 dB.
9	5MS_INCL	- 5ms frame Reverse Link Attribute Adjustment Gain included
10		indicator.
11		If Reverse Link Attribute Adjustment Gain for 5ms frame is
12		included in this message, the base station shall set this field
13		to '1'; otherwise, the base station shall set this field to '0'.
14	RL_ATT_ADJ_GAIN_9600_5MS	- Reverse Link Attribute Adjustment Gain for the
15		transmission rate 9600 bits/s with 5ms frame.
16		If 5MS_INCL is set to '0', the base station shall omit this field.
17		If 5MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set
18		to '0', the base station shall set this field to the value of the
19		nominal attribute gain adjustment that the mobile station is
20		to make for the transmission attributes with transmission
21		rate 9600 bits/s, convolutional code and 5ms frame. The
22		base station shall set the value in the range from -48 to 48
23		inclusive.
24		If 5MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set
25		to '1', the base station shall set this field to the value of the
26		pilot reference level adjustment that the mobile station is to
27		make for the transmission attributes with transmission rate
28		9600 bits/s, convolutional code and 5ms frame.
29		The base station shall set this field to the correction factor
30		expressed as a two's complement value in units of 0.125 dB.
31	RC3_RC5_40MS_INCL	- Reverse Link Attribute Adjustment Gain for Radio
32		Configuration 3 or 5 of 40 ms frame included indicator.
33		If Reverse Link Attribute adjustment Gain for Radio
34		Configuration 3 or 5 of 40 ms frame is included in this
35		message, the base station shall set this field to '1'; otherwise,
36		the base station shall set this field to '0'.
37	RL_ATT_ADJ_GAIN_1350_40MS	- Reverse Link Attribute Adjustment Gain for the
38		transmission rate 1350 bits/s.
39		If RC3_RC5_40MS_INCL is set to '0', the base station shall
40		omit this field.
41		If RC3_RC5_40MS_INCL is set to '1' and
42		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
43		set this field to the value of the nominal attribute gain
44		adjustment that the mobile station is to make for the
45		transmission attributes with transmission rate 1350 bits/s,
46		convolutional code and 40ms frame. The base station shall
47		set the value in the range from -48 to 48 inclusive.

1 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 1350 bits/s,  
 6 convolutional code and 40ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_2400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 10 transmission rate 2400 bits/s.

11 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 2400 bits/s,  
 18 convolutional code and 40ms frame. The base station shall  
 19 set the value in the range from -48 to 48 inclusive.

20 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 22 set this field to the value of the pilot reference level  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 2400 bits/s,  
 25 convolutional code and 40ms frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_4800\_40MS - Reverse Link Attribute Gain Adjustment for the  
 29 transmission rate 4800 bits/s.

30 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 31 omit this field.

32 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 33 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 34 set this field to the value of the nominal attribute gain  
 35 adjustment that the mobile station is to make for the  
 36 transmission attributes with transmission rate 4800 bits/s,  
 37 convolutional code and 40ms frame. The base station shall  
 38 set the value in the range from -48 to 48 inclusive.

39 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 41 set this field to the value of the pilot reference level  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 4800 bits/s,  
 44 convolutional code and 40ms frame.

45 The base station shall set this field to the correction factor  
 46 expressed as a two's complement value in units of 0.125 dB.

47 RL\_ATT\_ADJ\_GAIN\_9600\_40MS - Reverse Link Attribute Gain Adjustment for the  
 48 transmission rate 9600 bits/s.

1		If RC3_RC5_40MS_INCL is set to '0', the base station shall
2		omit this field.
3		If RC3_RC5_40MS_INCL is set to '1' and
4		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
5		set this field to the value of the nominal attribute gain
6		adjustment that the mobile station is to make for the
7		transmission attributes with transmission rate 9600 bits/s,
8		convolutional code and 40ms frame. The base station shall
9		set the value in the range from -48 to 48 inclusive.
10		If RC3_RC5_40MS_INCL is set to '1' and
11		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
12		set this field to the value of the pilot reference level
13		adjustment that the mobile station is to make for the
14		transmission attributes with transmission rate 9600 bits/s,
15		convolutional code and 40ms frame.
16		The base station shall set this field to the correction factor
17		expressed as a two's complement value in units of 0.125 dB.
18	RC4_RC6_40MS_INCL -	Reverse Link Attribute Adjustment Gain for Radio
19		Configuration 4 or 6 of 40ms frame included indicator.
20		If Reverse Link Attribute Adjustment Gain for Radio
21		Configuration 4 or 6 of 40ms frame is included in this
22		message, the base station shall set this field to '1'; otherwise,
23		the base station shall set this field to '0'.
24	RL_ATT_ADJ_GAIN_1800_40MS -	Reverse Link Attribute Gain Adjustment for the
25		transmission rate 1800 bits/s.
26		If RC4_RC6_40MS_INCL is set to '0', the base station shall
27		omit this field.
28		If RC4_RC6_40MS_INCL is set to '1' and
29		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
30		set this field to the value of the nominal attribute gain
31		adjustment that the mobile station is to make for the
32		transmission attributes with transmission rate 1800 bits/s,
33		convolutional code and 40ms frame. The base station shall
34		set the value in the range from -48 to 48 inclusive.
35		If RC4_RC6_40MS_INCL is set to '1' and
36		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
37		set this field to the value of the pilot reference level
38		adjustment that the mobile station is to make for the
39		transmission attributes with transmission rate 1800 bits/s,
40		convolutional code and 40ms frame.
41		The base station shall set this field to the correction factor
42		expressed as a two's complement value in units of 0.125 dB.
43	RL_ATT_ADJ_GAIN_3600_40MS -	Reverse Link Attribute Adjustment Gain for the
44		transmission rate 3600 bits/s.
45		If RC4_RC6_40MS_INCL is set to '0', the base station shall
46		omit this field.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 3 set this field to the value of the nominal attribute gain  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 3600 bits/s,  
 6 convolutional code and 40ms frame. The base station shall  
 7 set the value in the range from -48 to 48 inclusive.

8 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 9 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 10 set this field to the value of the pilot reference level  
 11 adjustment that the mobile station is to make for the  
 12 transmission attributes with transmission rate 3600 bits/s,  
 13 convolutional code and 40ms frame.

14 The base station shall set this field to the correction factor  
 15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_7200\_40MS - Reverse Link Attribute Adjustment Gain for the  
 17 transmission rate 7200 bits/s.

18 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 19 omit this field.

20 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 22 set this field to the value of the nominal attribute gain  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 7200 bits/s,  
 25 convolutional code and 40ms frame. The base station shall  
 26 set the value in the range from -48 to 48 inclusive.

27 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 28 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 29 this field to the value of the pilot reference level adjustment  
 30 that the mobile station is to make for the transmission  
 31 attributes with transmission rate 7200 bits/s, convolutional  
 32 code and 40ms frame.

33 The base station shall set this field to the correction factor  
 34 expressed as a two's complement value in units of 0.125 dB.

35 RL\_ATT\_ADJ\_GAIN\_14400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 36 transmission rate 14400 bits/s.

37 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 38 omit this field.

39 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 41 set this field to the value of the nominal gain adjustment that  
 42 the mobile station is to make for the transmission attributes  
 43 with transmission rate 14400 bits/s, convolutional code and  
 44 40ms frame. The base station shall set the value in the range  
 45 from -48 to 48 inclusive.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 14400 bits/s,  
 6 convolutional code and 40ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RC3\_RC5\_80MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 10 Configuration 3 or 5 of 80 ms frame included indicator.

11 If Reverse Link Attribute adjustment Gain for Radio  
 12 Configuration 3 or 5 of 80 ms frame is included in this  
 13 message, the base station shall set this field to '1'; otherwise,  
 14 the base station shall set this field to '0'.

15 RL\_ATT\_ADJ\_GAIN\_1200\_80MS - Reverse Link Attribute Adjustment Gain for the  
 16 transmission rate 1200 bits/s.

17 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 18 omit this field.

19 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 20 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 21 set this field to the value of the nominal attribute gain  
 22 adjustment that the mobile station is to make for the  
 23 transmission attributes with transmission rate 1200 bits/s,  
 24 convolutional code and 80ms frame. The base station shall  
 25 set the value in the range from -48 to 48 inclusive.

26 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 27 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 28 set this field to the value of the pilot reference level  
 29 adjustment that the mobile station is to make for the  
 30 transmission attributes with transmission rate 1200 bits/s,  
 31 convolutional code and 80ms frame.

32 The base station shall set this field to the correction factor  
 33 expressed as a two's complement value in units of 0.125 dB.

34 RL\_ATT\_ADJ\_GAIN\_2400\_80MS - Reverse Link Attribute Adjustment Gain for the  
 35 transmission rate 2400 bits/s.

36 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 37 omit this field.

38 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 39 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 40 set this field to the value of the nominal attribute gain  
 41 adjustment that the mobile station is to make for the  
 42 transmission attributes with transmission rate 2400 bits/s,  
 43 convolutional code and 80ms frame. The base station shall  
 44 set the value in the range from -48 to 48 inclusive.

1 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 2400 bits/s,  
 6 convolutional code and 80ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_4800\_80MS - Reverse Link Attribute Gain Adjustment for the  
 10 transmission rate 4800 bits/s.

11 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 4800 bits/s,  
 18 convolutional code and 80ms frame. The base station shall  
 19 set the value in the range from -48 to 48 inclusive.

20 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 22 set this field to the value of the pilot reference level  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 4800 bits/s,  
 25 convolutional code and 80ms frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_9600\_80MS - Reverse Link Attribute Gain Adjustment for the  
 29 transmission rate 9600 bits/s.

30 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 31 omit this field.

32 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 33 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 34 set this field to the value of the nominal attribute gain  
 35 adjustment that the mobile station is to make for the  
 36 transmission attributes with transmission rate 9600 bits/s,  
 37 convolutional code and 80ms frame. The base station shall  
 38 set the value in the range from -48 to 48 inclusive.

39 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 41 set this field to the value of the pilot reference level  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 9600 bits/s,  
 44 convolutional code and 80ms frame.

45 The base station shall set this field to the correction factor  
 46 expressed as a two's complement value in units of 0.125 dB.

47 RC4\_RC6\_80MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 48 Configuration 4 or 6 of 80ms frame included indicator.



1 If Reverse Link Attribute Adjustment Gain for Radio  
 2 Configuration 4 or 6 of 80ms frame is included in this  
 3 message, the base station shall set this field to '1'; otherwise,  
 4 the base station shall set this field to '0'.

5 RL\_ATT\_ADJ\_GAIN\_1800\_80MS - Reverse Link Attribute Gain Adjustment for the  
 6 transmission rate 1800 bits/s.

7 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
 8 omit this field.

9 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 10 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 11 set this field to the value of the nominal attribute gain  
 12 adjustment that the mobile station is to make for the  
 13 transmission attributes with transmission rate 1800 bits/s,  
 14 convolutional code and 80ms frame. The base station shall  
 15 set the value in the range from -48 to 48 inclusive.

16 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 17 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 18 set this field to the value of the pilot reference level  
 19 adjustment that the mobile station is to make for the  
 20 transmission attributes with transmission rate 1800 bits/s,  
 21 convolutional code and 80ms frame.

22 The base station shall set this field to the correction factor  
 23 expressed as a two's complement value in units of 0.125 dB.

24 RL\_ATT\_ADJ\_GAIN\_3600\_80MS - Reverse Link Attribute Adjustment Gain for the  
 25 transmission rate 3600 bits/s.

26 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
 27 omit this field.

28 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 29 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 30 set this field to the value of the nominal attribute gain  
 31 adjustment that the mobile station is to make for the  
 32 transmission attributes with transmission rate 3600 bits/s,  
 33 convolutional code and 80ms frame. The base station shall  
 34 set the value in the range from -48 to 48 inclusive.

35 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 36 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 37 set this field to the value of the pilot reference level  
 38 adjustment that the mobile station is to make for the  
 39 transmission attributes with transmission rate 3600 bits/s,  
 40 convolutional code and 80ms frame.

41 The base station shall set this field to the correction factor  
 42 expressed as a two's complement value in units of 0.125 dB.

43 RL\_ATT\_ADJ\_GAIN\_7200\_80MS - Reverse Link Attribute Adjustment Gain for the  
 44 transmission rate 7200 bits/s.

45 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
 46 omit this field.

1 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 3 set this field to the value of the nominal attribute gain  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 7200 bits/s,  
 6 convolutional code and 80ms frame. The base station shall  
 7 set the value in the range from -48 to 48 inclusive.

8 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 9 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 10 this field to the value of the pilot reference level adjustment  
 11 that the mobile station is to make for the transmission  
 12 attributes with transmission rate 7200 bits/s, convolutional  
 13 code and 80ms frame.

14 The base station shall set this field to the correction factor  
 15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_14400\_80MS - Reverse Link Attribute Adjustment Gain for the  
 17 transmission rate 14400 bits/s.

18 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
 19 omit this field.

20 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 22 set this field to the value of the nominal gain adjustment that  
 23 the mobile station is to make for the transmission attributes  
 24 with transmission rate 14400 bits/s, convolutional code and  
 25 80ms frame. The base station shall set the value in the range  
 26 from -48 to 48 inclusive.

27 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 28 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 29 set this field to the value of the pilot reference level  
 30 adjustment that the mobile station is to make for the  
 31 transmission attributes with transmission rate 14400 bits/s,  
 32 convolutional code and 80ms frame.

33 The base station shall set this field to the correction factor  
 34 expressed as a two's complement value in units of 0.125 dB.

35 RESERVED - Reserved bits.

36 The base station shall add reserved bits as needed in order to  
 37 make the length of the entire record equal to an integer  
 38 number of octets. The base station shall set these bits to '0'.

39 If RPC\_ADJ\_REC\_TYPE is equal to '0010', the base station shall set type-specific fields as  
 40 specified in Table 3.7.3.3.2.25-6.

**Table 3.7.3.3.2.25-6. Type Specific Fields for  
RECORD\_TYPE = '0010'**

<b>Fields</b>	<b>Length (Bits)</b>
CODE_TYPE	1
RL_ATT_ADJ_GAIN_TYPE	1
RC3_RC5_20MS_INCL	1
RL_ATT_ADJ_GAIN_19200	0 or 8
RL_ATT_ADJ_GAIN_38400	0 or 8
RL_ATT_ADJ_GAIN_76800	0 or 8
RL_ATT_ADJ_GAIN_153600	0 or 8
RL_ATT_ADJ_GAIN_307200	0 or 8
RL_ATT_ADJ_GAIN_614400	0 or 8
RC4_RC6_20MS_INCL	1
RL_ATT_ADJ_GAIN_28800	0 or 8
RL_ATT_ADJ_GAIN_57600	0 or 8
RL_ATT_ADJ_GAIN_115200	0 or 8
RL_ATT_ADJ_GAIN_230400	0 or 8
RL_ATT_ADJ_GAIN_460800	0 or 8
RL_ATT_ADJ_GAIN_1036800	0 or 8
RC3_RC5_40MS_INCL	1
RL_ATT_ADJ_GAIN_19200_40MS	0 or 8
RL_ATT_ADJ_GAIN_38400_40MS	0 or 8
RL_ATT_ADJ_GAIN_76800_40MS	0 or 8
RL_ATT_ADJ_GAIN_153600_40MS	0 or 8
RL_ATT_ADJ_GAIN_307200_40MS	0 or 8
RC4_RC6_40MS_INCL	1
RL_ATT_ADJ_GAIN_28800_40MS	0 or 8
RL_ATT_ADJ_GAIN_57600_40MS	0 or 8
RL_ATT_ADJ_GAIN_115200_40MS	0 or 8

(continues on next page)

Fields	Length (Bits)
RL_ATT_ADJ_GAIN_230400_40MS	0 or 8
RL_ATT_ADJ_GAIN_518400_40MS	0 or 8
RC3_RC5_80MS_INCL	1
RL_ATT_ADJ_GAIN_19200_80MS	0 or 8
RL_ATT_ADJ_GAIN_38400_80MS	0 or 8
RL_ATT_ADJ_GAIN_76800_80MS	0 or 8
RL_ATT_ADJ_GAIN_153600_80MS	0 or 8
RC4_RC6_80MS_INCL	1
RL_ATT_ADJ_GAIN_28800_80MS	0 or 8
RL_ATT_ADJ_GAIN_57600_80MS	0 or 8
RL_ATT_ADJ_GAIN_115200_80MS	0 or 8
RL_ATT_ADJ_GAIN_259200_80MS	0 or 8

1

RESERVED	0-7 (if needed)
----------	-----------------

2

3           CODE\_TYPE   -   Coding type indicator.

4                               If the following corresponding gain adjustment fields apply for  
5                               the convolutional code, the base station shall set this field to  
6                               '0'. If the following corresponding gain adjustment fields  
7                               apply for the Turbo code, the base station shall set this field  
8                               to '1'.

9   RL\_ATT\_ADJ\_GAIN\_TYPE   -   Reverse Link Attribute adjustment Gain value type  
10 indicator.

11                              If the following corresponding gain adjustment fields are set  
12                              to the value of the nominal attribute gain adjustment that the  
13                              mobile station is to make for the corresponding transmission  
14                              attributes (relative to Nominal\_Attribute\_Gain specified in  
15                              [2]), the base station shall set this field to '0'. If the following  
16                              corresponding gain adjustment fields are set to the value of  
17                              the pilot reference level adjustment that the mobile station is  
18                              to use for the corresponding transmission attributes (relative  
19                              to Pilot\_Reference\_Level specified in [2]), the base station  
20                              shall set this field to '1'.

21   RC3\_RC5\_20MS\_INCL   -   Reverse Link Attribute Adjustment Gain for Radio  
22                              Configuration 3 or 5 of 20ms frame included indicator.

23                              If Reverse Link Attribute Adjustment Gain for Radio  
24                              Configuration 3 or 5 of 20ms frame is included in this  
25                              message, the base station shall set this field to '1'; otherwise,  
26                              the base station shall set this field to '0'.

1	RL_ATT_ADJ_GAIN_19200	- Reverse Link Attribute Adjustment Gain for the
2		transmission rate 19200 bits/s.
3		If RC3_RC5_20MS_INCL is set to '0', the base station shall
4		omit this field.
5		If RC3_RC5_20MS_INCL is set to '1' and
6		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
7		set this field to the value of the nominal attribute gain
8		adjustment that the mobile station is to make for the
9		transmission attributes with transmission rate 19200 bits/s,
10		and 20ms frame. The base station shall set the value in the
11		range from -48 to 48 inclusive.
12		If RC3_RC5_20MS_INCL is set to '1' and
13		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
14		set this field to the value of the pilot reference level
15		adjustment that the mobile station is to make for the
16		transmission attributes with transmission rate 19200 bits/s
17		and 20ms frame.
18		The base station shall set this field to the correction factor
19		expressed as a two's complement value in units of 0.125 dB.
20	RL_ATT_ADJ_GAIN_38400	- Reverse Link Attribute Adjustment Gain for the
21		transmission rate 38400 bits/s.
22		If RC3_RC5_20MS_INCL is set to '0', the base station shall
23		omit this field.
24		If RC3_RC5_20MS_INCL is set to '1' and
25		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
26		set this field to the value of the nominal attribute gain
27		adjustment that the mobile station is to make for the
28		transmission attributes with transmission rate 38400 bits/s,
29		and 20ms frame. The base station shall set the value in the
30		range from -48 to 48 inclusive.
31		If RC3_RC5_20MS_INCL is set to '1' and
32		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
33		this field to the value of the pilot reference level adjustment
34		that the mobile station is to make for the transmission
35		attributes with transmission rate 38400 bits/s and 20ms
36		frame.
37		The base station shall set this field to the correction factor
38		expressed as a two's complement value in units of 0.125 dB.
39	RL_ATT_ADJ_GAIN_76800	- Reverse Link Attribute Adjustment Gain for the
40		transmission rate 76800 bits/s.
41		If RC3_RC5_20MS_INCL is set to '0', the base station shall
42		omit this field.

1		If RC3_RC5_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
3		set this field to the value of the nominal attribute gain
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 76800 bits/s,
6		and 20ms frame. The base station shall set the value in the
7		range from -48 to 48 inclusive.
8		If RC3_RC5_20MS_INCL is set to '1' and
9		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
10		set this field to the value of the pilot reference level
11		adjustment that the mobile station is to make for the
12		transmission attributes with transmission rate 76800 bits/s
13		and 20ms frame.
14		The base station shall set this field to the correction factor
15		expressed as a two's complement value in units of 0.125 dB.
16	RL_ATT_ADJ_GAIN_153600	- Reverse Link Attribute Adjustment Gain for the
17		transmission rate 153600 bits/s.
18		If RC3_RC5_20MS_INCL is set to '0', the base station shall
19		omit this field.
20		If RC3_RC5_20MS_INCL is set to '1' and
21		NORM_ATT_GAIN_TYPE is set to '0', the base station shall set
22		this field to the value of the nominal attribute gain
23		adjustment that the mobile station is to make for the
24		transmission attributes with transmission rate 153600
25		bits/s, and 20ms frame. The base station shall set the value
26		in the range from -48 to 48 inclusive.
27		If RC3_RC5_20MS_INCL is set to '1' and
28		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
29		this field to the value of the pilot reference level adjustment
30		that the mobile station is to make for the transmission
31		attributes with transmission rate 153600 bits/s and 20ms
32		frame.
33		The base station shall set this field to the correction factor
34		expressed as a two's complement value in units of 0.125 dB.
35	RL_ATT_ADJ_GAIN_307200	- Reverse Link Attribute Adjustment Gain for the
36		transmission rate 307200 bits/s.
37		If RC3_RC5_20MS_INCL is set to '0', the base station shall
38		omit this field.
39		If RC3_RC5_20MS_INCL is set to '1' and
40		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
41		set this field to the value of the nominal attribute gain
42		adjustment that the mobile station is to make for the
43		transmission attributes with transmission rate 307200
44		bits/s, and 20ms frame. The base station shall set the value
45		in the range from -48 to 48 inclusive.

1		If RC3_RC5_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
3		set this field to the value of the pilot reference level
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 307200 bits/s
6		and 20ms frame.
7		The base station shall set this field to the correction factor
8		expressed as a two's complement value in units of 0.125 dB.
9	RL_ATT_ADJ_GAIN_614400	- Reverse Link Attribute Adjustment Gain for the
10		transmission rate 614400 bits/s.
11		If RC3_RC5_20MS_INCL is set to '0', the base station shall
12		omit this field.
13		If RC3_RC5_20MS_INCL is set to '1' and
14		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
15		set this field to the value of the nominal attribute gain
16		adjustment that the mobile station is to make for the
17		transmission attributes with transmission rate 614400
18		bits/s, and 20ms frame. The base station shall set the value
19		in the range from -48 to 48 inclusive.
20		If RC3_RC5_20MS_INCL is set to '1' and
21		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
22		set this field to the value of the pilot reference level
23		adjustment that the mobile station is to make for the
24		transmission attributes with transmission rate 614400 bits/s
25		and 20ms frame.
26		The base station shall set this field to the correction factor
27		expressed as a two's complement value in units of 0.125 dB.
28	RC4_RC6_20MS_INCL	- Reverse Link Attribute Adjustment Gain for Radio
29		Configuration 4 or 6 of 20ms frame included indicator.
30		If Reverse Link Attribute Adjustment Gain for Radio
31		Configuration 4 or 6 of 20ms frame is included in this
32		message, the base station shall set this field to '1'; otherwise,
33		the base station shall set this field to '0'.
34	RL_ATT_ADJ_GAIN_28800	- Reverse Link Attribute Adjustment Gain for the
35		transmission rate 28800 bits/s.
36		If RC4_RC6_20MS_INCL is set to '0', the base station shall
37		omit this field.
38		If RC4_RC6_20MS_INCL is set to '1' and
39		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
40		set this field to the value of the nominal attribute gain
41		adjustment that the mobile station is to make for the
42		transmission attributes with transmission rate 28800 bits/s,
43		and 20ms frame. The base station shall set the value in the
44		range from -48 to 48 inclusive.

1		If RC4_RC6_20MS_INCL is set to '1' and
2		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
3		this field to the value of the pilot reference level adjustment
4		that the mobile station is to make for the transmission
5		attributes with transmission rate 28800 bits/s and 20ms
6		frame.
7		The base station shall set this field to the correction factor
8		expressed as a two's complement value in units of 0.125 dB.
9	RL_ATT_ADJ_GAIN_57600	- Reverse Link Attribute Adjustment Gain for the
10		transmission rate 57600 bits/s.
11		If RC4_RC6_20MS_INCL is set to '0', the base station shall
12		omit this field.
13		If RC4_RC6_20MS_INCL is set to '1' and
14		NORM_ATT_GAIN_TYPE is set to '0', the base station shall set
15		this field to the value of the nominal attribute gain
16		adjustment that the mobile station is to make for the
17		transmission attributes with transmission rate 57600 bits/s,
18		and 20ms frame. The base station shall set the value in the
19		range from -48 to 48 inclusive.
20		If RC4_RC6_20MS_INCL is set to '1' and
21		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
22		this field to the value of the pilot reference level adjustment
23		that the mobile station is to make for the transmission
24		attributes with transmission rate 57600 bits/s and 20ms
25		frame.
26		The base station shall set this field to the correction factor
27		expressed as a two's complement value in units of 0.125 dB.
28	RL_ATT_ADJ_GAIN_115200	- Reverse Link Attribute Adjustment Gain for the
29		transmission rate 115200 bits/s.
30		If RC4_RC6_20MS_INCL is set to '0', the base station shall
31		omit this field.
32		If RC4_RC6_20MS_INCL is set to '1' and
33		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
34		set this field to the value of the nominal attribute gain
35		adjustment that the mobile station is to make for the
36		transmission attributes with transmission rate 115200
37		bits/s, and 20ms frame. The base station shall set the value
38		in the range from -48 to 48 inclusive.
39		If RC4_RC6_20MS_INCL is set to '1' and
40		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
41		set this field to the value of the pilot reference level
42		adjustment that the mobile station is to make for the
43		transmission attributes with transmission rate 115200 bits/s
44		and 20ms frame.
45		The base station shall set this field to the correction factor
46		expressed as a two's complement value in units of 0.125 dB.
47	RL_ATT_ADJ_GAIN_230400	- Reverse Link Attribute Adjustment Gain for the
48		transmission rate 230400 bits/s.



1 If RC4\_RC6\_20MS\_INCL is set to '0', the base station shall  
2 omit this field.

3 If RC4\_RC6\_20MS\_INCL is set to '1' and  
4 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
5 set this field to the value of the nominal attribute gain  
6 adjustment that the mobile station is to make for the  
7 transmission attributes with transmission rate 230400  
8 bits/s, and 20ms frame. The base station shall set the value  
9 in the range from -48 to 48 inclusive.

10 If RC4\_RC6\_20MS\_INCL is set to '1' and  
11 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
12 set this field to the value of the pilot reference level  
13 adjustment that the mobile station is to make for the  
14 transmission attributes with transmission rate 230400 bits/s  
15 and 20ms frame.

16 The base station shall set this field to the correction factor  
17 expressed as a two's complement value in units of 0.125 dB.

18 RL\_ATT\_ADJ\_GAIN\_460800 - Reverse Link Attribute Adjustment Gain for the  
19 transmission rate 460800 bits/s.

20 If RC4\_RC6\_20MS\_INCL is set to '0', the base station shall  
21 omit this field.

22 If RC4\_RC6\_20MS\_INCL is set to '1' and  
23 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
24 set this field to the value of the nominal attribute gain  
25 adjustment that the mobile station is to make for the  
26 transmission attributes with transmission rate 460800  
27 bits/s, and 20ms frame. The base station shall set the value  
28 in the range from -48 to 48 inclusive.

29 If RC4\_RC6\_20MS\_INCL is set to '1' and  
30 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
31 set this field to the value of the pilot reference level  
32 adjustment that the mobile station is to make for the  
33 transmission attributes with transmission rate 460800 bits/s  
34 and 20ms frame.

35 The base station shall set this field to the correction factor  
36 expressed as a two's complement value in units of 0.125 dB.

37 RL\_ATT\_ADJ\_GAIN\_1036800- Reverse Link Attribute Adjustment Gain for the  
38 transmission rate 1036800 bits/s.

39 If RC4\_RC6\_20MS\_INCL is set to '0', the base station shall  
40 omit this field.

41 If RC4\_RC6\_20MS\_INCL is set to '1' and  
42 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
43 set this field to the value of the nominal attribute gain  
44 adjustment that the mobile station is to make for the  
45 transmission attributes with transmission rate 1036800  
46 bits/s, and 20ms frame. The base station shall set the value  
47 in the range from -48 to 48 inclusive.

1 If RC4\_RC6\_20MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 1306800  
 6 bits/s and 20ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RC3\_RC5\_40MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 10 Configuration 3 or 5 of 40ms frame included indicator.

11 If Reverse Link Attribute Adjustment Gain for Radio  
 12 Configuration 3 or 5 of 40ms frame is included in this  
 13 message, the base station shall set this field to '1'; otherwise,  
 14 the base station shall set this field to '0'.

15 RL\_ATT\_ADJ\_GAIN\_19200\_40MS - Reverse Link Attribute Adjustment Gain for the  
 16 transmission rate 19200 bits/s.

17 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 18 omit this field.

19 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 20 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 21 set this field to the value of the nominal attribute gain  
 22 adjustment that the mobile station is to make for the  
 23 transmission attributes with transmission rate 19200 bits/s,  
 24 and 40ms frame. The base station shall set the value in the  
 25 range from -48 to 48 inclusive.

26 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 27 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 28 set this field to the value of the pilot reference level  
 29 adjustment that the mobile station is to make for the  
 30 transmission attributes with transmission rate 19200 bits/s  
 31 and 40ms frame.

32 The base station shall set this field to the correction factor  
 33 expressed as a two's complement value in units of 0.125 dB.

34 RL\_ATT\_ADJ\_GAIN\_38400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 35 transmission rate 38400 bits/s.

36 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 37 omit this field.

38 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 39 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 40 set this field to the value of the nominal attribute gain  
 41 adjustment that the mobile station is to make for the  
 42 transmission attributes with transmission rate 38400 bits/s,  
 43 and 40ms frame. The base station shall set the value in the  
 44 range from -48 to 48 inclusive.

1 If RC3\_RC5\_20MS\_INCL is set to '1' and  
 2 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 3 this field to the value of the pilot reference level adjustment  
 4 that the mobile station is to make for the transmission  
 5 attributes with transmission rate 38400 bits/s and 40ms  
 6 frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_76800\_40MS - Reverse Link Attribute Adjustment Gain for the  
 10 transmission rate 76800 bits/s.

11 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 76800 bits/s,  
 18 and 40ms frame. The base station shall set the value in the  
 19 range from -48 to 48 inclusive.

20 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 22 set this field to the value of the pilot reference level  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 76800 bits/s  
 25 and 40ms frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_153600\_40MS - Reverse Link Attribute Adjustment Gain for the  
 29 transmission rate 153600 bits/s.

30 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 31 omit this field.

32 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 33 NORM\_ATT\_GAIN\_TYPE is set to '0', the base station shall set  
 34 this field to the value of the nominal attribute gain  
 35 adjustment that the mobile station is to make for the  
 36 transmission attributes with transmission rate 153600  
 37 bits/s, and 40ms frame. The base station shall set the value  
 38 in the range from -48 to 48 inclusive.

39 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 40 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 41 this field to the value of the pilot reference level adjustment  
 42 that the mobile station is to make for the transmission  
 43 attributes with transmission rate 153600 bits/s and 40ms  
 44 frame.

45 The base station shall set this field to the correction factor  
 46 expressed as a two's complement value in units of 0.125 dB.

47 RL\_ATT\_ADJ\_GAIN\_307200\_40MS - Reverse Link Attribute Adjustment Gain for the  
 48 transmission rate 307200 bits/s.

1		If RC3_RC5_40MS_INCL is set to '0', the base station shall
2		omit this field.
3		If RC3_RC5_40MS_INCL is set to '1' and
4		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
5		set this field to the value of the nominal attribute gain
6		adjustment that the mobile station is to make for the
7		transmission attributes with transmission rate 307200
8		bits/s, and 40ms frame. The base station shall set the value
9		in the range from -48 to 48 inclusive.
10		If RC3_RC5_40MS_INCL is set to '1' and
11		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
12		set this field to the value of the pilot reference level
13		adjustment that the mobile station is to make for the
14		transmission attributes with transmission rate 307200 bits/s
15		and 40ms frame.
16		The base station shall set this field to the correction factor
17		expressed as a two's complement value in units of 0.125 dB.
18	RC4_RC6_40MS_INCL	- Reverse Link Attribute Adjustment Gain for Radio
19		Configuration 4 or 6 of 40ms frame included indicator.
20		If Reverse Link Attribute Adjustment Gain for Radio
21		Configuration 4 or 6 of 40ms frame is included in this
22		message, the base station shall set this field to '1'; otherwise,
23		the base station shall set this field to '0'.
24	RL_ATT_ADJ_GAIN_28800_40MS	- Reverse Link Attribute Adjustment Gain for the
25		transmission rate 28800 bits/s.
26		If RC4_RC6_40MS_INCL is set to '0', the base station shall
27		omit this field.
28		If RC4_RC6_40MS_INCL is set to '1' and
29		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
30		set this field to the value of the nominal attribute gain
31		adjustment that the mobile station is to make for the
32		transmission attributes with transmission rate 28800 bits/s,
33		and 40ms frame. The base station shall set the value in the
34		range from -48 to 48 inclusive.
35		If RC4_RC6_40MS_INCL is set to '1' and
36		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
37		this field to the value of the pilot reference level adjustment
38		that the mobile station is to make for the transmission
39		attributes with transmission rate 28800 bits/s and 40ms
40		frame.
41		The base station shall set this field to the correction factor
42		expressed as a two's complement value in units of 0.125 dB.
43	RL_ATT_ADJ_GAIN_57600_40MS	- Reverse Link Attribute Adjustment Gain for the
44		transmission rate 57600 bits/s.
45		If RC4_RC6_40MS_INCL is set to '0', the base station shall
46		omit this field.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 2 NORM\_ATT\_GAIN\_TYPE is set to '0', the base station shall set  
 3 this field to the value of the nominal attribute gain  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 57600 bits/s,  
 6 and 40ms frame. The base station shall set the value in the  
 7 range from -48 to 48 inclusive.

8 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 9 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 10 this field to the value of the pilot reference level adjustment  
 11 that the mobile station is to make for the transmission  
 12 attributes with transmission rate 57600 bits/s and 40ms  
 13 frame.

14 The base station shall set this field to the correction factor  
 15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_115200\_40MS - Reverse Link Attribute Adjustment Gain for the  
 17 transmission rate 115200 bits/s.

18 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 19 omit this field.

20 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 22 set this field to the value of the nominal attribute gain  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 115200  
 25 bits/s, and 40ms frame. The base station shall set the value  
 26 in the range from -48 to 48 inclusive.

27 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 28 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 29 set this field to the value of the pilot reference level  
 30 adjustment that the mobile station is to make for the  
 31 transmission attributes with transmission rate 115200 bits/s  
 32 and 40ms frame.

33 The base station shall set this field to the correction factor  
 34 expressed as a two's complement value in units of 0.125 dB.

35 RL\_ATT\_ADJ\_GAIN\_230400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 36 transmission rate 230400 bits/s.

37 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 38 omit this field.

39 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 41 set this field to the value of the nominal attribute gain  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 230400  
 44 bits/s, and 40ms frame. The base station shall set the value  
 45 in the range from -48 to 48 inclusive.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 230400 bits/s  
 6 and 40ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_518400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 10 transmission rate 518400 bits/s.

11 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 518400  
 18 bits/s, and 40ms frame. The base station shall set the value  
 19 in the range from -48 to 48 inclusive.

20 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 22 set this field to the value of the pilot reference level  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 518400 bits/s  
 25 and 40ms frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RC3\_RC5\_80MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 29 Configuration 3 or 5 of 80ms frame included indicator.

30 If Reverse Link Attribute Adjustment Gain for Radio  
 31 Configuration 3 or 5 of 80ms frame is included in this  
 32 message, the base station shall set this field to '1'; otherwise,  
 33 the base station shall set this field to '0'.

34 RL\_ATT\_ADJ\_GAIN\_19200\_80MS - Reverse Link Attribute Adjustment Gain for the  
 35 transmission rate 19200 bits/s.

36 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 37 omit this field.

38 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 39 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 40 set this field to the value of the nominal attribute gain  
 41 adjustment that the mobile station is to make for the  
 42 transmission attributes with transmission rate 19200 bits/s,  
 43 and 80ms frame. The base station shall set the value in the  
 44 range from -48 to 48 inclusive.

1 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 19200 bits/s  
 6 and 80ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_38400\_80MS - Reverse Link Attribute Adjustment Gain for the  
 10 transmission rate 38400 bits/s.

11 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 38400 bits/s,  
 18 and 80ms frame. The base station shall set the value in the  
 19 range from -48 to 48 inclusive.

20 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 21 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 22 this field to the value of the pilot reference level adjustment  
 23 that the mobile station is to make for the transmission  
 24 attributes with transmission rate 38400 bits/s and 80ms  
 25 frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_76800\_80MS - Reverse Link Attribute Adjustment Gain for the  
 29 transmission rate 76800 bits/s.

30 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 31 omit this field.

32 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 33 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 34 set this field to the value of the nominal attribute gain  
 35 adjustment that the mobile station is to make for the  
 36 transmission attributes with transmission rate 76800 bits/s,  
 37 and 80ms frame. The base station shall set the value in the  
 38 range from -48 to 48 inclusive.

39 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 41 set this field to the value of the pilot reference level  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 76800 bits/s  
 44 and 80ms frame.

45 The base station shall set this field to the correction factor  
 46 expressed as a two's complement value in units of 0.125 dB.

47 RL\_ATT\_ADJ\_GAIN\_153600\_80MS - Reverse Link Attribute Adjustment Gain for the  
 48 transmission rate 153600 bits/s.

1 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
2 omit this field.

3 If RC3\_RC5\_80MS\_INCL is set to '1' and  
4 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
5 set this field to the value of the nominal attribute gain  
6 adjustment that the mobile station is to make for the  
7 transmission attributes with transmission rate 153600  
8 bits/s, and 80ms frame. The base station shall set the value  
9 in the range from -48 to 48 inclusive.

10 If RC3\_RC5\_80MS\_INCL is set to '1' and  
11 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
12 set this field to the value of the pilot reference level  
13 adjustment that the mobile station is to make for the  
14 transmission attributes with transmission rate 153600 bits/s  
15 and 80ms frame.

16 The base station shall set this field to the correction factor  
17 expressed as a two's complement value in units of 0.125 dB.

18 RC4\_RC6\_80MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
19 Configuration 4 or 6 of 80ms frame included indicator.

20 If Reverse Link Attribute Adjustment Gain for Radio  
21 Configuration 4 or 6 of 80ms frame is included in this  
22 message, the base station shall set this field to '1'; otherwise,  
23 the base station shall set this field to '0'.

24 RL\_ATT\_ADJ\_GAIN\_28800\_80MS - Reverse Link Attribute Adjustment Gain for the  
25 transmission rate 28800 bits/s.

26 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
27 omit this field.

28 If RC4\_RC6\_80MS\_INCL is set to '1' and  
29 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
30 set this field to the value of the nominal attribute gain  
31 adjustment that the mobile station is to make for the  
32 transmission attributes with transmission rate 28800 bits/s,  
33 and 80ms frame. The base station shall set the value in the  
34 range from -48 to 48 inclusive.

35 If RC4\_RC6\_80MS\_INCL is set to '1' and  
36 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
37 this field to the value of the pilot reference level adjustment  
38 that the mobile station is to make for the transmission  
39 attributes with transmission rate 28800 bits/s and 80ms  
40 frame.

41 The base station shall set this field to the correction factor  
42 expressed as a two's complement value in units of 0.125 dB.

43 RL\_ATT\_ADJ\_GAIN\_57600\_80MS - Reverse Link Attribute Adjustment Gain for the  
44 transmission rate 57600 bits/s.

45 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
46 omit this field.



1 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 2 NORM\_ATT\_GAIN\_TYPE is set to '0', the base station shall set  
 3 this field to the value of the nominal attribute gain  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 57600 bits/s,  
 6 and 80ms frame. The base station shall set the value in the  
 7 range from -48 to 48 inclusive.

8 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 9 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 10 this field to the value of the pilot reference level adjustment  
 11 that the mobile station is to make for the transmission  
 12 attributes with transmission rate 57600 bits/s and 80ms  
 13 frame.

14 The base station shall set this field to the correction factor  
 15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_115200\_80MS - Reverse Link Attribute Adjustment Gain for the  
 17 transmission rate 115200 bits/s.

18 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
 19 omit this field.

20 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 22 set this field to the value of the nominal attribute gain  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 115200  
 25 bits/s, and 80ms frame. The base station shall set the value  
 26 in the range from -48 to 48 inclusive.

27 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 28 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 29 set this field to the value of the pilot reference level  
 30 adjustment that the mobile station is to make for the  
 31 transmission attributes with transmission rate 115200 bits/s  
 32 and 80ms frame.

33 The base station shall set this field to the correction factor  
 34 expressed as a two's complement value in units of 0.125 dB.

35 RL\_ATT\_ADJ\_GAIN\_259200\_80MS - Reverse Link Attribute Adjustment Gain for the  
 36 transmission rate 259200 bits/s.

37 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
 38 omit this field.

39 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 41 set this field to the value of the nominal attribute gain  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 259200  
 44 bits/s, and 80ms frame. The base station shall set the value  
 45 in the range from -48 to 48 inclusive.

If RC4\_RC6\_80MS\_INCL is set to '1' and RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 259200 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire record equal to an integer number of octets. The base station shall set these bits to '0'.

If RPC\_ADJ\_REC\_TYPE is equal to '0011', the base station shall set type-specific fields as specified in Table 3.7.3.3.2.25-7.

**Table 3.7.3.3.2.25-7. Type Specific Fields for  
RECORD\_TYPE = '0011'**

Fields	Length (Bits)
RL_CQICH_ATT_ADJ_GAIN_TYPE	1
RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL	1
RL_CQICH_ATT_ADJ_GAIN_HIGH	0 or 8
RL_CQICH_ATT_ADJ_GAIN_LOW_INCL	1
RL_CQICH_ATT_ADJ_GAIN_LOW	0 or 8
RESERVED	0-7 (if needed)

RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE - Reverse Channel Quality Indicator Channel attribute adjustment gain value type indicator

If the following fields are set to the nominal attribute gain adjustment values that the mobile station is to use for the transmission attributes (relative to Nominal\_Attribute\_Gain specified in [2]), the base station shall set this field to '0'. If the following fields are set to the pilot reference level adjustment values that the mobile station is to use for the transmission attributes (relative to Pilot\_Reference\_Level specified in [2]), the base station shall set this field to '1'.

RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH\_INCL - Reverse Channel Quality Indicator Channel attribute adjustment gain for the high power level included indicator.

If the attribute adjustment gain for the high power level of Reverse Channel Quality Indicator Channel transmission is included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

1 RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH - Attribute adjustment gain for Reverse Channel  
 2 Quality Indicator Channel for the high Channel Quality  
 3 Indicator gain power level.

4 If RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH\_INCL is set to '0', the  
 5 base station shall omit this field; otherwise, the base station  
 6 shall set this field as follows:

7 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base  
 8 station shall set this field to the value of the nominal  
 9 attribute gain adjustment that the mobile station is to make  
 10 for the transmission attributes for the high power level of R-  
 11 CQICH. The base station shall set the value in the range  
 12 from -40 to 16 inclusive.

13 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base  
 14 station shall set this field to the value of the pilot reference  
 15 level adjustment that the mobile station is to make for the  
 16 transmission attributes for the high power level of R-CQICH.

17 The base station shall set this field to the correction factor  
 18 expressed as a two's complement value in units of 0.125 dB.

19 RL\_CQICH\_ATT\_ADJ\_GAIN\_LOW\_INCL - Reverse Channel Quality Indicator Channel  
 20 attribute adjustment gain for the low power level included  
 21 indicator.

22 If the attribute adjustment gain for the low power level of  
 23 Reverse Channel Quality Indicator Channel transmission is  
 24 included in this message, the base station shall set this field  
 25 to '1'; otherwise, the base station shall set this field to '0'.

26 RL\_CQICH\_ATT\_ADJ\_GAIN\_LOW - Attribute adjustment gain for Reverse Channel  
 27 Quality Indicator Channel for the low Channel Quality  
 28 Indicator gain power level.

29 If RL\_CQICH\_ATT\_ADJ\_GAIN\_LOW\_INCL is set to '0', the base  
 30 station shall omit this field; otherwise, the base station shall  
 31 set this field as follows:

32 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base  
 33 station shall set this field to the value of the nominal  
 34 attribute gain adjustment that the mobile station is to make  
 35 for the transmission attributes for the low power level of R-  
 36 CQICH. The base station shall set the value in the range  
 37 from -16 to 16 inclusive.

38 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base  
 39 station shall set this field to the value of the pilot reference  
 40 level adjustment that the mobile station is to make for the  
 41 transmission attributes for the low power level of R-CQICH.

42 The base station shall set this field to the correction factor  
 43 expressed as a two's complement value in units of 0.125 dB.

44 If RPC\_ADJ\_REC\_TYPE is equal to '0100', the base station shall set type-specific fields as  
 45 specified in Table 3.7.3.3.2.25-8.

**Table 3.7.3.3.2.25-8. Type Specific Fields for**

1

**RECORD\_TYPE = '0100'**

<b>Fields</b>	<b>Length (Bits)</b>
REV_REQCH_ADJ_INCL	1
REV_REQCH_ADJ_GAIN	0 or 8
REV_SPICH_ADJ_INCL	1
REV_SPICH_ADJ_GAIN	0 or 8
REV_SPICH_EP_SIZE	0 or 4
REV_PDCCH_ADJ_INCL	1
REV_PDCCH_ADJ_GAIN	0 or 8
REV_PDCCH_ATTRIBUTE_ADJ_INCL	1
REV_PDCCH_EP_SIZE_NUM	0 or 4
{ (REV_PDCCH_EP_SIZE_NUM +1)	
{ (2)	
REV_PDCCH_ATTRIBUTE_ADJ_GAIN	8
} (2)	
} (REV_PDCCH_EP_SIZE_NUM +1)	
REV_PDCCH_BOOST_ADJ_INCL	1
{ (2)	
REV_PDCCH_BOOST_ADJ_GAIN	0 or 8
} (2)	
REV_PDCCH_PAYLOAD_ADJ_INCL	1
REV_PDCCH_EP_SIZE_NUM_1	0 or 4
{ (REV_PDCCH_EP_SIZE_NUM_1 +1)	
REV_PDCCH_PAYLOAD_ADJ_GAIN	8
} (REV_PDCCH_EP_SIZE_NUM_1 +1)	
REV_PDCH_ADJ_INCL	1
REV_PDCH_ADJ_GAIN	0 or 8
REV_PDCH_PAYLOAD_ADJ_INCL	1
REV_PDCH_EP_SIZE_NUM	0 or 4
{ (REV_PDCH_EP_SIZE_NUM +1)	
REV_PDCH_PAYLOAD_ADJ_GAIN	8
} (REV_PDCH_EP_SIZE_NUM +1)	
REV_PDCH_BOOST_ADJ_INCL	1
{ (2)	
REV_PDCH_BOOST_ADJ_GAIN	8

} (2)

REV_PDCH_SUBPACKET_ADJ_INCL	1
REV_PDCH_RETRX_NUM	0 or 2

{ (REV\_PDCH\_RETRX\_NUM+1)

REV_PDCH_SUBPACKET_ADJ_GAIN	8
-----------------------------	---

} (REV\_PDCH\_RETRX\_NUM+1)

REV_PDCH_ATTRIBUTE_ADJ_INCL	1
REV_PDCH_EP_SIZE_NUM_1	0 or 4
REV_PDCH_RETRX_NUM_1	0 or 2

{ (REV\_PDCH\_EP\_SIZE\_NUM\_1+1)

{ (REV\_PDCH\_RETRX\_NUM\_1+1)

{ (2)

REV_PDCH_ATTRIBUTE_ADJ_GAIN	8
-----------------------------	---

} (2)

} (REV\_PDCH\_RETRX\_NUM\_1+1)

} (REV\_PDCH\_EP\_SIZE\_NUM\_1 +1)

RESERVED	0-7 (if needed)
----------	-----------------

1

2 REV\_REQCH\_ADJ\_INCL - Reverse Request Channel Adjustment included field.

3 If the attribute adjustment gains for the Reverse Request  
4 Channel are included in this message, the base station shall  
5 set this field to '1'; otherwise, the base station shall set this  
6 field to '0'.

7 REV\_REQCH\_ADJ\_GAIN - Reverse Request Channel Adjustment Gain.

8 If REV\_REQCH\_ADJ\_INCL is set to '0', the base station shall  
9 omit this field; otherwise, the base station shall include this  
10 field, and set it as follows.

11 The base station shall set this field to the value of the  
12 nominal attribute gain adjustment that the mobile station is  
13 to make for the transmission attributes for the power level of  
14 R-REQCH. The base station shall set the value in the range  
15 from -24 to 40 inclusive.

16 The base station shall set this field to the correction factor  
17 expressed as a two's complement value in units of 0.125 dB.

18 REV\_SPICH\_ADJ\_INCL - Reverse Secondary Pilot Channel Adjustment included field.

19 If the attribute adjustment gains for the Reverse Secondary  
20 Pilot Channel are included in this message, the base station  
21 shall set this field to '1'; otherwise, the base station shall set  
22 this field to '0'.

1	REV_SPICH_ADJ_GAIN	-	Reverse Secondary Pilot Channel Adjustment Gain.
2			If REV_SPICH_ADJ_INCL is set to '0', the base station shall
3			omit this field; otherwise, the base station shall include this
4			field, and set it as follows.
5			The base station shall set this field to the value of the
6			nominal attribute gain adjustment that the mobile station is
7			to make for the transmission attributes for the power level of
8			R-SPICH. The base station shall set the value in the range
9			from -16 to 48 inclusive.
10			The base station shall set this field to the correction factor
11			expressed as a two's complement value in units of 0.125 dB.
12	REV_SPICH_EP_SIZE	-	Minimum Encoder Packet Size for which the Reverse
13			Secondary Pilot Channel is used.
14			If REV_SPICH_ADJ_INCL is set to '0', the base station shall
15			omit this field; otherwise, the base station shall include this
16			field, and set it as follows.
17			The base station shall set this field to the minimum encoder
18			packet size for which the Reverse Secondary Pilot Channel is
19			used (see [2] and [3]).
20			The base station shall set this field to a value in the range 0
21			to 10 inclusive, corresponding to the encoder packet sizes
22			192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384,
23			and 18456 bits respectively.
24	REV_PDCCH_ADJ_INCL	-	Reverse Packet Data Control Channel Adjustment included
25			field.
26			If the attribute adjustment gains for the Reverse Packet Data
27			Control Channel are included in this message, the base
28			station shall set this field to '1'; otherwise, the base station
29			shall set this field to '0'.
30	REV_PDCCH_ADJ_GAIN	-	Reverse Packet Data Control Channel Adjustment Gain.
31			If REV_PDCCH_ADJ_INCL is set to '0', the base station shall
32			omit this field; otherwise, the base station shall include this
33			field, and set it as follows.
34			The base station shall set this field to the value of the
35			nominal attribute gain adjustment that the mobile station is
36			to make for the transmission attributes for the power level of
37			R-PDCCH. The base station shall set the value in the range
38			from -32 to 32 inclusive.
39			The base station shall set this field to the correction factor
40			expressed as a two's complement value in units of 0.125 dB.
41	REV_PDCCH_ATTRIBUTE_ADJ_INCL	-	Reverse Packet Data Control Channel
42			Attribute Adjustment included field.

1 If the attribute adjustment gains for the Reverse Packet Data  
2 Control Channel are included per encoder packet size and per  
3 boost mode in this message, the base station shall set this  
4 field to '1'; otherwise, the base station shall set this field to  
5 '0'.

6 REV\_PDCCH\_EP\_SIZE\_NUM - Number of occurrences of Reverse Packet Data Control  
7 Channel Attribute Adjustment Gains.

8 If REV\_PDCCH\_ATTRIBUTE\_ADJ\_INCL is set to '0', the base  
9 station shall omit this field; otherwise, the base station shall  
10 include this field, and set it as follows.

11 The base station shall set this field to one less than half the  
12 number of occurrences of the field included hereafter. The  
13 records are listed per encoder packet size, in the following  
14 ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,  
15 9240, 12312, 15384, 18456 bits.

16

17 If REV\_PDCCH\_ATTRIBUTE\_ADJ\_INCL is set to '1', the base station shall include  
18 REV\_PDCCH\_EP\_SIZE\_NUM+1 occurrences of the following record:

19 The base station shall include 2 occurrences of the following field. The first occurrence of  
20 this field is for the non-boosted mode, while the second is for the boosted mode.

21 REV\_PDCCH\_ATTRIBUTE\_ADJ\_GAIN - Reverse Packet Data Control Channel Attribute  
22 Adjustment Gain.

23 The base station shall set this field to the value of the  
24 nominal attribute gain adjustment that the mobile station is  
25 to make for the transmission attributes for the power level of  
26 R-PDCCH, for the i-th encoder packet size, and for the non-  
27 boosted and boosted modes.

28 The base station shall set the value in the range from -32 to  
29 32 inclusive.

30 The base station shall set this field to the correction factor  
31 expressed as a two's complement value in units of 0.125 dB.

32 REV\_PDCCH\_BOOST\_ADJ\_INCL- Reverse Packet Data Control Channel Boost  
33 Adjustment included field.

34 If the attribute adjustment gains for the Reverse Packet Data  
35 Control Channel per boosted mode are included in this  
36 message, the base station shall set this field to '1'; otherwise,  
37 the base station shall set this field to '0'.

38

39 If REV\_PDCCH\_BOOST\_ADJ\_INCL is set to '1', the base station shall include two  
40 occurrences of the following record:

41 REV\_PDCCH\_BOOST\_ADJ\_GAIN - Reverse Packet Data Control Channel Boost  
42 Adjustment Gains.

1		The base station shall set this field to the value of the
2		nominal attribute gain adjustment that the mobile station is
3		to make for the transmission attributes for the power level of
4		R-PDCCH, for the appropriate mode. The base station shall
5		set the value in the range from -32 to 32 inclusive.
6		The first occurrence of this field is for the non-boosted mode,
7		while the second is for the boosted mode. The base station
8		shall set this field to the correction factor expressed as a
9		two's complement value in units of 0.125 dB.
10	REV_PDCCH_PAYLOAD_ADJ_INCL -	Reverse Packet Data Control Channel Payload
11		Attribute Adjustment inclusion field.
12		If the attribute adjustment gains for the Reverse Packet Data
13		Control Channel are included per encoder packet size in this
14		message, the base station shall set this field to '1'; otherwise,
15		the base station shall set this field to '0'.
16	REV_PDCCH_EP_SIZE_NUM_1 -	Number of occurrences of Reverse Packet Data Control
17		Channel Payload Attribute Adjustment Gain records.
18		If REV_PDCCH_PAYLOAD_ADJ_INCL is set to '0', the base
19		station shall omit this field; otherwise, the base station shall
20		include this field, and set it as follows.
21		The base station shall set this field to one less than the
22		number of occurrences of the field included hereafter. The
23		fields are listed per encoder packet size, in the following
24		ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,
25		9240, 12312, 15384, 18456 bits.
26		
27	If REV_PDCCH_PAYLOAD_ADJ_INCL is set to '1', the base station shall include	
28	(REV_PDCCH_EP_SIZE_NUM_1+1) × 2 occurrences of the following record:	
29	REV_PDCCH_PAYLOAD_ADJ_GAIN -	Reverse Packet Data Control Channel Payload
30		Attribute Adjustment Gain.
31		The base station shall set this field to the value of the
32		nominal attribute gain adjustment that the mobile station is
33		to make for the transmission attributes for the power level of
34		R-PDCCH, for the i-th encoder packet size, and for the non-
35		boosted and boosted modes. In each set for the i-th encoder
36		packet, the first occurrence of this field is for the non-boosted
37		mode, while the second is for the boosted mode.
38		The base station shall set the value in the range from -32 to
39		32 inclusive. The base station shall set this field to the
40		correction factor expressed as a two's complement value in
41		units of 0.125 dB.
42	REV_PDCH_ADJ_INCL -	Reverse Packet Data Channel Adjustment included field.
43		If the attribute adjustment gains for the Reverse Packet Data
44		Channel are included in this message, the base station shall
45		set this field to '1'; otherwise, the base station shall set this
46		field to '0'.



1    REV\_PDCH\_ADJ\_GAIN    -    Reverse Packet Data Channel Adjustment Gain.  
2                                If REV\_PDCH\_ADJ\_INCL is set to '0', the base station shall  
3                                omit this field; otherwise, the base station shall include this  
4                                field, and set it as follows.  
5                                The base station shall set this field to the value of the  
6                                nominal attribute gain adjustment that the mobile station is  
7                                to make for the transmission attributes for the power level of  
8                                R-PDCH. The base station shall set the value in the range  
9                                from -40 to 56 inclusive.  
10                               The base station shall set this field to the correction factor  
11                               expressed as a two's complement value in units of 0.125 dB.

12   REV\_PDCH\_PAYLOAD\_ADJ\_INCL    -    Reverse Packet Data Channel Adjustment included  
13                                field.  
14                                If the attribute adjustment gains for the Reverse Packet Data  
15                                Channel are included per encoder packet size in this  
16                                message, the base station shall set this field to '1'; otherwise,  
17                                the base station shall set this field to '0'.

18   REV\_PDCH\_EP\_SIZE\_NUM    -    Number of occurrences of Reverse Packet Data Channel  
19                                Payload Adjustment Gains.  
20                                If REV\_PDCH\_PAYLOAD\_ADJ\_INCL is set to '0', the base  
21                                station shall omit this field; otherwise, the base station shall  
22                                include this field, and set it as follows.  
23                                The base station shall set this field to one less than the  
24                                number of occurrences of the following field. The fields are  
25                                listed per encoder packet size, in the following ascending  
26                                order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312,  
27                                15384, 18456 bits

28   If REV\_PDCH\_PAYLOAD\_ADJ\_INCL is set to '1', the base station shall include  
29   REV\_PDCH\_EP\_SIZE\_NUM+1 occurrences of the following record:

30   REV\_PDCH\_PAYLOAD\_ADJ\_GAIN    -    Reverse Packet Data Channel Payload Adjustment  
31                                Gain.  
32                                The base station shall set this field to the value of the  
33                                nominal attribute gain adjustment that the mobile station is  
34                                to make for the transmission attributes for the power level of  
35                                R-PDCH, for the i-th encoder packet size. The base station  
36                                shall set the value in the range from -40 to 56 inclusive.  
37                                The base station shall set this field to the correction factor  
38                                expressed as a two's complement value in units of 0.125 dB.

39   REV\_PDCH\_BOOST\_ADJ\_INCL    -    Reverse Packet Data Channel Adjustment included  
40                                field.  
41                                If the attribute adjustment gains for the Reverse Packet Data  
42                                Channel are included per boosted mode in this message, the  
43                                base station shall set this field to '1'; otherwise, the base  
44                                station shall set this field to '0'.

45

1 If REV\_PDCH\_BOOST\_ADJ\_INCL is set to '1', the base station shall include two  
 2 occurrences of the following record. The first occurrence of this record is for the non-  
 3 boosted mode, while the second is for the boosted mode.

4 REV\_PDCH\_BOOST\_ADJ\_GAIN - Reverse Packet Data Channel Boost-dependent  
 5 Adjustment Gain.

6 The base station shall set this field to the value of the  
 7 nominal attribute gain adjustment that the mobile station is  
 8 to make for the transmission attributes for the power level of  
 9 R-PDCH. The base station shall set the value in the range  
 10 from -40 to 56 inclusive.

11 The first occurrence of this field is for the non-boosted mode,  
 12 while the second is for the boosted mode. The base station  
 13 shall set this field to the correction factor expressed as a  
 14 two's complement value in units of 0.125 dB.

15 REV\_PDCH\_SUBPACKET\_ADJ\_INCL - Reverse Packet Data Channel Subpacket  
 16 Adjustment included field.

17 If the attribute adjustment gains for the Reverse Packet Data  
 18 Channel are included per subpacket transmission round in  
 19 this message, the base station shall set this field to '1';  
 20 otherwise, the base station shall set this field to '0'.

21 REV\_PDCH\_RETRX\_NUM - Number of occurrences of the Reverse Packet Data  
 22 Channel Subpacket Adjustment Gains.

23 If REV\_PDCH\_SUBPACKET\_ADJ\_INCL is set to '0', the base  
 24 station shall omit this field; otherwise, the base station shall  
 25 include this field, and set it as follows.

26 The base station shall set this field to one less than the  
 27 number of occurrences of the following field.

28 If REV\_PDCH\_SUBPACKET\_ADJ\_INCL is set to '1', the base station shall include  
 29 (REV\_PDCH\_RETRX\_NUM+1) occurrences of the following record:

30 REV\_PDCH\_SUBPACKET\_ADJ\_GAIN - Reverse Packet Data Channel Subpacket  
 31 Adjustment Gain.

32 The base station shall set this field to the value of the  
 33 nominal attribute gain adjustment that the mobile station is  
 34 to make for the transmission attributes for the power level of  
 35 R-PDCH, on the i-th transmission round. The base station  
 36 shall set the value in the range from -40 to 56 inclusive.

37 The base station shall set this field to the correction factor  
 38 expressed as a two's complement value in units of 0.125 dB.

39 REV\_PDCH\_ATTRIBUTE\_ADJ\_INCL - Reverse Packet Data Channel Attribute  
 40 Adjustment included field.

41 If the attribute adjustment gains for the Reverse Packet Data  
 42 Channel are included per encoder packet size and per  
 43 subpacket transmission round in this message, the base  
 44 station shall set this field to '1'; otherwise, the base station  
 45 shall set this field to '0'.

1 REV\_PDCH\_EP\_SIZE\_NUM\_1 - Number of occurrences of the Reverse Packet Data  
2 Channel Attribute Adjustment Gains record.

3 If REV\_PDCH\_ATTRIBUTE\_ADJ\_INCL is set to '0', the base  
4 station shall omit this field; otherwise, the base station shall  
5 include this field, and set it as follows.

6 The base station shall set this field to one less than the  
7 number of occurrences of the following subrecord. The  
8 subrecords are listed per encoder packet size, in the following  
9 ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,  
10 9240, 12312, 15384, 18456 bits.

11

12 If REV\_PDCH\_ATTRIBUTE\_ADJ\_INCL is set to '1', the base station shall include  
13 (REV\_PDCH\_EP\_SIZE\_NUM\_1+1) occurrences of the following subrecord:

14 REV\_PDCH\_RETRX\_NUM\_1 - Number of occurrences of the Reverse Packet Data  
15 Channel Subpacket Adjustment Gains.

16 The base station shall set this field to one less than the  
17 number of occurrences of the Reverse Packet Data Channel  
18 Subpacket Adjustment Gains record.

19

20 The base station shall include (REV\_PDCH\_RETRX\_NUM\_1+1) occurrences of the following  
21 record:

22 The base station shall include 2 occurrences of the following field. The first occurrence of  
23 this field is for the non-boosted mode, while the second is for the boosted mode.

24 REV\_PDCH\_ATTRIBUTE\_ADJ\_GAIN - Reverse Packet Data Channel Attribute  
25 Adjustment Gain.

26 The base station shall set this field to the value of the  
27 nominal attribute gain adjustment that the mobile station is  
28 to make for the transmission attributes for the power level of  
29 R-PDCH, for the i-th encoder packet size on a j-th  
30 transmission round, using the non-boosted or boosted mode.

31 The base station shall set the value in the range from -40 to  
32 56 inclusive. The base station shall set this field to the  
33 correction factor expressed as a two's complement value in  
34 units of 0.125 dB.

35 REV\_PDCH\_PARMS\_INCL - Reverse Packet Data Channel related parameters included  
36 indicator.

37 The base station shall set this field to '1' if the R-PDCH  
38 parameters are included in this message; otherwise, the base  
39 station shall set this field to '0'.

40 REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL - Maximum number of allowed ARQ rounds  
41 on the Reverse PDCH in the non-boosted mode.

42 If REV\_PDCH\_PARMS\_INCL is set to '0', the base station shall  
43 omit this field; otherwise, the base station shall include this  
44 field and set it as follows:

1		The base station shall set this field to one less the maximum
2		number of allowed ARQ rounds on the Reverse PDCH in the
3		non-boosted mode. The base station shall set this field to 0,
4		1, or 2 corresponding to 1, 2, or 3 rounds respectively (See
5		[3]).
6	REV_PDCH_NUM_ARQ_ROUNDS_BOOST	- Maximum number of allowed HARQ
7		retransmissions on the Reverse PDCH in the boosted mode.
8		If REV_PDCH_PARMS_INCL is set to '0', the base station shall
9		omit this field; otherwise, the base station shall include this
10		field and set it as follows:
11		The base station shall set this field to one less the maximum
12		number of allowed ARQ rounds on the Reverse PDCH in the
13		boosted mode. The base station shall set this field to 0, 1, or
14		2 corresponding to 1, 2, or 3 rounds respectively (See [3]).
15	FPC_BCMC_CHAN	- Channel used for secondary power control subchannel.
16		If FPC_INCL is set to '1' and FPC_MODE is set to '001', '010',
17		'101', or '110', the base station shall include this field and set
18		it as follows; otherwise, the base station shall omit this field.
19		If F-FCH is associated with secondary power control
20		subchannel, the base station shall set this field to '1';
21		otherwise, base station shall set this field to '0' to indicate
22		that FPC_SEC_CHAN points to the channel associated with
23		secondary power control subchannel.
24	RESERVED	- Reserved bits.
25		The base station shall add reserved bits as needed in order to
26		make the length of the entire record equal to an integer
27		number of octets. The base station shall set these bits to '0'.
28		

## 1 3.7.3.3.2.26 Extended Neighbor List Update Message

2 MSG\_TAG: ENLUM

3

Field	Length (bits)
PILOT_INC	4
NGHBR_SRCH_MODE	2
SRCH_WIN_N	4
USE_TIMING	1
GLOBAL_TIMING_INCL	0 or 1
GLOBAL_TX_DURATION	0 or 4
GLOBAL_TX_PERIOD	0 or 7
NUM_NGHR	6

NUM\_NGHR occurrences of the following field:

{ (NUM\_NGHR)

NGHR_PN	9
SEARCH_PRIORITY	0 or 2
SRCH_WIN_NGHR	0 or 4
TIMING_INCL	0 or 1
NGHR_TX_OFFSET	0 or 7
NGHR_TX_DURATION	0 or 4
NGHR_TX_PERIOD	0 or 7

} (NUM\_NGHR)

SRCH_OFFSET_INCL	1
------------------	---

NUM\_NGHR occurrences of the following record:

{ (NUM\_NGHR)

ADD_PILOT_REC_INCL	1
NGHR_PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$
SRCH_OFFSET_NGHR	0 or 3

} (NUM\_NGHR)

(continues on next page)

4

Field	Length (bits)
RESQ_ENABLED	1
RESQ_DELAY_TIME	0 or 6
RESQ_ALLOWED_TIME	0 or 6
RESQ_ATTEMPT_TIME	0 or 6
RESQ_CODE_CHAN	0 or 11
RESQ_QOF	0 or 2
RESQ_MIN_PERIOD_INCL	0 or 1
RESQ_MIN_PERIOD	0 or 5
RESQ_NUM_TOT_TRANS_INCL	0 or 1
RESQ_NUM_TOT_TRANS_20MS	0 or 4
RESQ_NUM_TOT_TRANS_5MS	0 or 4
RESQ_NUM_PREAMBLE	0 or 3
RESQ_POWER_DELTA	0 or 3

If RESQ\_ENABLED is set to '1', NUM\_NGHBR occurrences of the following one-field record:

{ (NUM\_NGHBR)

NGHBR_RESQ_CONFIGURED	1
-----------------------	---

} (NUM\_NGHBR)

- 1
- 2           PILOT\_INC   -   Pilot PN sequence offset index increment.
- 3                           A mobile station searches for Remaining Set pilots at pilot PN
- 4                           sequence index values that are multiples of this value.
- 5                           The base station shall set this field to the pilot PN sequence
- 6                           increment, in units of 64 PN chips, that mobile stations are to
- 7                           use for searching the Remaining Set. The base station
- 8                           should set this field to the largest increment such that the
- 9                           pilot PN sequence offsets of all its neighbor base stations are
- 10                          integer multiples of that increment.
- 11                          The base station shall set this field to a value in the range 1
- 12                          to 15 inclusive.
- 13   NGHBR\_SRCH\_MODE   -   Search mode.
- 14                           The base station shall set this field to the value specified in
- 15                           Table 3.7.3.3.2.26-1 corresponding to the search mode.
- 16

**Table 3.7.3.3.2.26-1. NGHBR\_SRCH\_MODE Field**

<b>Value (binary)</b>	<b>Description</b>
00	No search priorities or search windows
01	Search priorities
10	Search windows
11	Search windows and search priorities

**SRCH\_WIN\_N** - Default search window size for the Neighbor Set.

The base station shall set this field to the value specified in Table 2.6.6.2.1-1 corresponding to the default search window size to be used by the mobile station for its Neighbor Set. The mobile station uses the default search window size for all pilots in its Neighbor Set when the search window is not specified for each pilot individually (NGHBR\_SRCH\_MODE is set to a value other than '10' and '11').

**USE\_TIMING** - Use timing indicator.

If base station timing information is included for neighbor base stations, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**GLOBAL\_TIMING\_INCL** - Global timing included.

If USE\_TIMING is set to '1', the base station shall include the field GLOBAL\_TIMING\_INCL and set this field as described below; otherwise, the base station shall omit this field.

If base station timing information is included globally for all neighbor base stations with TIMING\_INCL equal to '1', the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**GLOBAL\_TX\_DURATION** - Global neighbor transmit time duration.

If GLOBAL\_TIMING\_INCL is included and is set to '1', the base station shall include the field GLOBAL\_TX\_DURATION and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the duration of the base station transmit window, during each period, in units of 80 ms. The base station should set this field to a value of 3 or greater.

**GLOBAL\_TX\_PERIOD** - Global neighbor transmit time period.

If GLOBAL\_TIMING\_INCL is included and is set to '1', the base station shall include the field GLOBAL\_TX\_PERIOD and shall set this field as described below; otherwise, the base station shall omit this field.

1 The base station shall set this field to duration of the period,  
2 in units of 80 ms.

3 NUM\_NGHR - Number of neighbor pilot PN sequences.

4 The base station shall set this field to the number of  
5 neighbors included in the message.

6 The base station shall include one occurrence of the following record for each pilot that a  
7 mobile station is to place in its Neighbor Set

8 NGHR\_PN - Neighbor pilot PN sequence offset index.

9 The base station shall include one occurrence of this field for  
10 each pilot in its neighbor list. The base station shall set this  
11 field to the pilot's PN sequence offset, in units of 64 PN chips.

12 SEARCH\_PRIORITY - Pilot Channel search priority.

13 If NGHR\_SRCH\_MODE is set to '01' or '11', then the base  
14 station shall set this field to the search priority for this  
15 neighbor. The base station shall set the search priority as  
16 specified in Table 3.7.3.3.2.26-2. If NGHR\_SRCH\_MODE is  
17 set to any other value, the base station shall omit this field.  
18

19 **Table 3.7.3.3.2.26-2. SEARCH\_PRIORITY Field**

Value (binary)	Search Priority
00	Low
01	Medium
10	High
11	Very High

20

21 SRCH\_WIN\_NGHR - Neighbor pilot channel search window size.

22 If NGHR\_SRCH\_MODE is set to '10' or '11', then the base  
23 station shall set this field to the value specified in Table  
24 2.6.6.2.1-1 corresponding to the search window size to be  
25 used by the mobile stations for this neighbor. If  
26 NGHR\_SRCH\_MODE is set to any other value, the base  
27 station shall omit this field.

28 TIMING\_INCL - Timing included indicator.

29 If USE\_TIMING is set to '1', the base station shall include the  
30 field TIMING\_INCL and set this field as described below;  
31 otherwise, the base station shall omit this field.

32 If base station timing information is included for this  
33 neighbor base station, the base station shall set this field to  
34 '1'; otherwise, the base station shall set this field to '0'.

35 NGHR\_TX\_OFFSET - Neighbor transmit time offset.



- 1 If TIMING\_INCL is included and is set to '1', the base station  
 2 shall include the field NGHBR\_TX\_OFFSET and set this field  
 3 as described below; otherwise, the base station shall omit  
 4 this field.
- 5 The base station shall set this field to the time offset, in units  
 6 of 80 ms, from the beginning of the neighbor timing period to  
 7 the beginning of the first base station transmit window within  
 8 the period. The beginning of the neighbor timing period  
 9 occurs when  $\lfloor t/4 \rfloor \bmod (16384) = 0$ .
- 10 NGHBR\_TX\_DURATION - Neighbor transmit time duration.
- 11 If TIMING\_INCL is included and is set to '1' and  
 12 GLOBAL\_TIMING\_INCL is set to '0', the base station shall  
 13 include the field NGHBR\_TX\_DURATION and set this field as  
 14 described below; otherwise, the base station shall omit this  
 15 field.
- 16 The base station shall set this field to duration of the base  
 17 station transmit window, during each period, in units of  
 18 80 ms. The base station should set this field to a value of 3  
 19 or greater.
- 20 NGHBR\_TX\_PERIOD - Neighbor transmit time period.
- 21 If TIMING\_INCL is included and is set to '1' and  
 22 GLOBAL\_TIMING\_INCL is set to '0', the base station shall  
 23 include the field NGHBR\_TX\_PERIOD and set this field as  
 24 described below; otherwise, the base station shall omit this  
 25 field.
- 26 The base station shall set this field to duration of the period,  
 27 in units of 80 ms.
- 28 SRCH\_OFFSET\_INCL - Neighbor pilot channel search window offset included.
- 29 If NGHBR\_SRCH\_MODE = '10' or '11' and if the  
 30 SRCH\_OFFSET\_NGHBR field is included in the following  
 31 records, the base station shall set this bit to '1'; otherwise,  
 32 the base station shall set this bit to '0'.
- 33 The base station shall include one occurrence of the following record for each pilot that a  
 34 mobile station is to place in its Neighbor Set. The base station shall use the same order for  
 35 the following record as is used for previous pilots which are listed in this message.  
 36 Specifically, the  $i^{th}$  occurrence of the following record shall correspond the  $i^{th}$  pilot in this  
 37 message.
- 38 ADD\_PILOT\_REC\_INCL - Additional pilot information included indicator.
- 39 The base station shall set this field to '1' if additional pilot  
 40 information listed in NGHBR\_PILOT\_REC\_TYPE and  
 41 RECORD\_LEN fields are included. The base station shall set  
 42 this field to '0' if the corresponding pilot is the common pilot  
 43 and there is no additional pilot information included.
- 44 NGHBR\_PILOT\_REC\_TYPE - Neighbor Pilot record type

1 If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall  
 2 set this field to the NGHBR\_PILOT\_REC\_TYPE value shown in  
 3 Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record  
 4 specified by this record.

5 If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall  
 6 omit this field.

7 RECORD\_LEN - Pilot record length.

8 If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall  
 9 set this field to the number of octets in the type-specific fields  
 10 of this pilot record.

11 If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall  
 12 omit this field.

13 Type-specific fields - Pilot record type-specific fields.

14 If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall  
 15 include type-specific fields based on the  
 16 NGHBR\_PILOT\_REC\_TYPE of this pilot record.

17 If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall  
 18 omit this field.

19

20 If NGHBR\_PILOT\_REC\_TYPE is equal to '000', the base station shall include the following  
 21 fields:

22

Field	Length (bits)
TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	4

23

24 TD\_POWER\_LEVEL - TD Transmit Power Level.

25 The base station shall set this field to the TD transmit power  
 26 level relative to that of the Forward Pilot Channel as specified  
 27 in Table 3.7.2.3.2.26-4.

28 TD\_MODE - Transmit Diversity mode.

29 The base station shall set this field to the Transmit Diversity  
 30 mode, as specified in Table 3.7.2.3.2.26-3.

31 RESERVED - Reserved bits.

32 The base station shall set this field to '0000'.

33 If NGHBR\_PILOT\_REC\_TYPE is equal to '001', the base station shall include the following  
 34 fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

1

2

QOF - Quasi-orthogonal function index.

3

4

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

5

WALSH\_LENGTH - Length of the Walsh code.

6

7

8

9

The base station shall set this field to the WALSH\_LENGTH value shown in Table 3.7.2.3.2.22-6 corresponding to the length of the Walsh code for the pilot that is used in as the Auxiliary Pilot.

10

AUX\_PILOT\_WALSH - Walsh code for the Auxiliary Pilot.

11

12

The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.

13

RESERVED - Reserved bits.

14

15

The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.

16

If NGHBR\_PILOT\_REC\_TYPE is equal to '010', the base station shall include the following fields:

17

18

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_WALSH	WALSH_LENGTH+6
AUX_TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	0 to 7 (as needed)

19

20

21

QOF - Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot.

22

23

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

24

WALSH\_LENGTH - Length of the Walsh code.

- 1 The base station shall set this field to the WALSH\_LENGTH  
2 value shown in 3.7.2.3.2.22-6 corresponding to the length of  
3 the Walsh code for the pilots that are used as Auxiliary pilot  
4 in the transmit diversity mode.
- 5 AUX\_WALSH - Walsh code for the Auxiliary Pilot.
- 6 The base station shall set this field to the Walsh code  
7 corresponding to the Auxiliary Pilot.
- 8 AUX\_TD\_POWER\_LEVEL - Auxiliary Transmit Diversity Pilot power level.
- 9 The base station shall set this field to the Auxiliary Transmit  
10 Diversity Pilot transmit power level relative to that of the  
11 Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.
- 12 TD\_MODE - Transmit Diversity mode.
- 13 The base station shall set this field to the Transmit Diversity  
14 mode, as specified in Table 3.7.2.3.2.26-3.
- 15 RESERVED - Reserved bits.
- 16 The base station shall set all the bits of this field to '0' to  
17 make the entire record octet-aligned.
- 18 If NGHBR\_PILOT\_REC\_TYPE is equal to '011', the base station shall include the following  
19 fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

- 20
- 21 SR3\_PRIMARY\_PILOT - Primary SR3 pilot.
- 22 The base station shall set this field to the value shown in  
23 Table 3.7.2.3.2.26-5 corresponding to the position of the  
24 primary SR3 pilot.
- 25 SR3\_PILOT\_POWER1 - The primary SR3 pilot power level relative to that of the pilot  
26 on the lower frequency of the two remaining SR3 frequencies.
- 27 The base station shall set this field to the value shown in  
28 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
29 primary pilot with respect to the pilot on the lower frequency  
30 of the two remaining SR3 frequencies.
- 31 SR3\_PILOT\_POWER2 - The primary SR3 pilot power level relative to that of the pilot  
32 on the higher frequency of the two remaining SR3  
33 frequencies.
- 34 The base station shall set this field to the value shown in  
35 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
36 primary pilot with respect to the pilot on the higher frequency  
37 of the two remaining SR3 frequencies.
- 38

- 1 If NGHBR\_PILOT\_REC\_TYPE is equal to '100', the base station shall include the following  
 2 fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
ADD_INFO_INCL1	1
QOF1	0 or 2
WALSH_LENGTH1	0 or 3
AUX_PILOT_WALSH1	0 or WALSH_LENGTH1+6
ADD_INFO_INCL2	1
QOF2	0 or 2
WALSH_LENGTH2	0 or 3
AUX_PILOT_WALSH2	0 or WALSH_LENGTH2+6
RESERVED	0 – 7 (as needed)

3

4 SR3\_PRIMARY\_PILOT– Primary SR3 pilot.

5 The base station shall set this field to the value shown in  
 6 Table 3.7.2.3.2.26-5 corresponding to the position of the  
 7 primary SR3 pilot.

8 SR3\_PILOT\_POWER1 – The primary SR3 pilot power level relative to that of the pilot  
 9 on the lower frequency of the two remaining SR3 frequencies.

10 The base station shall set this field to the value shown in  
 11 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 12 primary pilot with respect to the pilot on the lower frequency  
 13 of the two remaining SR3 frequencies.

14 SR3\_PILOT\_POWER2 – The primary SR3 pilot power level relative to that of the pilot  
 15 on the higher frequency of the two remaining SR3  
 16 frequencies.

17 The base station shall set this field to the value shown in  
 18 Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 19 primary pilot with respect to the pilot on the higher frequency  
 20 of the two remaining SR3 frequencies.

21 QOF – Quasi-orthogonal function index.

1			The base station shall set this field to the index of the Quasi-
2			orthogonal function (see [2]) on the frequency of the primary
3			pilot.
4	WALSH_LENGTH	-	Length of the Walsh Code.
5			The base station shall set this field to the WALSH_LENGTH
6			value shown in Table 3.7.2.3.2.22-6 corresponding to the
7			length of the Walsh code for the pilot that is used as the
8			Auxiliary pilot on the frequency of the primary pilot.
9	AUX_PILOT_WALSH	-	Walsh Code for the Auxiliary Pilot.
10			The base station shall set this field to the Walsh code
11			corresponding to the Auxiliary pilot on the frequency of the
12			primary pilot.
13	ADD_INFO_INCL1	-	Additional information included for the pilot on the lower
14			frequency of the two remaining SR3 frequencies.
15			If the additional information for the pilot on the lower
16			frequencies of the two remaining SR3 frequencies is the same
17			as pilot on the primary frequency, the base station shall set
18			this field to '0'; otherwise, the base station shall set this field
19			to '1'.
20	QOF1	-	Quasi-orthogonal function index for the pilot on the lower
21			frequency of the two remaining SR3 frequencies.
22			If ADD_INFO_INCL1 is set to '0', the base station shall omit
23			this field; otherwise, the base station shall set this field as
24			follows:
25			The base station shall set this field to the index of the Quasi-
26			orthogonal function (see [2]) on the lower frequency of the two
27			remaining SR3 frequencies.
28	WALSH_LENGTH1	-	Length of the Walsh Code for the pilot on the lower frequency
29			of the two remaining SR3 frequencies.
30			If ADD_INFO_INCL1 is set to '0', the base station shall omit
31			this field; otherwise, the base station shall set this field as
32			follows:
33			The base station shall set this field to the WALSH_LENGTH
34			value shown in Table 3.7.2.3.2.22-6 corresponding to the
35			length of the Walsh code for the pilot that is used as the
36			Auxiliary pilot on the lower frequency of the two remaining
37			SR3 frequencies.
38	AUX_PILOT_WALSH1	-	Walsh Code for the Auxiliary Pilot on the lower frequency of
39			the two remaining SR3 frequencies.
40			If ADD_INFO_INCL1 is set to '0', the base station shall omit
41			this field; otherwise, the base station shall set this field as
42			follows:
43			The base station shall set this field to the Walsh code
44			corresponding to the Auxiliary pilot on the lower frequency of
45			the two remaining SR3 frequencies.

1	ADD_INFO_INCL2	-	Additional information included for the pilot on the higher
2			frequency of the two remaining SR3 frequencies.
3			If the additional information for the pilot on the higher
4			frequencies of the two remaining SR3 frequencies is the same
5			as pilot on the primary frequency, the base station shall set
6			this field to '0'; otherwise, the base station shall set this field
7			to '1'.
8	QOF2	-	Quasi-orthogonal function index for the pilot on the higher
9			frequency of the two remaining SR3 frequencies.
10			If ADD_INFO_INCL2 is set to '0', the base station shall omit
11			this field; otherwise, the base station shall set this field as
12			follows:
13			The base station shall set this field to the index of the Quasi-
14			orthogonal function (see [2]) on the higher frequency of the
15			two remaining SR3 frequencies.
16	WALSH_LENGTH2	-	Length of the Walsh Code for the pilot on the higher
17			frequency of the two remaining SR3 frequencies.
18			If ADD_INFO_INCL2 is set to '0', the base station shall omit
19			this field; otherwise, the base station shall set this field as
20			follows:
21			The base station shall set this field to the WALSH_LENGTH
22			value shown in Table 3.7.2.3.2.22-6 corresponding to the
23			length of the Walsh code for the pilot that is used as the
24			Auxiliary pilot on the higher frequency of the two remaining
25			SR3 frequencies.
26	AUX_PILOT_WALSH2	-	Walsh Code for the Auxiliary Pilot on the higher frequency of
27			the two remaining SR3 frequencies.
28			If ADD_INFO_INCL2 is set to '0', the base station shall omit
29			this field; otherwise, the base station shall set this field as
30			follows:
31			The base station shall set this field to the Walsh code
32			corresponding to the Auxiliary pilot on the higher frequency
33			of the two remaining SR3 frequencies.
34	RESERVED	-	Reserved bits.
35			The base station shall set all the bits of this field to '0' to
36			make the entire record octet-aligned.
37	SRCH_OFFSET_NGHR	-	Neighbor pilot channel search window offset.
38			If SRCH_OFFSET_INCL equals to '1', then the base station
39			shall set this field to the value shown in Table 2.6.6.2.1-2
40			corresponding to the search window offset to be used by the
41			mobile station for this neighbor; otherwise, the base station
42			shall omit this field.
43	RESQ_ENABLED	-	Call rescue feature enabled indicator.

1			The base station shall set this field to '1' if the call rescue
2			feature is enabled and there is at least one occurrence of
3			NGHBR_RESQ_CONFIGURED set to '1' in this message;
4			otherwise, the base station shall set this field to '0'.
5	RESQ_DELAY_TIME	-	Call rescue delay timer value.
6			If RESQ_ENABLED is set to '0', the base station shall omit
7			this field; otherwise, the base station shall include this field
8			and set it as follows:
9			The base station shall set this field to the value of the call
10			rescue delay timer to be used by the mobile station, in units
11			of 80 ms.
12	RESQ_ALLOWED_TIME	-	Call rescue allowed timer value.
13			If RESQ_ENABLED is set to '0', the base station shall omit
14			this field; otherwise, the base station shall include this field
15			and set it as follows:
16			The base station shall set this field to the value of the call
17			rescue allowed timer to be used by the mobile station, in
18			units of 80 ms.
19	RESQ_ATTEMPT_TIME	-	Call rescue attempt timer value.
20			If RESQ_ENABLED is set to '0', the base station shall omit
21			this field; otherwise, the base station shall include this field
22			and set it as follows:
23			The base station shall set this field to the value of the call
24			rescue attempt timer to be used by the mobile station, in
25			units of 40 ms.
26	RESQ_CODE_CHAN	-	Code channel index for the Rescue Channel.
27			If RESQ_ENABLED is set to '0', the base station shall omit
28			this field; otherwise, the base station shall include this field
29			and set it as follows:
30			The base station shall set this field to the code channel index
31			(see [2]) that the mobile station is to use on the Forward
32			Fundamental Channel when attempting Call Rescue Soft
33			Handoff with the associated neighbor pilot.
34			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
35			station shall set this field in the range 1 to 63 inclusive. If
36			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
37			station shall set this field in the range 1 to 127 inclusive. If
38			Radio Configuration 7 or 9 is used, the base station shall set
39			this field in the range 1 to 255 inclusive.
40	RESQ_QOF	-	Quasi-Orthogonal Function mask identifier for the Rescue
41			Channel.
42			If RESQ_ENABLED is set to '0', the base station shall omit
43			this field; otherwise, the base station shall include this field
44			and set it as follows:



1		The base station shall set this field to the quasi-orthogonal
2		function mask identifier (see [2]) that the mobile station is to
3		use on the Forward Fundamental Channel when attempting
4		Call Rescue Soft Handoff with the associated neighbor pilot.
5	RESQ_MIN_PERIOD_INCL	- Minimum time between consecutive rescues included
6		indicator.
7		If RESQ_ENABLED is set to '0', the base station shall omit
8		this field; otherwise, the base station shall include this field
9		and set it as follows:
10		The base station shall set this field to '1' if the
11		RESQ_MIN_PERIOD field is included in this message;
12		otherwise, the base station shall set this field to '0'.
13		This field is set to '0' if there is no minimum time restriction
14		between consecutive rescues.
15	RESQ_MIN_PERIOD	- Minimum time between consecutive rescues.
16		If RESQ_MIN_PERIOD_INCL is not included, or is included
17		and set to '0', the base station shall omit this field; otherwise,
18		the base station shall include this field and set it as follows:
19		The base station shall set this field to one less than the
20		minimum time after a successful call rescue (i.e. receipt of
21		N <sub>3m</sub> good frames by the mobile station after the rescue
22		attempt timer is enabled) before any subsequent call rescue
23		attempts can be initiated, in units of 2 seconds.
24	RESQ_NUM_TOT_TRANS_INCL	- The required number of transmissions before
25		declaring L2 Acknowledgment Failure when Call Rescue is
26		enabled included indicator.
27		If RESQ_ENABLED is set to '0', the base station shall omit
28		this field; otherwise, the base station shall include this field
29		and set it as follows:
30		If the required number of transmissions of a regular PDU and
31		mini PDU before declaring L2 Acknowledgment Failure when
32		Call Rescue is enabled is included in this message, the base
33		station shall set this field to '1'; otherwise, the base station
34		shall set this field to '0'.
35	RESQ_NUM_TOT_TRANS_20MS	- The required number of transmissions of a regular
36		PDU before declaring L2 Acknowledgment Failure when Call
37		Rescue is enabled.
38		If RESQ_NUM_TOT_TRANS_INCL field is not included or is
39		included and is set to '0', the base station shall omit this
40		field; otherwise, the base station shall include this field and
41		set it as follows:
42		The base station shall set this field to the required number of
43		transmissions of a regular PDU before declaring L2
44		Acknowledgment Failure when Call Rescue is enabled.
45		The base station shall not set this field to a value greater
46		than N <sub>1m</sub> .

1 RESQ\_NUM\_TOT\_TRANS\_5MS – The required number of transmissions of a mini PDU  
2 before declaring L2 Acknowledgment Failure when Call  
3 Rescue is enabled.

4 If RESQ\_NUM\_TOT\_TRANS\_INCL field is not included or is  
5 included and is set to '0', the base station shall omit this  
6 field; otherwise, the base station shall include this field and  
7 set it as follows:

8 The base station shall set this field to the required number of  
9 transmissions of a mini PDU before declaring L2  
10 Acknowledgment Failure when Call Rescue is enabled.

11 The base station shall not set this field to a value greater  
12 than  $N_{15m}$ .

13 RESQ\_NUM\_PREAMBLE – The Traffic Channel preamble Length for Call Rescue Soft  
14 Handoff.

15 If RESQ\_ENABLED is set to '0', the base station shall omit  
16 this field; otherwise, the base station shall include this field  
17 and set it to the length of Traffic Channel preamble that the  
18 mobile station is to send when performing a call rescue soft  
19 handoff, as follows:

20 If Radio configuration 1 or Radio configuration 2 is being  
21 used, the base station shall set this field to the Traffic  
22 Channel preamble length in 20 ms units; otherwise, the base  
23 station shall set this field to the value shown in Table  
24 3.7.3.3.2.17-1 corresponding to the Traffic Channel preamble  
25 length in 1.25 ms units.

26 RESQ\_POWER\_DELTA – The power level adjustment to be applied to the last closed-  
27 loop power level when re-enabling the transmitter for call  
28 rescue soft handoff.

29 If RESQ\_ENABLED is set to '0', the base station shall omit  
30 this field; otherwise, the base station shall set this field to a  
31 value by which mobile stations are to adjust the last closed-  
32 loop power level when re-enabling the transmitter for call  
33 rescue, expressed as a two's complement value in units of  
34 1 dB.

35 The base station shall include NUM\_NGHBR occurrences of the following one-field record  
36 if RESQ\_ENABLED is set to '1'. The base station shall use the same order for the following  
37 field as is used for the NGHBR\_PN fields listed in this message.

38 NGHBR\_RESQ\_CONFIGURED – Neighbor Rescue Channel configured indicator.

39 The base station shall set this field to '1' if a Rescue Channel  
40 is configured for this neighbor pilot; otherwise, the base  
41 station shall set this field to '0'.  
42

1 3.7.3.3.2.27 Candidate Frequency Search Request Message

2 MSG\_TAG: CFSRQM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	6
RESERVED_1	4
CFSRM_SEQ	2
SEARCH_TYPE	2
SEARCH_PERIOD	4
SEARCH_MODE	4
MODE_SPECIFIC_LEN	8
Mode-specific fields	8 × MODE_SPECIFIC_LEN
ALIGN_TIMING	1
SEARCH_OFFSET	0 or 6

4

5 USE\_TIME - Use action time indicator.

6 This field indicates whether an explicit action time is  
7 specified in this message.

8 If an explicit action time is specified in this message, the base  
9 station shall set this field to '1'; otherwise, the base station  
10 shall set this field to '0'.

11 If the base station requests the mobile station to perform an  
12 aligned search (see 2.6.6.2.8.3), the base station shall specify  
13 an explicit action time for the message.

14 ACTION\_TIME - Action time.

15 If the USE\_TIME field is set to '1', the base station shall set  
16 this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$   
17 ms, in units of 80 ms (modulo 64), at which the message is to  
18 take effect. If the USE\_TIME field is set to '0', the base station  
19 shall set this field to '000000'.

20 RESERVED\_1 - Reserved bits.

21 The base station shall set this field to '0000'.

22 CFSRM\_SEQ - *Candidate Frequency Search Request Message* sequence  
23 number.

The base station shall set this field to the *Candidate Frequency Search Request Message* sequence number, as specified in 2.6.6.2.2.3.

**SEARCH\_TYPE** - Search command.

The base station shall set this field to the appropriate **SEARCH\_TYPE** code from Table 3.7.3.3.2.27-1 to indicate the purpose of the message.

**Table 3.7.3.3.2.27-1. SEARCH\_TYPE Codes**

<b>SEARCH_TYPE (binary)</b>	<b>Meaning</b>
00	Directs the mobile station to stop any periodic search in progress (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4)
01	Directs the mobile station to perform a single search (see 2.6.6.2.8.3.1 and 2.6.6.2.10.1).
11	Directs the mobile station to perform a periodic search (see 2.6.6.2.8.3.2 and 2.6.6.2.10.2).
10	Reserved.

**SEARCH\_PERIOD** - Time between successive searches on the Candidate Frequency for periodic searches.

The base station shall set this field to the **SEARCH\_PERIOD** value shown in Table 2.6.6.2.8.3.2-1 corresponding to the search period to be used by the mobile station, i.e., the time between the beginning of successive searches on the Candidate Frequency.

**SEARCH\_MODE** - Search mode.

The base station shall set this field to the **SEARCH\_MODE** value specified in Table 3.7.3.3.2.27-2 corresponding to the type of search specified by this message.

1

**Table 3.7.3.3.2.27-2. SEARCH\_MODE Types**

<b>SEARCH_MODE (binary)</b>	<b>Description</b>
0000	Searches for CDMA pilots on a Candidate Frequency.
0001	Reserved (Previously: Searches for analog channels)
0010	Searches for Direct Spread (DS) neighbor cell (see [32]).
0011-1111	Reserved

2

3    **MODE\_SPECIFIC\_LEN**    -    Length of mode-specific fields.4                                    The base station shall set this field to the number of octets in  
5                                    the mode-specific fields of this message.6        **Mode-specific fields**    -    Search mode-specific fields.7                                    The base station shall include mode-specific fields based on  
8                                    the SEARCH\_MODE field.

9    If SEARCH\_MODE is equal to '0000', the base station shall include the following fields:

10

Field	Length (bits)
BAND_CLASS	5
CDMA_FREQ	11
SF_TOTAL_EC_THRESH	5
SF_TOTAL_EC_I0_THRESH	5
DIFF_RX_PWR_THRESH	5
MIN_TOTAL_PILOT_EC_I0	5
CF_T_ADD	6
TF_WAIT_TIME	4
CF_PILOT_INC	4
CF_SRCH_WIN_N	4
CF_SRCH_WIN_R	4
RESERVED_2	5
PILOT_UPDATE	1
NUM_PILOTS	0 or 6
CF_NGHR_SRCH_MODE	0 or 2

NUM\_PILOTS occurrences of the following record:

{ (0 or NUM\_PILOTS)

NGHR_PN	9
SEARCH_SET	1
SEARCH_PRIORITY	0 or 2
SRCH_WIN_NGHR	0 or 4

} (0 or NUM\_PILOTS)

NUM\_PILOTS occurrences of the following record:

CF_SRCH_OFFSET_INCL	1
---------------------	---

(continues on next page)

1

Field	Length (bits)
NUM_PILOTS occurrences of the following record: { (0 or NUM_PILOTS)	
ADD_PILOT_REC_INCL	1
NGHBR_PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$
SRCH_OFFSET_NGHBR	0 or 3
} (0 or NUM_PILOTS)	
RESERVED_3	0 - 7 (as needed)

2

3 BAND\_CLASS - Band class.

4 The base station shall set this field to the CDMA band class  
5 of the Candidate Frequency.

6 CDMA\_FREQ - Frequency assignment.

7 The base station shall set this field to the CDMA frequency  
8 assignment for the Candidate Frequency.9 SF\_TOTAL\_EC\_THRESH - Serving Frequency total pilot  $E_c$  threshold.10 If the mobile station is not to use the measurement of total  $E_c$   
11 of the pilots in the Serving Frequency Active Set in the  
12 Candidate Frequency periodic search procedure, the base  
13 station shall set this field to '11111'; otherwise, the base  
14 station shall set this field to

15 
$$\lceil (10 \times \log_{10}(\text{total\_ec\_thresh}) + 120) / 2 \rceil$$

16 where *total\_ec\_thresh* is defined by the following rule: The  
17 mobile station is not to visit the CDMA Candidate Frequency  
18 to search for pilots if the total  $E_c$  of the pilots in the Serving  
19 Frequency Active Set is greater than *total\_ec\_thresh*.20 SF\_TOTAL\_EC\_I0\_THRESH - Serving Frequency total pilot  $E_c/I_0$  threshold.21 If the mobile station is not to use the measurement of total  
22  $E_c/I_0$  of the pilots in the Serving Frequency Active Set in the  
23 Candidate Frequency periodic search procedure, the base  
24 station shall set this field to '11111'; otherwise, the base  
25 station shall set this field to

26 
$$\lfloor -20 \times \log_{10}(\text{total\_ec\_i0\_thresh}) \rfloor$$

1 where *total\_ec\_i0\_thresh* is defined by the following rule: The  
2 mobile station is not to visit the CDMA Candidate Frequency  
3 to search for pilots if the total  $E_c/I_0$  of the pilots in the  
4 Serving Frequency Active Set is greater than  
5 *total\_ec\_i0\_thresh*.

6 DIFF\_RX\_PWR\_THRESH - Minimum difference in received power.  
7 If this message is used for the Candidate Frequency single or  
8 periodic search procedure:  
9 If the mobile station is to search for pilots on the CDMA  
10 Candidate Frequency irrespective of the received power on  
11 the Candidate Frequency, the base station shall set this  
12 field to '00000'; otherwise, the base station shall set this  
13 field to  
14  $\lceil (minimum\_power\_diff + 30) / 2 \rceil$   
15 where *minimum\_power\_diff* is determined by the following  
16 rule: The mobile station is not to search for pilots on the  
17 CDMA Candidate Frequency if (*cand\_freq\_pwr* -  
18 *serving\_freq\_pwr*) is less than *minimum\_power\_diff* (in  
19 dB), where *cand\_freq\_pwr* is the received power on the  
20 CDMA Candidate Frequency, in dBm / 1.23 MHz, and  
21 *serving\_freq\_pwr* is the received power on the Serving  
22 Frequency, in dBm / 1.23 MHz.

23 If this message is used for the Hard Handoff with Return on  
24 Failure procedure:  
25 If the mobile station is to continue hard handoff  
26 procedures irrespective of the received power on the  
27 Target Frequency, the base station shall set this field to  
28 '00000'; otherwise, the base station shall set this field to  
29  $\lceil (minimum\_power\_diff + 30) / 2 \rceil$   
30 where *minimum\_power\_diff* is determined by the following  
31 rule: The mobile station is to declare the handoff attempt  
32 to be unsuccessful if (*target\_freq\_pwr* - *serving\_freq\_pwr*)  
33 is less than *minimum\_power\_diff* (in dB), where  
34 *target\_freq\_pwr* is the received power on the CDMA Target  
35 Frequency, in dBm / 1.23 MHz, and *serving\_freq\_pwr* is  
36 the received power on the Serving Frequency, in dBm /  
37 1.23 MHz.

38 MIN\_TOTAL\_PILOT\_EC\_I0 - Minimum total pilot  $E_c/I_0$ .  
39 If this message is used for the Candidate Frequency periodic  
40 search procedure:  
41 If the mobile station is to search for pilots on the CDMA  
42 Candidate Frequency irrespective of the strength of pilots  
43 in the Candidate Frequency Search Set, the base station  
44 shall set this field to '00000'; otherwise, the base station  
45 shall set this field to  
46  $\lfloor -20 \times \log_{10} total\_pilot\_threshold \rfloor$



1			where <i>total_pilot_threshold</i> is defined by the following
2			rule: The mobile station is not to send the <i>Candidate</i>
3			<i>Frequency Search Report Message</i> if the sum of $E_c/I_0$ of
4			all pilots in the mobile station's Candidate Frequency
5			Search Set that measure above CF_T_ADD is less than
6			<i>total_pilot_threshold</i> .
7			If this message is used for the Hard Handoff with Return on
8			Failure procedure:
9			If the mobile station is to attempt to demodulate the
10			Forward Traffic Channels irrespective of the strength of
11			pilots in the Active Set, the base station shall set this field
12			to '00000'; otherwise, the base station shall set this field
13			to
14			$\lfloor -20 \times \log_{10} total\_pilot\_threshold \rfloor$
15			where <i>total_pilot_threshold</i> is defined by the following
16			rule: The mobile station is not to attempt to demodulate
17			the Forward Traffic Channels if the sum of $E_c/I_0$ of all
18			pilots in the mobile station's Active Set is less than
19			<i>total_pilot_threshold</i> .
20	CF_T_ADD	-	Pilot detection threshold for the CDMA Candidate Frequency.
21			This value is used by the mobile station to trigger the sending
22			of the <i>Candidate Frequency Search Report Message</i> during a
23			periodic search of the CDMA Candidate Frequency (see
24			2.6.6.2.8.3.2).
25			The base station shall set this field to the pilot detection
26			threshold, expressed as an unsigned binary number equal to
27			$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
28	TF_WAIT_TIME	-	The total maximum wait time on the CDMA Target
29			Frequency.
30			The base station shall set this field to the maximum wait
31			time, in units of 80 ms, that the mobile station is to spend
32			waiting for a period of $(N_{11m} \times 20)$ ms with sufficient signal
33			quality (e.g. good frames) on the CDMA Target Frequency.
34	CF_PILOT_INC	-	Pilot PN sequence offset index increment to be used on the
35			CDMA Candidate Frequency after handoff.
36			The base station shall set this field to the pilot PN sequence
37			increment, in units of 64 PN chips, that the mobile station is
38			to use for searching the Remaining Set, after a handoff to the
39			CDMA Candidate Frequency is successfully completed. The
40			base station should set this field to the largest increment
41			such that the pilot PN sequence offsets of all its neighbor
42			base stations are integer multiples of that increment.
43	CF_SRCH_WIN_N	-	Default search window size for the Candidate Frequency
44			Search Set.

1			The base station shall set this field to the value specified in
2			Table 2.6.6.2.1-1 corresponding to the default search window
3			size to be used by the mobile station for its Candidate
4			Frequency Search Set. The mobile station uses the default
5			search window size for all pilots in its Candidate Frequency
6			Search Set when the search window has not been specified
7			for each pilot individually.
8	CF_SRCH_WIN_R	-	Search window size for the Remaining Set on the CDMA
9			Candidate Frequency.
10			The base station shall set this field to the window size
11			parameter shown in Table 2.6.6.2.1-1 corresponding to the
12			number of PN chips that the mobile station is to search for
13			pilots in the Remaining Set on the CDMA Candidate
14			Frequency after a handoff is successfully completed.
15	RESERVED_2	-	Reserved bits.
16			The base station shall set this field to '00000'.
17	PILOT_UPDATE	-	Pilot search parameter update indicator.
18			If the mobile station is to change its pilot search parameters,
19			the base station shall set this field to '1'; otherwise, the base
20			station shall set this field to '0'.
21	NUM_PILOTS	-	Number of pilots included in the message.
22			If the PILOT_UPDATE field is set to '0', the base station shall
23			omit this field; otherwise, the base station shall include this
24			field and set it as follows:
25			The base station shall set this field to the number of the
26			CDMA Candidate Frequency pilots included in this message.
27			The base station shall set this field to a value from 0 to $N_{gm}$ ,
28			inclusive.
29	CF_NGHR_SRCH_MODE	-	Search mode for Candidate Frequency Search Set.
30			If the PILOT_UPDATE field is set to '0', the base station shall
31			omit this field; otherwise, the base station shall include this
32			field and set it as follows:
33			The base station shall set this field to the value shown in
34			Table 3.7.3.3.2.27-3 corresponding to the search mode.
35			

**Table 3.7.3.3.2.27-3. CF\_NGHR\_SRCH\_MODE Field**

Value (binary)	Description
00	No search priorities or search windows specified
01	Search priorities specified
10	Search windows specified
11	Search windows and search priorities specified

1	The base station shall include NUM_PILOTS occurrences of the following four-field record,		
2	one for each included CDMA Candidate Frequency pilot.		
3	NGHBR_PN	-	Neighbor pilot PN sequence offset index.
4	The base station shall set this field to the pilot's PN sequence		
5	offset, in units of 64 PN chips.		
6	SEARCH_SET	-	Flag to indicate if the corresponding pilot is to be searched.
7	The base station shall set this field to '1' if the mobile station		
8	should add the corresponding pilot to its Candidate		
9	Frequency Search Set; otherwise, the base station shall set		
10	this field to '0'.		
11	SEARCH_PRIORITY	-	Pilot Channel search priority.
12	If CF_NGHBR_SRCH_MODE is set to '01' or '11', then the		
13	base station shall set this field to the search priority for this		
14	neighbor. The base station shall set the search priority as		
15	specified in Table 3.7.3.3.2.26-2. If		
16	CF_NGHBR_SRCH_MODE is set to any other value, the base		
17	station shall omit this field.		
18	SRCH_WIN_NGHBR	-	Neighbor pilot channel search window size.
19	If CF_NGHBR_SRCH_MODE is set to '10' or '11', then the		
20	base station shall set this field to the value specified in		
21	Table 2.6.6.2.1-1 corresponding to the search window size to		
22	be used by mobile stations for this neighbor. If the		
23	CF_NGHBR_SRCH_MODE is set to any other value, the base		
24	station shall omit this field.		
25	CF_SRCH_OFFSET_INCL	-	Neighbor pilot channel search window offset included.
26	If PILOT_UPDATE is set to '0', the base station shall omit this		
27	field; otherwise, the base station shall include this field and		
28	set it as follows:		
29	If CF_NGHBR_SRCH_MODE is set to '10' or '11' and if		
30	SRCH_OFFSET_NGHBR is included in the message, the base		
31	station shall set this bit to '1'; otherwise, the base station		
32	shall set this bit to '0'.		
33	ADD_PILOT_REC_INCL	-	Additional pilot information included indicator.
34	The base station shall set this field to '1' if additional pilot		
35	information listed in NGHBR_PILOT_REC_TYPE and		
36	RECORD_LEN fields are included. The base station shall set		
37	this field to '0' if the corresponding pilot is the common pilot		
38	and there is no additional pilot information included.		
39	NGHBR_PILOT_REC_TYPE	-	Neighbor Pilot record type
40	If ADD_PILOT_REC_INCL is set to '1', the base station shall		
41	set this field to the NGHBR_PILOT_REC_TYPE value shown in		
42	Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record		
43	specified by this record.		
44	If ADD_PILOT_REC_INCL is set to '0', the base station shall		
45	omit this field.		

- 1            **RECORD\_LEN**    -    Pilot record length.
- 2                                    If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall
- 3                                    set this field to the number of octets in the type-specific fields
- 4                                    of this pilot record.
- 5                                    If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall
- 6                                    omit this field.
- 7            **Type-specific fields**    -    Pilot record type-specific fields.
- 8                                    If ADD\_PILOT\_REC\_INCL is set to '1', the base station shall
- 9                                    include type-specific fields based on the
- 10                                    NGHBR\_PILOT\_REC\_TYPE of this pilot record.
- 11                                    If ADD\_PILOT\_REC\_INCL is set to '0', the base station shall
- 12                                    omit this field.

13 If NGHBR\_PILOT\_REC\_TYPE is equal to '000', the base station shall include the following

14 fields:

15

Field	Length (bits)
TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	4

16

- 17            **TD\_POWER\_LEVEL**    -    TD Transmit Power Level.
- 18                                    The base station shall set this field to the TD transmit power
- 19                                    level relative to that of the Forward Pilot Channel as specified
- 20                                    in Table 3.7.2.3.2.26-4.
- 21            **TD\_MODE**    -    Transmit Diversity mode.
- 22                                    The base station shall set this field to the Transmit Diversity
- 23                                    mode, as specified in Table 3.7.2.3.2.26-3.
- 24            **RESERVED**    -    Reserved bits.
- 25                                    The base station shall set these bits to '0000'.

26 If NGHBR\_PILOT\_REC\_TYPE is equal to '001', the base station shall include the following

27 fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

28

- 29            **QOF**    -    Quasi-orthogonal function index.

- 1 The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).
- 2
- 3 **WALSH\_LENGTH** - Length of the Walsh code.
- 4 The base station shall set this field to the **WALSH\_LENGTH**
- 5 value shown in Table 3.7.2.3.2.22-6 corresponding to the
- 6 length of the Walsh code for the pilot that is used in as the
- 7 Auxiliary pilot.
- 8 **AUX\_PILOT\_WALSH** - Walsh code for the Auxiliary Pilot.
- 9 The base station shall set this field to the Walsh code
- 10 corresponding to the Auxiliary Pilot.
- 11 **RESERVED** - Reserved bits.
- 12 The base station shall set all the bits of this field to '0' to
- 13 make the entire record octet-aligned.

14 If **NGHBR\_PILOT\_REC\_TYPE** is equal to '010', the base station shall include the following

15 fields:

16

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_WALSH	WALSH_LENGTH+6
AUX_TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	0 to 7 (as needed)

17

- 18 **QOF** - Quasi-orthogonal function index for the Auxiliary Transmit
- 19 Diversity Pilot.
- 20 The base station shall set this field to the index of the Quasi-
- 21 orthogonal function (see [2]).
- 22 **WALSH\_LENGTH** - Length of the Walsh code.
- 23 The base station shall set this field to the **WALSH\_LENGTH**
- 24 value shown in 3.7.2.3.2.22-6 corresponding to the length of
- 25 the Walsh code for the pilots that are used as Auxiliary pilot
- 26 in the transmit diversity mode.
- 27 **AUX\_WALSH** - Walsh code for the Auxiliary Pilot.
- 28 The base station shall set this field to the Walsh code
- 29 corresponding to the Auxiliary Pilot.
- 30 **AUX\_TD\_POWER\_LEVEL** - Auxiliary Transmit Diversity Pilot power level.
- 31 The base station shall set this field to the Auxiliary Transmit
- 32 Diversity Pilot transmit power level relative to that of the
- 33 Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.

- 1            TD\_MODE    -   Transmit Diversity mode.  
 2                            The base station shall set this field to the Transmit Diversity  
 3                            mode, as specified in Table 3.7.2.3.2.26-3.  
 4            RESERVED   -   Reserved bits.  
 5                            The base station shall set all the bits of this field to '0' to  
 6                            make the entire record octet-aligned.

7    If NGHBR\_PILOT\_REC\_TYPE is equal to '011', the base station shall include the following  
 8    fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

- 9  
 10   SR3\_PRIMARY\_PILOT   -   Primary SR3 pilot.  
 11                            The base station shall set this field to the value shown in  
 12                            Table 3.7.2.3.2.26-5 corresponding to the position of the  
 13                            primary SR3 pilot.  
 14   SR3\_PILOT\_POWER1   -   The primary SR3 pilot power level relative to that of the pilot  
 15                            on the lower frequency of the two remaining SR3 frequencies.  
 16                            The base station shall set this field to the value shown in  
 17                            Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 18                            primary pilot with respect to the pilot on the lower frequency  
 19                            of the two remaining SR3 frequencies.  
 20   SR3\_PILOT\_POWER2   -   The primary SR3 pilot power level relative to that of the pilot  
 21                            on the higher frequency of the two remaining SR3  
 22                            frequencies.  
 23                            The base station shall set this field to the value shown in  
 24                            Table 3.7.2.3.2.26-6 corresponding to the power level of the  
 25                            primary pilot with respect to the pilot on the higher frequency  
 26                            of the two remaining SR3 frequencies.

27  
 28   If NGHBR\_PILOT\_REC\_TYPE is equal to '100', the base station shall include the following  
 29   fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
ADD_INFO_INCL1	1
QOF1	0 or 2
WALSH_LENGTH1	0 or 3
AUX_PILOT_WALSH1	0 or WALSH_LENGTH1+6
ADD_INFO_INCL2	1
QOF2	0 or 2
WALSH_LENGTH2	0 or 3
AUX_PILOT_WALSH2	0 or WALSH_LENGTH2+6
RESERVED	0 – 7 (as needed)

- 1
- 2 SR3\_PRIMARY\_PILOT– Primary SR3 pilot.
- 3 The base station shall set this field to the value shown in
- 4 Table 3.7.2.3.2.26-5 corresponding to the position of the
- 5 primary SR3 pilot.
- 6 SR3\_PILOT\_POWER1 – The primary SR3 pilot power level relative to that of the pilot
- 7 on the lower frequency of the two remaining SR3 frequencies.
- 8 The base station shall set this field to the value shown in
- 9 Table 3.7.2.3.2.26-6 corresponding to the power level of the
- 10 primary pilot with respect to the pilot on the lower frequency
- 11 of the two remaining SR3 frequencies.
- 12 SR3\_PILOT\_POWER2 – The primary SR3 pilot power level relative to that of the pilot
- 13 on the higher frequency of the two remaining SR3
- 14 frequencies.
- 15 The base station shall set this field to the value shown in
- 16 Table 3.7.2.3.2.26-6 corresponding to the power level of the
- 17 primary pilot with respect to the pilot on the higher frequency
- 18 of the two remaining SR3 frequencies.
- 19 QOF – Quasi-orthogonal function index.
- 20 The base station shall set this field to the index of the Quasi-
- 21 orthogonal function (see [2]) on the frequency of the primary
- 22 pilot.

1	WALSH_LENGTH	-	Length of the Walsh Code.
2			The base station shall set this field to the WALSH_LENGTH
3			value shown in Table 3.7.2.3.2.22-6 corresponding to the
4			length of the Walsh code for the pilot that is used as the
5			Auxiliary pilot on the frequency of the primary pilot.
6	AUX_PILOT_WALSH	-	Walsh Code for the Auxiliary Pilot.
7			The base station shall set this field to the Walsh code
8			corresponding to the Auxiliary pilot on the frequency of the
9			primary pilot.
10	ADD_INFO_INCL1	-	Additional information included for the pilot on the lower
11			frequency of the two remaining SR3 frequencies.
12			If the additional information for the pilot on the lower
13			frequencies of the two remaining SR3 frequencies is the same
14			as pilot on the primary frequency, the base station shall set
15			this field to '0'; otherwise, the base station shall set this field
16			to '1'.
17	QOF1	-	Quasi-orthogonal function index for the pilot on the lower
18			frequency of the two remaining SR3 frequencies.
19			If ADD_INFO_INCL1 is set to '0', the base station shall omit
20			this field; otherwise, the base station shall set this field as
21			follows:
22			The base station shall set this field to the index of the Quasi-
23			orthogonal function (see [2]) on the lower frequency of the two
24			remaining SR3 frequencies.
25	WALSH_LENGTH1	-	Length of the Walsh Code for the pilot on the lower frequency
26			of the two remaining SR3 frequencies.
27			If ADD_INFO_INCL1 is set to '0', the base station shall omit
28			this field; otherwise, the base station shall set this field as
29			follows:
30			The base station shall set this field to the WALSH_LENGTH
31			value shown in Table 3.7.2.3.2.22-6 corresponding to the
32			length of the Walsh code for the pilot that is used as the
33			Auxiliary pilot on the lower frequency of the two remaining
34			SR3 frequencies.
35	AUX_PILOT_WALSH1	-	Walsh Code for the Auxiliary Pilot on the lower frequency of
36			the two remaining SR3 frequencies.
37			If ADD_INFO_INCL1 is set to '0', the base station shall omit
38			this field; otherwise, the base station shall set this field as
39			follows:
40			The base station shall set this field to the Walsh code
41			corresponding to the Auxiliary pilot on the lower frequency of
42			the two remaining SR3 frequencies.
43	ADD_INFO_INCL2	-	Additional information included for the pilot on the higher
44			frequency of the two remaining SR3 frequencies.



1			If the additional information for the pilot on the higher
2			frequencies of the two remaining SR3 frequencies is the same
3			as pilot on the primary frequency, the base station shall set
4			this field to '0'; otherwise, the base station shall set this field
5			to '1'.
6	QOF2	-	Quasi-orthogonal function index for the pilot on the higher
7			frequency of the two remaining SR3 frequencies.
8			If ADD_INFO_INCL2 is set to '0', the base station shall omit
9			this field; otherwise, the base station shall set this field as
10			follows:
11			The base station shall set this field to the index of the Quasi-
12			orthogonal function (see [2]) on the higher frequency of the
13			two remaining SR3 frequencies.
14	WALSH_LENGTH2	-	Length of the Walsh Code for the pilot on the higher
15			frequency of the two remaining SR3 frequencies.
16			If ADD_INFO_INCL2 is set to '0', the base station shall omit
17			this field; otherwise, the base station shall set this field as
18			follows:
19			The base station shall set this field to the WALSH_LENGTH
20			value shown in Table 3.7.2.3.2.22-6 corresponding to the
21			length of the Walsh code for the pilot that is used as the
22			Auxiliary pilot on the higher frequency of the two remaining
23			SR3 frequencies.
24	AUX_PILOT_WALSH2	-	Walsh Code for the Auxiliary Pilot on the higher frequency of
25			the two remaining SR3 frequencies.
26			If ADD_INFO_INCL2 is set to '0', the base station shall omit
27			this field; otherwise, the base station shall set this field as
28			follows:
29			The base station shall set this field to the Walsh code
30			corresponding to the Auxiliary pilot on the higher frequency
31			of the two remaining SR3 frequencies.
32	RESERVED	-	Reserved bits.
33			The base station shall set all the bits of this field to '0' to
34			make the entire record octet-aligned.
35	SRCH_OFFSET_NGHR	-	Neighbor pilot channel search window offset.
36			If CF_SRCH_OFFSET_INCL is included and equals to '1', then
37			the base station shall set this field to the value specified in
38			Table 2.6.6.2.1-2 corresponding to the search window offset
39			to be used by the mobile station for this neighbor; otherwise,
40			the base station shall omit this field.
41	RESERVED_3	-	Reserved bits.
42			The base station shall add reserved bits as needed in order to
43			make the length of the Mode-specific fields equal to an
44			integer number of octets. The base station shall set these
45			bits to '0'.
46	ALIGN_TIMING	-	Align timing indicator.

1                    If the base station requests that the mobile station offset the  
2                    start of the first search from the action time of this message  
3                    (or of a subsequent *Candidate Frequency Search Control*  
4                    *Message* that starts a search) by a delay specified by the  
5                    SEARCH\_OFFSET field, the base station shall set this field to  
6                    '1'; otherwise, the base station shall set this field to '0'.

7                    SEARCH\_OFFSET    -    Search offset.

8                    If the ALIGN\_TIMING field is set to '0', the base station shall  
9                    omit this field; otherwise, the base station shall include this  
10                    field and set it to

11                    
$$\min ( 63, \lceil search\_offset\_time / 0.00125 \rceil )$$

12                    where *search\_offset\_time* is the time offset, in seconds, of the  
13                    start of the first search from the action time of this message  
14                    (or of a subsequent *Candidate Frequency Search Control*  
15                    *Message* that starts a search).

16

1 3.7.3.3.2.28 Candidate Frequency Search Control Message

2 MSG\_TAG: CFSCNM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	6
CFSCM_SEQ	2
SEARCH_TYPE	2
ALIGN_TIMING	1

4

5 USE\_TIME - Use action time indicator.

6 This field indicates whether an explicit action time is  
7 specified in this message.

8 If an explicit action time is specified in this message, the base  
9 station shall set this field to '1'; otherwise, the base station  
10 shall set this field to '0'.

11 If the base station requests the mobile station to perform an  
12 aligned search (see 2.6.6.2.8.3), the base station shall specify  
13 an explicit action time for the message.

14 ACTION\_TIME - Action time.

15 If the USE\_TIME field is set to '1', the base station shall set  
16 this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$   
17 ms, in units of 80 ms (modulo 64), at which the message is to  
18 take effect. If the USE\_TIME field is set to '0', the base station  
19 shall set this field to '000000'.

20 CFSCM\_SEQ - *Candidate Frequency Search Control Message* sequence  
21 number.

22 The base station shall set this field to the *Candidate*  
23 *Frequency Search Control Message* sequence number, as  
24 specified in 3.6.6.2.2.5.

25 SEARCH\_TYPE - Search command.

26 The base station shall set this field to the appropriate  
27 SEARCH\_TYPE code from Table 3.7.3.3.2.27-1 to indicate the  
28 purpose of the message.

29 ALIGN\_TIMING - Align timing indicator.

1  
2  
3  
4  
5  
6  
7

If the base station requests that the mobile station offset the start of the first search from the action time of this message by a delay specified by the SEARCH\_OFFSET field of the last *Candidate Frequency Search Request Message* sent to the mobile station, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

### 3.7.3.3.2.29 Power Up Function Message

MSG\_TAG: PUFM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	6
ACTION_TIME_FRAME	2
PUF_SETUP_SIZE	6
PUF_PULSE_SIZE	7
PUF_INTERVAL	10
PUF_INIT_PWR	6
PUF_PWR_STEP	5
TOTAL_PUF_PROBES	4
MAX_PWR_PUF	4
PUF_FREQ_INCL	1
PUF_BAND_CLASS	0 or 5
PUF_CDMA_FREQ	0 or 11

4

5           USE\_TIME    -   Use action time indicator.

6                            The base station shall set this field to '1'.

7           ACTION\_TIME   -   Action time.

8                            The base station shall set this field to the System Time minus  
9                            FRAME\_OFFSET<sub>S</sub> × 1.25 ms, in units of 80 ms (modulo 64),  
10                           used in calculating the start of the first PUF probe.

11   ACTION\_TIME\_FRAME   -   Action time frame.

12                            The base station shall set this field to the number of frames  
13                            after ACTION\_TIME that the mobile station is to begin the  
14                            first PUF probe.

15           PUF\_SETUP\_SIZE   -   Number of PUF setup power control groups.

16                            The base station shall set this field to one less than the  
17                            number of power control groups that the mobile station is to  
18                            transmit at nominal power prior to transmitting a PUF pulse.  
19                            The base station shall set the values of PUF\_SETUP\_SIZE and  
20                            PUF\_PULSE\_SIZE so that  $[PUF\_SETUP\_SIZE + 1 +$   
21                             $PUF\_PULSE\_SIZE + 1] \bmod 16$  is not equal to 0.

22           PUF\_PULSE\_SIZE   -   Number of PUF pulse power control groups.

1		The base station shall set this field to one less than the
2		number of power control groups that the mobile station is to
3		transmit at elevated power level during the PUF pulse. The
4		base station shall set the values of PUF_SETUP_SIZE and
5		PUF_PULSE_SIZE so that $[PUF\_SETUP\_SIZE + 1 +$
6		$PUF\_PULSE\_SIZE + 1] \bmod 16$ is not equal to 0.
7	PUF_INTERVAL	- PUF interval.
8		The base station shall set this field to the number of frames
9		between the start of each PUF probe.
10	PUF_INIT_PWR	- Power increase of initial PUF pulse.
11		The base station shall set this field to the amount (in dB) that
12		the mobile station is to increase its mean output power for
13		the first PUF pulse.
14	PUF_PWR_STEP	- PUF power step.
15		The base station shall set this field to the value (in dB) by
16		which the mobile station is to increment the power of a PUF
17		pulse above nominal power from one PUF pulse to the next.
18	TOTAL_PUF_PROBES	- Total number of PUF probes.
19		The base station shall set this field to one less than the
20		maximum number of PUF probes the mobile station is to
21		transmit in a PUF attempt.
22	MAX_PWR_PUF	- Maximum number of PUF probes transmitted at full power.
23		The base station shall set this field to one less than the
24		number of PUF pulses that the mobile station is to transmit
25		at maximum power level.
26	PUF_FREQ_INCL	- Frequency included indicator.
27		If the mobile station is to change PUF_BAND_CLASS or
28		PUF_CDMA_FREQ, the base station shall set this field to '1';
29		otherwise, the base station shall set this field to '0'.
30	PUF_BAND_CLASS	- Band class.
31		If PUF_FREQ_INCL is set to '1', the base station shall include
32		this field and set it to the CDMA band class corresponding to
33		the CDMA frequency assignment for the CDMA Channel as
34		specified in [30]; otherwise, the base station shall omit this
35		field.
36	PUF_CDMA_FREQ	- Frequency assignment.
37		If PUF_FREQ_INCL is set to '1', the base station shall include
38		this field and set it to the CDMA Channel number, in the
39		specified CDMA band class, corresponding to the CDMA
40		frequency for the CDMA Channel as specified in [2];
41		otherwise, the base station shall omit this field.
42		

1 3.7.3.3.2.30 Power Up Function Completion Message

2 MSG\_TAG: PUFCM

3

Field	Length (bits)
RESERVED	6
LOC_IND	1
RESERVED_1	0 or 3
MS_LAT	0 or 22
MS_LONG	0 or 23
MS_LOC_TSTAMP	0 or 24

4

5 RESERVED - Reserved bits.

6 The base station shall set these bits to '000000'.

7 LOC\_IND - Location indicator

8 If the base station is to include MS\_LAT, MS\_LONG, and  
9 MS\_LOC\_TSTAMP in this message, the base station shall set  
10 this field to '1'; otherwise, the base station shall set this field  
11 to '0'.

12 RESERVED\_1 - Reserved bits.

13 If LOC\_IND is equal to '1', the base station shall set these bits  
14 to '000'; otherwise, the base station shall not include this  
15 field.

16 MS\_LAT - Mobile station latitude.

17 If LOC\_IND is equal to '1', the base station shall set this field  
18 to the mobile station's latitude in units of 0.25 second,  
19 expressed as a two's complement signed number with  
20 positive numbers signifying North latitudes. The base station  
21 shall set this field to a value in the range -1296000 to  
22 1296000 inclusive (corresponding to a range of -90° to +90°).

23 Otherwise, the base station shall not include this field.

24 MS\_LONG - Mobile station longitude.

25 If LOC\_IND is equal to '1', the base station shall set this field  
26 to the mobile station's longitude in units of 0.25 second,  
27 expressed as a two's complement signed number with  
28 positive numbers signifying East longitude. The base station  
29 shall set this field to a value in the range -2592000 to  
30 2592000 inclusive (corresponding to a range of -180° to  
31 +180°).

32 Otherwise, the base station shall not include this field.

33 MS\_LOC\_TSTAMP - Time stamp.

1 If LOC\_IND is equal to '1', the base station shall set this field  
2 to the time at which the mobile station's location parameters  
3 were received; otherwise, the base station shall not include  
4 this field.

5 This field is formatted as shown below.  
6

Field	Length (bits)
HOURS	8
MINUTES	8
SECONDS	8
Note: All subfields contain two 4-bit BCD numbers giving the decimal value of the subfield. For example, if the minute is 53, the MINUTES subfield contains '01010011'.	

- 7
- 8           HOURS    -   Current hour (UTC).  
9                    The base station shall set this field to the current hour (UTC),  
10                   in the range 0-23.
- 11           MINUTES -   Current minutes (UTC).  
12                   The base station shall set this field to the current minutes  
13                   (UTC), in the range 0-59.
- 14           SECONDS -   Current seconds (UTC).  
15                   The base station shall set this field to the current seconds  
16                   (UTC), in the range 0-59.  
17



1 3.7.3.3.2.31 General Handoff Direction Message

2 MSG\_TAG: GHDM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
HDM_SEQ	2
SEARCH_INCLUDED	1
SRCH_WIN_A	0 or 4
SRCH_WIN_N	0 or 4
SRCH_WIN_R	0 or 4
T_ADD	0 or 6
T_DROP	0 or 6
T_COMP	0 or 4
T_TDROP	0 or 4
SOFT_SLOPE	0 or 6
ADD_INTERCEPT	0 or 6
DROP_INTERCEPT	0 or 6
EXTRA_PARMS	1
P_REV	0 or 8
PACKET_ZONE_ID	0 or 8
FRAME_OFFSET	0 or 4
PRIVATE_LCM	0 or 1
RESET_L2	0 or 1
RESET_FPC	0 or 1
SERV_NEG_TYPE	0 or 1

4

(continues on next page)

5

1

<b>Field</b>	<b>Length (bits)</b>
ENCRYPT_MODE	0 or 2
NOM_PWR_EXT	0 or 1
NOM_PWR	0 or 4
NUM_PREAMBLE	0 or 3
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11
RETURN_IF_HANDOFF_FAIL	0 or 1
COMPLETE_SEARCH	0 or 1
PERIODIC_SEARCH	0 or 1
SCR_INCLUDED	0 or 1
SERV_CON_SEQ	0 or 3
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$
SUP_CHAN_PARMS_INCLUDED	1
FOR_INCLUDED	0 or 1
FOR_SUP_CONFIG	0 or 2
NUM_FOR_SUP	0 or 3
USE_FOR_DURATION	0 or 1
FOR_DURATION	0 or 8
REV_INCLUDED	0 or 1
REV_DTX_DURATION	0 or 4
CLEAR_RETRY_DELAY	0 or 1
USE_REV_DURATION	0 or 1
REV_DURATION	0 or 8
NUM_REV_CODES	0 or 3
USE_T_ADD_ABORT	0 or 1
REV_PARMS_INCLUDED	0 or 1
T_MULCHAN	0 or 3
BEGIN_PREAMBLE	0 or 3
RESUME_PREAMBLE	0 or 3

(continues on next page)

2

3

1

Field	Length (bits)
USE_PWR_CNTL_STEP	1
PWR_CNTL_STEP	0 or 3
NUM_PILOTS	3

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

PILOT_PN	9
PWR_COMB_IND	1
FOR_FUND_CODE_CHAN	8
FOR_SUP_INCLUDED	0 or 1
FOR_SUP_CHAN_REC Record	0 or 9 or (1 + 8 × NUM_FOR_SUP)

} (NUM\_PILOTS)

FPC_SUBCHAN_GAIN	5
USE_PC_TIME	1
PC_ACTION_TIME	0 or 6
RLGAIN_TRAFFIC_PILOT	0 or 6
DEFAULT_RLAG	0 or 1
NNSCR_INCLUDED	0 or 1
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN
REV_FCH_GATING_MODE	1
REV_PWR_CNTL_DELAY_INCL	0 or 1
REV_PWR_CNTL_DELAY	0 or 2

(continues on next page)

2

3

1

Field	Length (bits)
D_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3
SYNC_ID_INCL	0 or 1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
CS_SUPPORTED	1

2

3

USE\_TIME - Use action time indicator.

4

This field indicates whether an explicit action time is specified in this message.

5

6

If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

7

8

9

ACTION\_TIME - Action time.

10

If the USE\_TIME field is set to '1', the base station shall set this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$  ms, in units of 80 ms (modulo 64), at which the handoff is to take effect. If the USE\_TIME field is set to '0', the base station shall omit this field.

11

12

13

14

15

HDM\_SEQ - *General Handoff Direction Message* sequence number.

16

This field is used by the mobile station in the *Power Measurement Report Message* to identify the order in which the reported pilot strengths are sent.

17

18

19

The base station shall set this field to the handoff message sequence number, as specified in 3.6.6.2.2.10.

20

21

SEARCH\_INCLUDED - Pilot search parameters included.

22

If the mobile station is to change its pilot search parameters, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

23

24

25

SRCH\_WIN\_A - Search window size for the Active Set and Candidate Set.

26

If SEARCH\_INCLUDED is set to '1', the base station shall include the field SRCH\_WIN\_A and set this field to the window size parameter shown in Table 2.6.6.2.1-1 corresponding to the number of PN chips that the mobile station is to search for pilots in the Active Set and the Candidate Set; otherwise, the base station shall omit this field.

27

28

29

30

31

32

33

SRCH\_WIN\_N - Search window size for the Neighbor Set.

1			If SEARCH_INCLUDED is set to '1', the base station shall
2			include the field SRCH_WIN_N and set this field to the
3			window size parameter shown in Table 2.6.6.2.1-1
4			corresponding to the search window size to be used by mobile
5			stations for the Neighbor Set after completion of the handoff;
6			otherwise, the base station shall omit this field.
7	SRCH_WIN_R	-	Search window size for the Remaining Set.
8			If SEARCH_INCLUDED is set to '1', the base station shall
9			include the field SRCH_WIN_R and set this field to the
10			window size parameter shown in Table 2.6.6.2.1-1
11			corresponding to the search window size to be used by mobile
12			stations for the Remaining Set after completion of the
13			handoff; otherwise, the base station shall omit this field.
14	T_ADD	-	Pilot detection threshold.
15			This value is used by the mobile station to trigger the transfer
16			of a pilot from the Neighbor Set or Remaining Set to the
17			Candidate Set (see 2.6.6.2.6) and to trigger the sending of the
18			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
19			<i>Strength Measurement Message</i> initiating the handoff process
20			(see 2.6.6.2.5.2).
21			If SEARCH_INCLUDED is set to '1', the base station shall
22			include the field T_ADD and set this field to the pilot
23			detection threshold, expressed as an unsigned binary
24			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ ; otherwise, the base
25			station shall omit this field.
26	T_DROP	-	Pilot drop threshold.
27			This value is used by mobile stations to start a handoff drop
28			timer for pilots in the Active Set and the Candidate Set (see
29			2.6.6.2.3).
30			If SEARCH_INCLUDED is set to '1', the base station shall
31			include the field T_DROP and set this field to the pilot drop
32			threshold, expressed as an unsigned binary number equal to
33			$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ ; otherwise, the base station shall omit
34			this field.
35	T_COMP	-	Active Set versus Candidate Set comparison threshold.
36			The mobile station transmits a <i>Pilot Strength Measurement</i>
37			<i>Message</i> or <i>Extended Pilot Strength Measurement Message</i>
38			when the strength of a pilot in the Candidate Set exceeds that
39			of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
40			If SEARCH_INCLUDED is set to '1', the base station shall
41			include the field T_COMP and set this field to the threshold
42			Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB;
43			otherwise, the base station shall omit this field.

1	T_TDROP	-	Drop timer value.
2			Timer value after which an action is taken by the mobile
3			station for a pilot that is a member of the Active Set or
4			Candidate Set, and whose strength has not become greater
5			than T_DROP. If the pilot is a member of the Active Set, a
6			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
7			<i>Strength Measurement Message</i> is issued. If the pilot is a
8			member of the Candidate Set, it will be moved to the Neighbor
9			Set.
10			If SEARCH_INCLUDED is set to '1', the base station shall
11			include the field T_TDROP and set this field to the T_TDROP
12			value shown in Table 2.6.6.2.3-1 corresponding to the drop
13			timer value to be used by the mobile station; otherwise, the
14			base station shall omit this field.
15	SOFT_SLOPE	-	The slope in the inequality criterion for adding a pilot to the
16			active set, or dropping a pilot from the active set (see
17			2.6.6.2.3 and 2.6.6.2.5.2).
18			If SEARCH_INCLUDED is set to '1', the base station shall
19			include the field SOFT_SLOPE in the additional fields and set
20			this field as an unsigned binary number; otherwise, the base
21			station shall omit this field.
22	ADD_INTERCEPT	-	The intercept in the inequality criterion for adding a pilot to
23			the active set (see 2.6.6.2.5.2).
24			If SEARCH_INCLUDED is set to '1', the base station shall
25			include the field ADD_INTERCEPT in the additional fields and
26			set this field as a two's complement signed binary number in
27			units of 0.5 dB; otherwise, the base station shall omit this
28			field.
29	DROP_INTERCEPT	-	The intercept in the inequality criterion for dropping a pilot
30			from the active set (see 2.6.6.2.3).
31			If SEARCH_INCLUDED is set to '1', the base station shall
32			include the field DROP_INTERCEPT in the additional fields
33			and set this field as a two's complement signed binary number
34			in units of 0.5 dB; otherwise, the base station shall omit this
35			field.
36	EXTRA_PARMS	-	Extra parameters included.
37			If the mobile station is to change FRAME_OFFSET,
38			PRIVATE_LCM, ENCRYPT_MODE, NOM_PWR, BAND_CLASS,
39			or CDMA_FREQ, or the mobile station is to perform a reset of
40			the acknowledgment procedures, or the mobile station is to
41			reset Forward Traffic Channel power control counters, the
42			base station shall set this field to '1'; otherwise, the base
43			station shall set this field to '0'.
44	P_REV	-	Protocol revision level.
45			If EXTRA_PARMS is set to '1', the base station shall set this
46			field to the base station protocol revision level that the mobile
47			station is to use after completion of the handoff; otherwise,
48			the base station shall omit this field.

1	PACKET_ZONE_ID	-	Packet data services zone identifier.
2			If EXTRA_PARMS is set to '1', the base station shall include
3			the field PACKET_ZONE_ID and set this field as described
4			below; otherwise, the base station shall omit this field.
5			If the base station supports a packet data service zone, the
6			base station shall set this field to the non-zero packet data
7			services zone identifier that the mobile station is to use after
8			completion of the handoff.
9			If the base station does not support a packet data service
10			zone, the base station shall set this field to '00000000'.
11	FRAME_OFFSET	-	Frame offset.
12			The Forward and Reverse Traffic Channel frames are delayed
13			FRAME_OFFSET $\times$ 1.25 ms relative to system timing (see [2]).
14			If EXTRA_PARMS is set to '1', the base station shall include
15			the field FRAME_OFFSET and set this field to the Forward
16			and Reverse Traffic Channel frame offset; otherwise, the base
17			station shall omit this field.
18	PRIVATE_LCM	-	Private long code mask indicator.
19			This field is used to change the long code mask after a hard
20			handoff.
21			If EXTRA_PARMS is set to '1', the base station shall include
22			the field PRIVATE_LCM and set this field as described below;
23			otherwise, the base station shall omit this field.
24			If the private long code mask is to be used after the handoff,
25			the base station shall set this field to '1'; otherwise, the base
26			station shall set this field to '0'.
27	RESET_L2	-	Reset acknowledgment procedures command.
28			This field is used to reset acknowledgment processing in the
29			mobile station.
30			If EXTRA_PARMS is set to '1', the base station shall include
31			the field RESET_L2 and set this field as described below;
32			otherwise, the base station shall omit this field.
33			If the field is included and the mobile station is to reset its
34			acknowledgment procedures, the base station shall set this
35			field to '1'; otherwise, the base station shall set this field to
36			'0'.
37	RESET_FPC	-	Reset Forward Traffic Channel power control.
38			This field is used to reset the Forward Traffic Channel power
39			control counters.
40			If EXTRA_PARMS is set to '1', the base station shall include
41			the field RESET_FPC and set this field as described below;
42			otherwise, the base station shall omit this field.

1			The base station shall set this field to '0' if the Forward Traffic
2			Channel power control counters are to be maintained after
3			completion of the handoff. If the counters are to be initialized
4			as specified in 2.6.4.1.1.1, then the base station shall set this
5			field to '1'.
6	SERV_NEG_TYPE	-	Service negotiation type.
7			If EXTRA_PARMS is set to '1', the base station shall include
8			the field SERV_NEG_TYPE and set this field as described
9			below; otherwise, the base station shall omit this field.
10			If the mobile station is to use service negotiation, the base
11			station shall set this field to '1'. If the mobile station is to use
12			service option negotiation, the base station shall set this field
13			to '0'.
14	ENCRYPT_MODE	-	Message encryption mode.
15			If EXTRA_PARMS is set to '1', the base station shall include
16			the field ENCRYPT_MODE and set this field to the
17			ENCRYPT_MODE value shown in Table 3.7.2.3.2.8-2
18			corresponding to the encryption mode that is to be used for
19			messages sent on the Forward and Reverse Traffic Channels,
20			as specified in 2.3.12.2; otherwise, the base station shall omit
21			this field.
22	NOM_PWR_EXT	-	Extended nominal transmit power.
23			If EXTRA_PARMS is set to '1', the base station shall include
24			this field and set this field as described below; otherwise, the
25			base station shall omit this field.
26			If the mobile station is being handed off to a base station
27			operating in Band Class 0 or Band Class 3, the base station
28			shall set this field to '0'; otherwise, the base station shall set
29			it as follows:
30			If the correction factor to be used by the mobile station in the
31			open loop power estimate is between -24 dB and -9 dB
32			inclusive, the base station shall set this field to '1'; otherwise
33			(the correction factor is in the range -8 dB to 7 dB inclusive),
34			the base station shall set this field to '0'.
35	NOM_PWR	-	Nominal transmit power offset.
36			If EXTRA_PARMS is set to '1', the base station shall include
37			the field NOM_PWR and set this field to the correction factor
38			to be used by the mobile station in the open loop power
39			estimate, expressed as a two's complement value in units of 1
40			dB (see [2]); otherwise, the base station shall omit this field.
41	NUM_PREAMBLE	-	Traffic Channel preamble length.
42			If EXTRA_PARMS is set to '0', the base station shall omit the
43			NUM_PREAMBLE field; otherwise, the base station shall
44			include this field and set it to the length of Traffic Channel
45			preamble that the mobile station is to send when performing
46			a handoff; as follows:



1		If, after the handoff, radio configuration 1 or radio
2		configuration 2 is to be used, the base station shall set
3		NUM_PREAMBLE to the Traffic Channel preamble length in
4		20 ms units; otherwise, the base station shall set
5		NUM_PREAMBLE to the value shown in Table 3.7.3.3.2.17-1
6		corresponding to the Traffic Channel preamble length in 1.25
7		ms units.
8	BAND_CLASS	- Band class.
9		If EXTRA_PARMS is set to '1', the base station shall include
10		the field BAND_CLASS and set this field to the CDMA band
11		class corresponding to the CDMA frequency assignment for
12		the CDMA Channel as specified in [30]; otherwise, the base
13		station shall omit this field.
14	CDMA_FREQ	- Frequency assignment.
15		If EXTRA_PARMS is set to '1', the base station shall include
16		the field CDMA_FREQ and set this field to the CDMA Channel
17		number, in the specified CDMA band class, corresponding to
18		the CDMA frequency assignment for the CDMA Channel as
19		specified in [2]; otherwise, the base station shall omit this
20		field.
21	RETURN_IF_HANDOFF_FAIL	- Return on failure flag.
22		If EXTRA_PARMS is set to '1', the base station shall include
23		the field RETURN_IF_HANDOFF_FAIL and set this field as
24		described below; otherwise, the base station shall omit this
25		field.
26		If the base station includes this field, it shall set this field to
27		'1' if the mobile station is to resume the use of the Active Set
28		on the Serving Frequency following an unsuccessful hard
29		handoff attempt, as specified in 2.6.6.2.8.2; otherwise, the
30		base station shall set this field to '0'.
31	COMPLETE_SEARCH	- Flag to complete search.
32		If RETURN_IF_HANDOFF_FAIL is included and is set to '1',
33		the base station shall include the field COMPLETE_SEARCH
34		and set this field as described below; otherwise, the base
35		station shall omit this field.
36		If the base station includes this field, it shall set this field to
37		'1' if the mobile station is to complete the search of the
38		Candidate Frequency Search Set before resuming the use of
39		the Active Set on the Serving Frequency when an inter-
40		frequency handoff attempt is unsuccessful, as specified in
41		2.6.6.2.8.2; otherwise, the base station shall set this field to
42		'0'.
43	PERIODIC_SEARCH	- Flag to search the Candidate Frequency periodically.
44		If EXTRA_PARMS is set to '1', the base station shall include
45		the field PERIODIC_SEARCH and set this field as described
46		below; otherwise, the base station shall omit this field.

1			If the base station includes this field, it shall set this field to
2			'1' if the mobile station is to periodically search the Candidate
3			Frequency, as specified in 2.6.6.2.8.3; otherwise, the base
4			station shall set this field to '0'.
5	SCR_INCLUDED	-	Service Configuration Record included indicator.
6			If EXTRA_PARMS is set to '1', the base station shall include
7			the field SCR_INCLUDED and shall set this field as described
8			below; otherwise, the base station shall omit this field.
9			The base station shall set this field to '1' if it includes Service
10			Configuration Record in the message; otherwise, the base
11			station shall set this field to '0'.
12	SERV_CON_SEQ	-	Connect sequence number.
13			If SCR_INCLUDED is included and is set to '1', the base
14			station shall include the field SERV_CON_SEQ and shall set
15			this field to the connect sequence number pertaining to this
16			service configuration as specified in 3.6.4.1.2.1.2.
17	If SCR_INCLUDED is included and is set to '1', the base station shall include one		
18	occurrence of the following three-field record to specify the service configuration.		
19	RECORD_TYPE	-	Information record type.
20			If SCR_INCLUDED is included and is set to '1', the base
21			station shall include the field RECORD_TYPE and shall set
22			this field to the record type value shown in Table 3.7.5-1
23			corresponding to the Service Configuration information
24			record.
25	RECORD_LEN	-	Information record length.
26			If SCR_INCLUDED is included and is set to '1', the base
27			station shall include the field RECORD_LEN and shall set
28			this field to the number of octets included in the type-specific
29			fields of the Service Configuration information record.
30	Type-specific fields	-	Type-specific fields.
31			If SCR_INCLUDED is included and is set to '1', the base
32			station shall include the type specific fields and shall set
33			these fields as specified in 3.7.5.7 for the Service
34			Configuration information record.
35	SUP_CHAN_PARMS_INCLUDED	-	Supplemental code channel parameters included
36			indicator.
37			The base station shall set this field to '1' if the base station
38			includes the FOR_INCLUDED, REV_INCLUDED, and
39			REV_PARMS_INCLUDED fields in the message; otherwise, the
40			base station shall set this field to '0'.
41	FOR_INCLUDED	-	Forward assignment information included indicator.
42			If SUP_CHAN_PARMS_INCLUDED is set to '1', the base
43			station shall include the field FOR_INCLUDED and set this
44			field as described below; otherwise, the base station shall
45			omit this field.

1			If the base station includes this field, it shall set this field to
2			'1' if Forward Supplemental Code Channel assignment
3			information is included in the message; otherwise, the base
4			station shall set this field to '0'.
5	FOR_SUP_CONFIG	-	Forward Supplemental Code Channel configuration indicator.
6			If FOR_INCLUDED is included and is set to '1', the base
7			station shall include the field FOR_SUP_CONFIG and set this
8			field according to the following rules:
9			The base station shall set this field to '00' if Forward
10			Supplemental Code Channels are not specified in the
11			message, and the mobile station is to stop processing all
12			Forward Supplemental Code Channels.
13			The base station shall set this field to '01' if Forward
14			Supplemental Code Channels are not specified in the
15			message, and the mobile station is to start processing the
16			Forward Supplemental Code Channels previously stored in
17			its Code Channel List, CODE_CHAN_LIST <sub>S</sub> .
18			The base station shall set this field to '10' if the Forward
19			Supplemental Code Channels are specified in the message,
20			and the mobile station is to stop processing all Forward
21			Supplemental Code Channels in CODE_CHAN_LIST <sub>S</sub> , and to
22			update the CODE_CHAN_LIST <sub>S</sub> , according to the information
23			contained in the message.
24			The base station shall set this field to '11' if the Forward
25			Supplemental Code Channels are specified in the message,
26			and the mobile station is to update its Code Channel List,
27			CODE_CHAN_LIST <sub>S</sub> , according to the information contained
28			in the message and to start processing the Forward
29			Supplemental Code Channels.
30	NUM_FOR_SUP	-	Number of Forward Supplemental Code Channels.
31			If FOR_SUP_CONFIG is included and is set to '10' or '11', the
32			base station shall include the field NUM_FOR_SUP and set it
33			to the number of Forward Supplemental Code Channels
34			assigned to the mobile station; otherwise, the base station
35			shall omit this field. NUM_FOR_SUP shall not exceed the
36			maximum number of Forward Supplemental Code Channels
37			for the negotiated multiplex option.
38	USE_FOR_DURATION	-	Use forward duration indicator.
39			If FOR_SUP_CONFIG is included and is set to '01' or '11', the
40			base station shall include the field USE_FOR_DURATION and
41			set this field as described below; otherwise the base station
42			shall omit this field.
43			The base station shall set this field to '1' if the
44			FOR_DURATION field is included in the message and the
45			mobile station is to process the Forward Supplemental Code
46			Channels for a time duration indicated by FOR_DURATION.

1			The base station shall set this field to '0' if the mobile station
2			is to process the Forward Supplemental Code Channels for
3			an indefinite duration (i.e., the mobile station is to continue
4			processing Forward Supplemental Code Channels until it
5			receives a subsequent <i>Supplemental Channel Assignment</i>
6			<i>Message</i> or a <i>General Handoff Direction Message</i> that
7			specifies a different Forward Supplemental Code Channel
8			assignment.
9	FOR_DURATION	-	Duration of Forward Supplemental Code Channel
10			assignment.
11			If USE_FOR_DURATION is included and is set to '1', the base
12			station shall include the field FOR_DURATION and set this
13			field to the allocated duration, in units of 80 ms, for which
14			the mobile station is to process the Forward Supplemental
15			Code Channels; otherwise, the base station shall omit this
16			field.
17	REV_INCLUDED	-	Reverse assignment information included indicator.
18			If SUP_CHAN_PARMS_INCLUDED is set to '1', the base
19			station shall include the field REV_INCLUDED and set this
20			field as described below; otherwise, the base station shall
21			omit this field.
22			If the base station includes this field, it shall set this field to
23			'1' if Reverse Supplemental Code Channel assignment
24			information is included in the message; otherwise, the base
25			station shall set this field to '0'.
26	REV_DTX_DURATION	-	Reverse Discontinuous Transmission Duration.
27			If REV_INCLUDED is included and is set to '1', the base
28			station shall include the field REV_DTX_DURATION;
29			otherwise the base station shall omit this field.
30			If the base station includes this field, it shall set this field to
31			the maximum duration of time in units of 20 ms that the
32			mobile station is allowed to stop transmission on a Reverse
33			Supplemental Code Channel within the reverse assignment
34			duration. The base station shall set this field to '0000' if the
35			mobile station is to stop using a Reverse Supplemental Code
36			Channel once it has stopped transmitting on that Reverse
37			Supplemental Code Channel. The base station shall set this
38			field to '1111' if the mobile station is allowed to resume
39			transmission on a Reverse Supplemental Code Channel at
40			any time within the reverse assignment duration.
41	CLEAR_RETRY_DELAY	-	Clear retry delay indicator.
42			If REV_INCLUDED is included and is set to '1', the base
43			station shall include the field CLEAR_RETRY_DELAY and set
44			this field as described below; otherwise the base station shall
45			omit this field.

1			The base station shall set this field to '1' to indicate that the
2			mobile station is to clear any existing retry delay which it has
3			stored (see 2.6.6.2.5.1); otherwise, the base station shall set
4			this field to '0'.
5	USE_REV_DURATION	-	Use reverse duration indicator.
6			If REV_INCLUDED is included and is set to '1', the base
7			station shall include the field USE_REV_DURATION and set
8			this field as described below; otherwise the base station shall
9			omit this field.
10			The base station shall set this field to '1' if the
11			REV_DURATION field is included in the message and the
12			mobile station is allowed to transmit on the Reverse
13			Supplemental Code Channels for a time duration indicated by
14			REV_DURATION.
15			The base station shall set this field to '0' if the mobile station
16			is allowed to transmit on the Reverse Supplemental Code
17			Channels for an indefinite duration (i.e., the mobile station
18			may continue to transmit on the Reverse Supplemental Code
19			Channels until it receives a subsequent <i>Supplemental</i>
20			<i>Channel Assignment Message</i> or a <i>General Handoff Direction</i>
21			<i>Message</i> that specifies a different Reverse Supplemental Code
22			Channel assignment.
23	REV_DURATION	-	Duration of Reverse Supplemental Code Channel
24			Assignment.
25			If USE_REV_DURATION is included and is set to '1', the base
26			station shall include the field REV_DURATION and set this
27			field to the allocated duration, in units of 80 ms, for which
28			the mobile station may transmit on Reverse Supplemental
29			Code Channels; otherwise the base station shall omit this
30			field.
31	NUM_REV_CODES	-	Number of Reverse Supplemental Code Channels.
32			If REV_INCLUDED is included and is set to '1', the base
33			station shall include the field NUM_REV_CODES and set this
34			field to the number of Reverse Supplemental Code Channels
35			which are assigned to the mobile station; otherwise the base
36			station shall omit this field.
37	USE_T_ADD_ABORT	-	Reverse use T_ADD abort indicator.
38			If REV_INCLUDED is included and is set to '1', the base
39			station shall include the field USE_T_ADD_ABORT and set
40			this field as described below; otherwise the base station shall
41			omit this field.
42			The base station shall set this field to '1' to indicate that the
43			mobile station is to use the T_ADD Reverse Supplemental
44			Code Channel abort feature for this reverse assignment;
45			otherwise, the base station shall set this field to '0'.
46	REV_PARMS_INCLUDED	-	Reverse assignment parameters included indicator.

1			If SUP_CHAN_PARMS_INCLUDED is set to '1', the base
2			station shall include the field REV_PARMS_INCLUDED and
3			set this field as described below; otherwise, the base station
4			shall omit this field.
5			If the base station includes this field, it shall set this field to
6			'1' if the following three fields are included in the message;
7			otherwise, the base station shall set this field to '0'.
8	T_MULCHAN	-	<i>Supplemental Channel Request Message</i> pilot strength
9			reporting offset.
10			If REV_PARMS_INCLUDED is included and is set to '1', the
11			base station shall include the field T_MULCHAN and set this
12			field as described below; otherwise the base station shall omit
13			this field.
14			The base station shall set this field to the threshold offset
15			that the mobile station is to use when reporting neighbor
16			pilot strength measurements in a <i>Supplemental Channel</i>
17			<i>Request Message</i> . The mobile station is to interpret this field
18			as an offset to T_ADD ranging from 0.5 dB (corresponding to
19			T_MULCHAN = '000') to 4.0 dB (corresponding to
20			T_MULCHAN = '111'), in 0.5 dB increments.
21	BEGIN_PREAMBLE	-	Number of preamble frames on Reverse Supplemental Code
22			Channels at the beginning of transmission on Reverse
23			Supplemental Code Channel.
24			If REV_PARMS_INCLUDED is included and is set to '1', the
25			base station shall include the field BEGIN_PREAMBLE and
26			set this field to the number of Reverse Supplemental Code
27			Channel preamble frames that the mobile station is to send
28			when beginning transmission on Reverse Supplemental Code
29			Channels; otherwise the base station shall omit this field.
30	RESUME_PREAMBLE	-	Number of preamble frames on Reverse Supplemental Code
31			Channels at the resumption of transmission.
32			If REV_PARMS_INCLUDED is included and is set to '1', the
33			base station shall include the field RESUME_PREAMBLE and
34			set this field to the number of Reverse Supplemental Code
35			Channel preamble frames that the mobile station is to send
36			when resuming transmission on a Reverse Supplemental
37			Code Channel following an autonomous suspension of
38			transmission on an allocated Supplemental Code Channel;
39			otherwise the base station shall omit this field.
40	USE_PWR_CNTL_STEP	-	Power control step size indicator.
41			The base station shall set this field to '1' if the field
42			PWR_CNTL_STEP is included in the message.
43	PWR_CNTL_STEP	-	Power control step size.
44			If USE_PWR_CNTL_STEP is set to '1', then the base station
45			shall include the field PWR_CNTL_STEP and set this field to
46			the step size that the mobile station is to use for closed loop
47			power control, according to Table 3.7.3.3.2.25-1; otherwise,
48			the base station shall omit this field.

1	NUM_PILOTS	-	Number of pilots included in the message.
2			The base station shall set this field to the number of pilots
3			included in the message. The base station shall set this field
4			to an integer that is equal to or greater than 1.
5			
6	The base station shall include one occurrence of the following four-part record for each of		
7	the NUM_PILOTS pilots included in the message:		
8	PILOT_PN	-	Pilot PN sequence offset index.
9			The base station shall set this field to the pilot PN sequence
10			offset for this pilot in units of 64 PN chips.
11	PWR_COMB_IND	-	Power control symbol combining indicator.
12			If the Forward Traffic Channel associated with this pilot will
13			carry the same closed-loop power control subchannel bits as
14			that of the previous pilot in this message, the base station
15			shall set this field to '1'; otherwise, the base station shall set
16			this field to '0'. The base station shall set this field to '0' in
17			the first record in the pilot list.
18	FOR_FUND_CODE_CHAN	-	Forward Fundamental Channel.
19			The base station shall set this field to the code channel index
20			to be used for the Forward Fundamental Channel associated
21			with this pilot.
22	FOR_SUP_INCLUDED	-	Forward Supplemental Code Channel included.
23			The base station shall include this field if FOR_SUP_CONFIG
24			is included and is set to '10' or '11'. If included, the base
25			station shall set this field to '1' if there are Supplemental
26			Code Channels associated with this pilot.
27	FOR_SUP_CHAN_REC	-	Forward Supplemental Code Channel record
28			If FOR_SUP_INCLUDED is set to '1', the base station shall
29			include the record FOR_SUP_CHAN_REC and set its fields as
30			described below; otherwise, the base station shall omit this
31			record.
32			FOR_SUP_CHAN_REC contains information about Forward
33			Supplemental Code Channels associated with this pilot, and
34			consists of the field EXPL_CODE_CHAN, and either the
35			BASE_CODE_CHAN field or NUM_FOR_SUP occurrences of
36			the FOR_SUP_CODE_CHAN field, as shown below.
37			

EXPL_CODE_CHAN	1
BASE_CODE_CHAN	0 or 8

If EXPL\_CODE\_CHAN is equal to '1', NUM\_FOR\_SUP occurrences of the following field:

{ (NUM\_FOR\_SUP)

FOR_SUP_CODE_CHAN	8
-------------------	---

} (NUM\_FOR\_SUP)

1

2 EXPL\_CODE\_CHAN - Explicit code channel indicator.

3 The base station shall set this field to '1' to indicate explicit  
4 assignment of each Forward Supplemental Code Channel by  
5 means of the field FOR\_SUP\_CODE\_CHAN. The base station  
6 shall set this field to '0' if the mobile station is to use  
7 NUM\_FOR\_SUP adjacent code channels beginning with index  
8 BASE\_CODE\_CHAN (i.e., BASE\_CODE\_CHAN through  
9 BASE\_CODE\_CHAN + NUM\_FOR\_SUP - 1).

10 In both cases (i.e., the explicit code channel list format and  
11 range format), the order of the code channel indices is the  
12 same for all pilots specified in this message (i.e., for each  
13 pilot, the  $i^{th}$  entry in the list indicates the code channel index  
14 to be used for the  $i^{th}$  Forward Supplemental Code Channel  
15 associated with that pilot).

16 BASE\_CODE\_CHAN - Base code channel index.

17 If the EXPL\_CODE\_CHAN field is included and is set to '0',  
18 the base station shall include the field BASE\_CODE\_CHAN  
19 and set this field as described below; otherwise the base  
20 station shall omit this field.

21 The base station shall set this field to the base code channel  
22 index (see [2]) in the range of 1 to (63 - NUM\_FOR\_SUP + 1),  
23 inclusive, that the mobile station is to use as the first  
24 Forward Supplemental Code Channel associated with this  
25 pilot. The mobile station is to use code channel index  
26 (BASE\_CODE\_CHAN +  $i$  - 1), where  $i$  ranges from 1 to  
27 NUM\_FOR\_SUP, for the  $i^{th}$  Forward Supplemental Code  
28 Channel associated with this pilot.

29 FOR\_SUP\_CODE\_CHAN - Forward Supplemental Code Channel.

30 If EXPL\_CODE\_CHAN is included and is set to '1', the base  
31 station shall include NUM\_FOR\_SUP occurrences of the field  
32 FOR\_SUP\_CODE\_CHAN and set this field as described below;  
33 otherwise the base station shall omit this field.

34 The base station shall set the  $i^{th}$  occurrence of this field to  
35 the code channel index (see [2]), in the range 1 to 63  
36 inclusive, that the mobile station is to use for the  $i^{th}$  Forward  
37 Code Channel associated with this pilot.



1	FPC_SUBCHAN_GAIN	-	Forward power control subchannel relative gain.
2			The base station shall set FPC_SUBCHAN_GAIN equal to the
3			power level of the forward link power control subchannel
4			relative to that of 20 ms frames at a 9600 bps or 14400 bps
5			rate on the Forward Fundamental Channel or the Forward
6			Dedicated Control Channel indicated by FPC_PRI_CHAN <sub>S</sub> .
7			The base station shall set the value in units of 0.25 dB.
8	USE_PC_TIME	-	Use power control action time indicator.
9			This field indicates whether an explicit time
10			[PC_ACTION_TIME] at which a new value for Power Control
11			Subchannel to traffic ratio (FPC_SUBCHAN_GAIN) takes effect
12			is specified in the message.
13			If an explicit action time is specified in this message, the base
14			station shall set this field to '1'; otherwise, the base station
15			shall set this field to '0'.
16	PC_ACTION_TIME	-	Power Control Subchannel gain action time.
17			If the USE_PC_TIME field is set to '1', the base station shall
18			set this field to the System Time minus FRAME_OFFSET <sub>S</sub> ×
19			1.25 ms, in units of 80 ms (modulo 64), at which
20			FPC_SUBCHAN_GAIN specified in this message is to take
21			effect. If the USE_PC_TIME field is set to '0', the base station
22			shall omit this field.
23	RLGAIN_TRAFFIC_PILOT	-	Gain adjustment of the Reverse Traffic Channel relative to the
24			Reverse Pilot Channel power for Radio Configurations greater
25			than 2.
26			If EXTRA_PARMS is set to '1', the base station shall include
27			this field and set it to the correction factor to be used by
28			mobile stations in setting the power of a code channel,
29			expressed as a two's complement value in units of 0.125 dB
30			(see [2]); otherwise, the base station shall omit this field.
31	DEFAULT_RLAG	-	Default reverse link attribute gain used indicator.
32			If EXTRA_PARMS is set to '0', the base station shall omit this
33			field; otherwise, the base station shall set this field as follows.
34			If the mobile station is to use the default values for the
35			reverse link attribute gain, as specified in [2] after completion
36			of handoff, the base station shall set this field to '1';
37			otherwise, the base station shall set this field to '0'.
38	NNSCR_INCLUDED	-	Non-negotiable Service Configuration Record included
39			indicator.
40			The base station shall omit this field, if EXTRA_PARMS is set
41			to '0'; otherwise, the base station shall include this field and
42			set this field as described below:
43			The base station shall set this field to '1', if the Non-
44			negotiable Service Configuration record is included in this
45			message; otherwise, the base station shall set this field to '0'.

- 1 If NNSCR\_INCLUDED is included and is set to '1', the base station shall include one  
 2 occurrence of the following three-field record to specify the non-negotiable service  
 3 configuration parameters.
- 4       RECORD\_TYPE    -   Information record type.
- 5                        If NNSCR\_INCLUDED is included and is set to '1', the base  
 6 station shall include the field RECORD\_TYPE and shall set  
 7 this field to the record type value shown in Table 3.7.5-1  
 8 corresponding to the Non-Negotiable Service Configuration  
 9 information record.
- 10       RECORD\_LEN     -   Information record length.
- 11                        If NNSCR\_INCLUDED is included and is set to '1', the base  
 12 station shall include the field RECORD\_LEN and shall set  
 13 this field to the number of octets included in the type-specific  
 14 fields of the Non-Negotiable Service Configuration information  
 15 record.
- 16       Type-specific fields   -   Type-specific fields.
- 17                        If NNSCR\_INCLUDED is included and is set to '1', the base  
 18 station shall include the type specific fields and shall set  
 19 these fields as specified in 3.7.5.20 for the Non-Negotiable  
 20 Service Configuration information record.
- 21       REV\_FCH\_GATING\_MODE   -   Reverse eighth gating mode indicator.
- 22                        The base station shall set this field to '1' if the mobile station  
 23 is allowed to perform the reverse eighth gating mode after  
 24 handoff; otherwise, the base station shall set this field to '0'.
- 25       REV\_PWR\_CNTL\_DELAY\_INCL   -   Reverse power control delay included indicator.
- 26                        If REV\_FCH\_GATING\_MODE is set to '0', the base station  
 27 shall omit this field; otherwise, the base station shall include  
 28 this field and set it as follows:
- 29                        The base station shall set this field to '1' if  
 30 REV\_PWR\_CNTL\_DELAY is included in this message;  
 31 otherwise, the base station shall set this field to '0'.
- 32       REV\_PWR\_CNTL\_DELAY   -   The reverse power control delay.
- 33                        If REV\_PWR\_CNTL\_DELAY\_INCL is set to '0', the base station  
 34 shall omit this field; otherwise, the base station shall include  
 35 this field and set it as follows:
- 36                        The base station shall set this field to the closed-loop reverse  
 37 power control delay minus one (the closed-loop reverse power  
 38 control delay is the time between the end of a gated-on  
 39 reverse PCG and the beginning of the reverse PCG where the  
 40 corresponding feedback is sent on the Forward Power Control  
 41 Subchannel, (see [2]), in units of 1.25 ms.
- 42       D\_SIG\_ENCRYPT\_MODE   -   Dedicated channel encryption mode indicator.

1			If ENCRYPT_MODE is included and is set to '11', the base station
2			shall include this field and shall set it to the dedicated channel
3			signaling encryption mode, as shown in Table 3.7.4.5-1;
4			otherwise the base station shall omit this field.
5	ENC_KEY_SIZE	-	Encryption key size indication.
6			If ENCRYPT_MODE is included and is set to '10' or '11', the
7			base station shall include this field and set it to the
8			encryption key size, as shown in Table 3.7.4.5-2; otherwise,
9			the base station shall omit this field.
10	SYNC_ID_INCL	-	Service Configuration synchronization identifier included
11			indicator.
12			If either the SCR_INCLUDED field is included and is set to '1'
13			or the NNSCR_INCLUDED field is included and is set to '1',
14			the base station shall include this field; otherwise, the base
15			station shall omit this field. If included, the base station shall
16			set this field as follows:
17			The base station shall set this field to '1' if the SYNC_ID field
18			is included in this message; otherwise, the base station shall
19			set this field to '0'.
20	SYNC_ID_LEN	-	Service Configuration synchronization identifier length.
21			If the SYNC_ID_INCL field is not included or is included and
22			is set to '0', the base station shall omit this field; otherwise,
23			the base station shall include this field and set it as follows:
24			The base station shall set this field to the length (in octets) of
25			the SYNC_ID field included in this message. The base station
26			shall set this field to a value larger than zero.
27	SYNC_ID	-	Service Configuration synchronization identifier.
28			If the SYNC_ID_INCL field is not included or is included and
29			is set to '0', the base station shall omit this field; otherwise,
30			the base station shall include this field and set it as follows:
31			The base station shall set this field to the synchronization
32			identifier corresponding to the service configuration conveyed
33			by this message.
34	CS_SUPPORTED	-	Concurrent Services supported indicator.
35			If the base station supports concurrent services, the base
36			station shall set this field to '1'; otherwise, the base station
37			shall set this field to '0'.
38			

## 3.7.3.3.2.32 Resource Allocation Message

MSG\_TAG: RAM

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
FPC_PRI_CHAN	1

USE\_TIME - Use action time indicator.

This field indicates whether an explicit action time is specified in this message.

If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

ACTION\_TIME - Action time.

If the USE\_TIME field is set to '1', the base station shall set this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$  ms, in units of 80 ms (modulo 64), at which this message is to take effect. If the USE\_TIME field is set to '0', the base station shall omit this field.

FPC\_PRI\_CHAN - Power Control Subchannel indicator.

The base station shall set this field to '0' if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to '1' if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.

If the F-CPCCH is assigned, the base station will multiplex the Power Control Subchannel on the F-CPCCH; otherwise:

If this field is set to '0', the base station will multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station will multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

## 3.7.3.3.2.33 Resource Allocation Mini Message

MSG\_TAG: RAMM

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
FPC_PRI_CHAN	1

USE\_TIME - Use action time indicator.

This field indicates whether an ACTION\_TIME is specified in this message.

If an ACTION\_TIME is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

ACTION\_TIME - Action time.

If the USE\_TIME field is set to '1', the base station shall set this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$  ms, in units of 80 ms (modulo 64), at which the message is to take effect. If the USE\_TIME field is set to '0', the base station shall omit this field.

FPC\_PRI\_CHAN - Power Control Subchannel indicator.

The base station shall set this field to '0' if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to '1' if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.

If the F-CPCCH is assigned, the base station will multiplex the Power Control Subchannel on the F-CPCCH; otherwise:

If this field is set to '0', the base station will multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station will multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

- 1 3.7.3.3.2.34 Extended Release Message
- 2 MSG\_TAG: ERM
- 3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
CH_IND	3
GATING_RATE_INCL	1
PILOT_GATING_RATE	0 or 2
USE_EXT_CH_IND	1
EXT_CH_IND	0 or 5
PDCH_CONTROL_HOLD	0 or 1
SWITCHING_PARMS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFTER_SWITCHING_FRAMES_CHM	0 or 4
DIRECT_TO_IDLE_INFO_INCL	1

If DIRECT\_TO\_IDLE\_INFO\_INCL is set to '1', the following DIRECT TO IDLE record shall be included:

{ (DIRECT TO IDLE Record)

RELEASE_TYPE	3
SID	0 or 15
NID	0 or 16
FREQ_INCL	0 or 1
CDMA_FREQ	0 or 11
BAND_CLASS	0 or 5
PAGE_CH	0 or 3
PRAT	0 or 2
SR1_BCCH_CODE_CHAN_NON_TD	0 or 6
SR1_CRAT_NON_TD	0 or 1
SR1_BRAT_NON-TD	0 or 2
SR1_TD_MODE	0 or 2
SR1_BCCH_CODE_CHAN_TD	0 or 6
SR1_CRAT_TD	0 or 1
SR1_BRAT_TD	0 or 2
SR1_TD_POWER_LEVEL	0 or 2
NUM_PILOTS_D2I_INCL	0 or 1

Field	Length (bits)
NUM_PILOTS_D2I	0 or 3

NUM\_PILOTS\_D2I occurrence of the following record:

{ (NUM\_PILOTS\_D2I)

PILOT_PN	9
----------	---

} (NUM\_PILOTS\_D2I)

}(DIRECT TO IDLE Record)

RER_MODE_ENABLED	1
RER_MAX_NUM_MSG_IDX	0 or 3
RER_TIME	0 or 3
RER_TIME_UNIT	0 or 2
MAX_RER_PILOT_LIST_SIZE	0 or 3
RSC_MODE_SUPPORTED	1
MAX_RSC_END_TIME_UNIT	0 or 2
MAX_RSC_END_TIME_VALUE	0 or 4
REQ_RSCI_INCL	0 or 1
REQ_RSCI	0 or 4
IGNORE_QPCH	0 or 1
TKZ_MODE_ENABLED	1
TKZ_ID	0 or 8
TKZ_MAX_NUM_MSG_IDX	0 or 3
TKZ_UPDATE_PRD	0 or 4
TKZ_LIST_LEN	0 or 4
TKZ_TIMER	0 or 8
TBR_RAND_SUPPR_ENABLE	1
TBR_RAND_WINDOW	2
BCMC_INFO_INCL	0 or 1
NUM_FSCH	0 or 3
NUM_BCMC_PROGRAMS	0 or 6

If NUM\_FSCH field is included, then NUM\_FSCH plus one occurrences of the following variable length record:

{ (NUM\_FSCH + 1)

FSCH_RECORD_LEN	8
-----------------	---



Field	Length (bits)
FSCH_CODE_CHAN	11
FSCH_MUX_OPTION	16
FSCH_RC	5
FSCH_CODING	1
FSCH_OUTERCODE_INCL	1
FSCH_OUTERCODE_RATE	0 or 3
FSCH_OUTERCODE_OFFSET	0 or 6
FSCH_RATE	4
FSCH_FRAME_40_USED	1
FSCH_FRAME_80_USED	1
FSCH_RECORD_RESERVED	0-7 (as needed)
} (NUM_FSCH + 1)	

If NUM\_BCMC\_PROGRAMS field is included, then  
 NUM\_BCMC\_PROGRAMS plus one occurrences of the following variable  
 length record:

{ (NUM\_BCMC\_PROGRAMS + 1)

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	BCMC_PROGRAM_ID_LEN+ 1
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINA TOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable  
 length record

{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINA TOR_LEN
NUM_LPM_ENTRIES	3

NUM\_LPM\_ENTRIES plus one occurrences of the following variable-length  
 record:

{ (NUM\_LPM\_ENTRIES + 1)

FSCH_ID	7
BSR_ID	3

---

$\} (NUM\_LPM\_ENTRIES + 1)$   
 $\} (NUM\_FLOW\_DISCRIMINATOR+1) \text{ or } 1$   
 $\} (NUM\_BCMC\_PROGRAMS + 1)$

USE\_TIME - Use action time indicator.

This field indicates whether an explicit action time is specified in this message.

If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

ACTION\_TIME - Action time.

If the USE\_TIME field is set to '1', the base station shall set this field to the System Time minus  $FRAME\_OFFSET_s \times 1.25$  ms, in units of 80 ms (modulo 64), at which the message is to take effect. If the USE\_TIME field is set to '0', the base station shall omit this field.

CH\_IND - Channel Indicator.

The base station shall set this field as shown in Table 3.7.3.3.2.34-1, to release physical resources.

**Table 3.7.3.3.2.34-1. Channel Indicator**

CH_IND (binary)	Physical Resource(s) Released
000	No Fundamental Channel, Dedicated Control Channel, or Continuous Reverse Pilot Channel released
001	Fundamental Channel
010	Dedicated Control Channel
011	Reserved
100	Continuous Reverse Pilot Channel
101	Fundamental Channel and Continuous Reverse Pilot Channel
110	Reserved
111	Fundamental Channel, Dedicated Control Channel, and Continuous Reverse Pilot Channel

GATING\_RATE\_INCL - Reverse pilot gating rate included flag.

1 The base station shall set this field to '1' if the  
 2 PILOT\_GATING\_RATE field is included, otherwise it shall set  
 3 this field to '0'.

4 PILOT\_GATING\_RATE - Actual Reverse Pilot gating Rate.

5 If the GATING\_RATE\_INCL field is set to '1', then the base  
 6 station shall set this field to the PILOT\_GATING\_RATE field  
 7 shown in Table 3.7.3.3.2.34-2 corresponding to the actual  
 8 gating rate on the Reverse Pilot Channel; otherwise, the base  
 9 station shall omit this field.

10

11 **Table 3.7.3.3.2.34-2. Actual Reverse Pilot Gating rate**

PILOT_GATING_RATE field (binary)	Meaning
00	Gating rate 1
01	Gating rate $\frac{1}{2}$
10	Gating rate $\frac{1}{4}$
11	Reserved

12

13 USE\_EXT\_CH\_IND - Use EXT\_CH\_IND to set channel configuration

14 The base station shall set this field to '1' if the EXT\_CH\_IND  
 15 field is included in this message and is used to set the  
 16 channel configuration; otherwise, the base station shall set  
 17 this field to '0'.

18 EXT\_CH\_IND - Extended Channel Indicator.

19 If the USE\_EXT\_CH\_IND field is set to '0', the base station  
 20 shall omit this field; otherwise, the base station shall include  
 21 this field and set it as follows:

22 The base station shall set this field to the desired channel  
 23 configuration shown in Table 2.7.1.3.2.4-11.

24 PDCH\_CONTROL\_HOLD - Packet Data Channel Control Hold mode indication.

25 If the USE\_EXT\_CH\_IND field is set to '0', the base station  
 26 shall omit this field; otherwise, the base station shall include  
 27 this field and set it as follows:

28 The base station shall set this field to '1' to instruct the  
 29 mobile station to transition to the Packet Data Channel  
 30 Control Hold Mode.

31 If EXT\_CH\_IND signals the allocation of F-FCH, this field  
 32 shall be set to '0'.

33 Table 3.7.3.3.2.34-3 shows the valid combinations of CH\_IND, EXT\_CH\_IND, and  
 34 PDCH\_CONTROL\_HOLD.

1 **Table 3.7.3.3.2.34-3. Valid CH\_IND, EXT\_CH\_IND, and PDCH\_CONTROL\_HOLD**

<b>Current EXT_CH_IND (binary)</b>	<b>CH_IND (binary)</b>	<b>EXT_CH _IND (binary)</b>	<b>PDCH_C ONTROL _HOLD (binary)</b>	<b>Physical Resource(s) Released</b>
Any	111	Omit	0	All assigned channels
00001	XXX	00001	1	Continuous R-PICH and R-CQICH
00010	XXX	00010	1	Continuous R-PICH and R-CQICH
00011	000	Omit	Omit	F-PDCH and R-CQICH
00100	XXX	00100	1	Continuous R-PICH and R-CQICH
00100	000	Omit	Omit	F-PDCH and R-CQICH
00100	100	Omit	Omit	F-PDCH and R-CQICH Continuous R-PICH
00101	XXX	00011	0	R-DCCH
00101	010	Omit	Omit	F-PDCH, R-CQICH, R-DCCH
00110	XXX	00011	0	F/R-DCCH
00110	XXX	00100	0 or 1	F/R-FCH, [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]
00110	XXX	00101	0	F-DCCH
00110	000	Omit	Omit	F-PDCH and R-CQICH
00110	010	Omit	Omit	F-PDCH, R-CQICH, F/R-DCCH
00110	001	Omit	Omit	F-PDCH, R-CQICH, F/R-FCH
00110	101	Omit	Omit	F-PDCH, R-CQICH, F/R-FCH, Continuous R-PICH
01001	XXX	00001	0 or 1	R-PDCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]
01001	XXX	01001	1	Continuous R-PICH and R-CQICH
01010	XXX	00010	0 or 1	R-PDCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]
01010	XXX	01010	1	Continuous R-PICH and R-CQICH
01011	XXX	00011	Omit	R-PDCH
01011	000	Omit	Omit	F-PDCH, R-CQICH, R-PDCH
01100	XXX	00100	0 or 1	R-PDCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]
01100	XXX	01100	1	Continuous R-PICH and R-CQICH
01100	000	Omit	Omit	F-PDCH, R-CQICH, R-PDCH

<b>Current EXT_CH_IND (binary)</b>	<b>CH_IND (binary)</b>	<b>EXT_CH _IND (binary)</b>	<b>PDCH_C ONTROL _HOLD (binary)</b>	<b>Physical Resource(s) Released</b>
01100	100	Omit	Omit	F-PDCH, R-CQICH, R-PDCH, Continuous R-PICH
01101	XXX	01011	0	R-DCCH
01101	XXX	00101	0	R-PDCH
01101	XXX	00011	0	R-PDCH, R-DCCH
01101	010	Omit	Omit	F-PDCH, R-CQICH, R-PDCH, R-DCCH
01110	XXX	01011	0	F/R-DCCH
01110	XXX	01100	0 or 1	F/R-FCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]
01110	XXX	01101	0	F-DCCH
01110	XXX	00110	0	R-PDCH
01110	XXX	00011	0	R-PDCH, F/R-DCCH
01110	XXX	00100	0 or 1	R-PDCH, F/R-FCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]
01110	XXX	00101	0	R-PDCH, F-DCCH
01110	000	Omit	Omit	F-PDCH, R-CQICH, R-PDCH
01110	010	Omit	Omit	F-PDCH, R-CQICH, R-PDCH, F/R-DCCH
01110	001	Omit	Omit	F-PDCH, R-CQICH, R-PDCH, F/R-FCH
01110	101	Omit	Omit	F-PDCH, R-CQICH, R-PDCH, F/R-FCH, Continuous R-PICH
01111	XXX	00100	Omit	F-FCH
10000	XXX	00010	Omit	F-DCCH
10000	XXX	00100	Omit	F-CPCCH
10000	XXX	00010	Omit	F-DCCH and F-CPCCH
10001	XXX	00100	Omit	F-FCH and F-CPCCH
10001	XXX	00010	Omit	F-FCH and F-DCCH
10010	XXX	00110	Omit	F-CPCCH
10010	XXX	00101	Omit	F-DCCH and F-CPCCH
10010	XXX	00100	Omit	F-FCH, R-FCH, F-CPCCH
10010	XXX	00011	Omit	F-DCCH, R-DCCH, F-CPCCH
10010	XXX	00010	Omit	F-FCH, R-FCH, F-DCCH

<b>Current EXT_CH_IND (binary)</b>	<b>CH_IND (binary)</b>	<b>EXT_CH _IND (binary)</b>	<b>PDCH_C ONTROL _HOLD (binary)</b>	<b>Physical Resource(s) Released</b>
10010	XXX	00001	Omit	F-DCCH, R-DCCH, R-FCH
10011	XXX	01111	Omit	R-PDCH
10100	XXX	10000	Omit	R-PDCH
10101	XXX	10001	Omit	R-PDCH
10110	XXX	10010	Omit	R-PDCH
10011	XXX	00100	Omit	R-PDCH, F-FCH
10100	XXX	00010	Omit	R-PDCH, F-DCCH
10100	XXX	00100	Omit	R-PDCH, F-CPCCH
10100	XXX	00010	Omit	R-PDCH, F-DCCH and F-CPCCH
10101	XXX	00100	Omit	R-PDCH, F-FCH and F-CPCCH
10101	XXX	00010	Omit	R-PDCH, F-FCH and F-DCCH
10110	XXX	00110	Omit	R-PDCH, F-CPCCH
10110	XXX	00101	Omit	R-PDCH, F-DCCH and F-CPCCH
10110	XXX	00100	Omit	R-PDCH, F-FCH, R-FCH, F-CPCCH
10110	XXX	00011	Omit	R-PDCH, F-DCCH, R-DCCH, F-CPCCH
10110	XXX	00010	Omit	R-PDCH, F-FCH, R-FCH, F-DCCH
10110	XXX	00001	Omit	R-PDCH, F-DCCH, R-DCCH, R-FCH

1	SWITCHING_PARMES_INCL	- R-CQICH switching parameters included indicator.
2		If the USE_EXT_CH_IND or the GATING_RATE_INCL field is
3		set to '0', the base station shall omit this field; otherwise, the
4		base station shall include this field and set it as follows:
5		The base station shall set this field to '1' if the parameters for
6		R-CQICH soft and softer switching are included in this
7		message; otherwise, the base station shall set this field to '0'.
8	NUM_SOFT_SWITCHING_FRAMES_CHM	- Number of frames for R-CQICH soft
9		switching while in Control Hold.
10		If SWITCHING_PARMES_INCL is not included or included and
11		set to '0', then the base station shall omit this field;
12		otherwise, the base station shall include this field and set it
13		as follows:
14		The base station shall set this field to the duration of the cell
15		switching period, in units of 20 ms, minus one, during which
16		the mobile station, while in Control Hold, is to transmit the
17		cell switch sequence on the R-CQICH when it switches
18		between two pilots which are in different groups.
19	NUM_SOFTER_SWITCHING_FRAMES_CHM	- Number of frames for R-CQICH softer
20		switching while in Control Hold.
21		If SWITCHING_PARMES_INCL is not included or included and
22		set to '0', then the base station shall omit this field;
23		otherwise, the base station shall include this field and set it
24		as follows:
25		The base station shall set this field to the duration of the cell
26		switching period, in units of 20 ms, minus one, during which
27		the mobile station, while in Control Hold, is to transmit the
28		cell switch sequence on the R-CQICH when it switches
29		between two pilots which are in the same group.
30	DIRECT_TO_IDLE_INFO_INCL	- Direct to Idle information included.
31		If USE_EXT_CH_IND is equal to '0' and CH_IND is equal to
32		'111' or the physical channels indicated by the two least
33		significant bits of CH_IND includes all the physical channels
34		(FCH, DCCH, or both) currently being processed by the
35		mobile station, the base station shall set this field as follows:
36		• If DIRECT TO IDLE record is included, the base station
37		shall set this field to '1'; otherwise base station shall set
38		this field to '0'.
39		Otherwise the base station shall set this field to '0'.
40	RELEASE_TYPE	- Release type.
41		If DIRECT_TO_IDLE_INFO_INCL is set to '0', the base station
42		shall omit this field; otherwise, the base station shall include
43		this field and shall set it as follows:
44		The base station shall set this field as specified in Table
45		3.7.3.3.2.34-4.

1

**Table 3.7.3.3.2.34-4 Release Type**

<b>Value (binary)</b>	<b>Release Type/Usage</b>
000	Release to <i>Mobile Station Idle State</i> on the PCH
001	Release to <i>Mobile Station Idle State</i> on the Primary BCCH.
010	Release to <i>Mobile Station Idle State</i> on the Primary BCCH that supports Transmit Diversity.
011	Release to <i>System Determination Substate</i> of the <i>Mobile Station Initialization State</i> .
100-111	Reserved.

2

3

SID - System identification.

4

5

6

7

8

If RELEASE\_TYPE field is not included or is included and equals '011', the base station shall omit this field; otherwise, the base station shall include this field and shall set it to the system identification number for the wireless system that the mobile station is being directed to (see 2.6.5.2).

9

NID - Network identification.

10

11

12

13

If RELEASE\_TYPE field is not included or is included and equals '011', the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

14

15

This field serves as a sub-identifier of a system as defined by the owner of the SID.

16

17

18

The base station shall set this field to the network identification number for the network that the mobile station is being directed to (see 2.6.5.2).

19

FREQ\_INCL - Frequency included indicator.

20

21

22

23

If RELEASE\_TYPE field is not included or is included and equals '011', the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

24

25

26

If the CDMA\_FREQ and BAND\_CLASS fields are included, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

27

CDMA\_FREQ - Frequency assignment.



1			If the FREQ_INCL field is not included or is included and set
2			to '0', the base station shall omit this field; otherwise, the
3			base station shall set this field to the CDMA Channel number
4			corresponding to the CDMA frequency assignment for the
5			CDMA Channel containing the Paging Channel or Primary
6			Broadcast Control Channel.
7	BAND_CLASS	-	Band class.
8			If the FREQ_INCL field is not included or is included and set
9			to '0', the base station shall omit this field; otherwise, the
10			base station shall set this field to the CDMA band class, as
11			specified in [30], corresponding to the CDMA frequency
12			assignment for the CDMA Channel containing the Paging
13			Channel or Primary Broadcast Control Channel.
14	PAGE_CH	-	Paging Channel.
15			If RELEASE_TYPE field is included and equals '000', the base
16			station shall set this field to the Paging Channel number of
17			the Paging Channel that the mobile station is being directed
18			to; otherwise, the base station shall omit this field.
19	PRAT	-	Paging Channel data rate.
20			If RELEASE_TYPE field is included and equals '000', the base
21			station shall set this field to the PRAT field value shown in
22			Table 3.7.2.3.2.26-1 corresponding to the data rate used by
23			the Paging Channel that the mobile station is being directed
24			to; otherwise, the base station shall omit this field.
25	SR1_BCCH_CODE_CHAN_NON_TD	-	Walsh code for the Spreading Rate 1 BCCH in non
26			Transmit Diversity mode.
27			If RELEASE_TYPE field is not included or is included and is
28			not equal to '001', the base station shall omit this field;
29			otherwise, the base station shall set this field to the Walsh
30			code corresponding to the Spreading Rate 1 BCCH in non
31			Transmit Diversity mode that the mobile station is being
32			directed to.
33	SR1_CRAT_NON_TD	-	BCCH code rate in non Transmit Diversity mode for
34			Spreading Rate 1.
35			If RELEASE_TYPE field is not included or is included and is
36			not equal to '001', the base station shall omit this field;
37			otherwise the base station shall set this field as follows:
38			The base station shall set this field to '0' if the BCCH Code
39			Rate is 1/4 (see [2]). The base station shall set this field to '1'
40			if the BCCH code rate is 1/2 (see [2]).
41	SR1_BRAT_NON_TD	-	BCCH data rate in non Transmit Diversity mode for
42			Spreading Rate 1.
43			If RELEASE_TYPE field is not included or is included and is
44			not equal to '001', the base station shall omit this field;
45			otherwise, the base station shall set this field as follows:

1		The base station shall set this field to the BRAT field value
2		shown in Table 3.7.2.3.2.26-2 corresponding to the data rate
3		used by the Primary Broadcast Control Channel that the
4		mobile station is being directed to.
5	SR1_TD_MODE	- Spreading Rate 1 Transmit Diversity Mode.
6		If RELEASE_TYPE field is included and equals '010', the base
7		station shall set this field to the value shown in Table
8		3.7.2.3.2.26-3; otherwise, the base station shall omit this
9		field.
10	SR1_BCCH_CODE_CHAN_TD	- Walsh Code for Spreading Rate 1 BCCH in Transmit
11		Diversity mode.
12		If RELEASE_TYPE field is included and equals '010', the base
13		station shall set this field to the Walsh Code corresponding to
14		the Spreading Rate 1 BCCH in Transmit Diversity mode that
15		the mobile station is being directed to; otherwise, the base
16		station shall omit this field
17	SR1_CRAT_TD	- BCCH code rate in Transmit Diversity mode for Spreading
18		Rate 1.
19		If RELEASE_TYPE field is not included or is included and is
20		not equal to '010', the base station shall omit this field;
21		otherwise, the base station shall set this field as follows:
22		The base station shall set this field to '0' if the BCCH Code
23		Rate is $\frac{1}{4}$ (see [2]). The base station shall set this field to '1' if
24		the BCCH Code Rate is $\frac{1}{2}$ (see [2]).
25	SR1_BRAT_TD	- BCCH data rate in Transmit Diversity mode for Spreading
26		Rate 1.
27		If RELEASE_TYPE field is included and equals '010', the base
28		station shall set this field to the BRAT field value shown in
29		Table 3.7.2.3.2.26-2 corresponding to the data rate used by
30		the Primary Broadcast Control Channel that the mobile
31		station is being directed to; otherwise, the base station shall
32		omit this field.
33	SR1_TD_POWER_LEVEL	- Spreading Rate 1 TD transmit power level.
34		If RELEASE_TYPE field is not included or is included and is
35		not equal to '010', the base station shall omit this field;
36		otherwise, the base station shall set this field as follows:
37		The base station shall set this field to the TD transmit power
38		level relative to that of the Forward Pilot Channel, as specified
39		in Table 3.7.2.3.2.26-4.
40	NUM_PILOTS_D2I_INCL	- Number of Pilots (Direct to Idle) Included Indicator.
41		If RELEASE_TYPE field is not included or is included and is
42		equal to '011', the base station shall omit this field;
43		otherwise, the base station shall include this field and shall
44		set it as follows:

1		The base station shall set this field to '0' to indicate any pilot
2		can be used for direct to idle transition; otherwise, the base
3		station shall set this field to '1'.
4	NUM_PILOTS_D2I	- Number of Pilots (Direct to Idle).
5		If NUM_PILOTS_D2I_INCL field is not included or is included
6		and is equal to '0', the base station shall omit this field;
7		otherwise, the base station shall include this field and shall
8		set it as follows:
9		The base station shall set this field to '000' to indicate any
10		pilot in the active set can be used for direct to idle transition;
11		otherwise, the base station shall set this field to number of
12		pilots included in this DIRECT TO IDLE record.
13	If NUM_PILOTS_D2I field is included, the base station shall include NUM_PILOTS_D2I	
14	occurrences of the following record:	
15	PILOT_PN	- Pilot PN sequence offset index.
16		The base station shall set this field to the pilot PN sequence
17		offset for this pilot in units of 64 PN chips.
18	RER_MODE_ENABLED	- Radio environment reporting mode enabled indicator.
19		If USE_EXT_CH_IND is equal to '0' and CH_IND is equal to
20		'111', or the physical channels indicated by the two least
21		significant bits of CH_IND includes all the physical channels
22		(FCH, DCCH, or both) currently being processed by the
23		mobile station, the base station shall set this field as follows:
24		• If the radio environment reporting mode is enabled in this
25		message, the base station shall set this field to '1';
26		otherwise, the base station shall set this field to '0'.
27		Otherwise, the base station shall set this field to '0'.
28	RER_MAX_NUM_MSG_IDX	- Maximum number of <i>Radio Environment Messages</i>
29		permitted while in radio environment reporting mode index.
30		If RER_MODE_ENABLED is set to '0', the base station shall
31		omit this field; otherwise, the base station shall include this
32		field and set it as follows:
33		The base station shall set this field to the maximum number
34		of <i>Radio Environment Messages</i> that the mobile station is
35		allowed to transmit while in radio environment reporting
36		mode, expressed as $2^{\text{RER\_MAX\_NUM\_MSG\_IDX}}$ where $0 \leq$
37		$\text{RER\_MAX\_NUM\_MSG\_IDX} \leq 6$ . If the mobile station is
38		allowed to transmit an unlimited number of <i>Radio</i>
39		<i>Environment Message</i> , then the base station shall set this
40		field to '111'.
41	RER_TIME	- Radio environment report timer value.
42		If RER_MODE_ENABLED is set to '0', the base station shall
43		omit this field; otherwise, the base station shall include this
44		field and set it as follows:

The base station shall set this field to the value of the radio-environment report timer, expressed as  $2^{\text{RER\_TIME}}$  where  $0 \leq \text{RER\_TIME} \leq 6$  and in units of RER\_TIME\_UNIT. If the value of the radio-environment report timer is infinite, then the base station shall set this field to '111'.

**RER\_TIME\_UNIT** - Radio environment report timer value units.

If RER\_MODE\_ENABLED is set to '1' and RER\_TIME is not set to '111', the base station shall include this field and shall set it according to Table 3.7.3.3.2.34-5; otherwise, the base station shall omit this field.

**Table 3.7.3.3.2.34-5 RER\_TIME\_UNIT values**

<b>RER_TIME _UNIT (binary)</b>	<b>Meaning</b>
00	Seconds
01	Minutes
10	Hours
11	Reserved

**MAX\_RER\_PILOT\_LIST\_SIZE** - Maximum number of pilots to maintain in RER\_PILOT\_LIST.

If RER\_MODE\_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum number of pilots that the mobile station is to maintain in RER\_PILOT\_LIST (see [4]). The base station shall set this field to a value in the range 1 to 6 inclusive.

**RSC\_MODE\_SUPPORTED** - Reduced slot cycle mode supported indicator.

If USE\_EXT\_CH\_IND is equal to '0' and CH\_IND is equal to '111', or the physical channels indicated by the two least significant bits of CH\_IND includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, the base station shall set this field as follows:

- If the fields related to reduced slot cycle mode are included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

Otherwise, the base station shall set this field to '0'.

1	MAX_RSC_END_TIME_UNIT	-	Maximum reduced slot cycle mode end time unit.
2			If RSC_MODE_SUPPORTED is equal to '0', the base station
3			shall omit this field; otherwise, the base station shall set this
4			field according to Table 2.7.3.5-1 to indicate the units of the
5			MAX_RSC_END_TIME_VALUE field.
6	MAX_RSC_END_TIME_VALUE	-	Maximum reduced slot cycle mode end time value.
7			If RSC_MODE_SUPPORTED is equal to '0', the base station
8			shall omit this field; otherwise, the base station shall include
9			this field and set it as follows:
10			The base station shall set this field to the maximum system
11			time, in units of time specified by
12			MAX_RSC_END_TIME_UNIT (modulo 16), at which the mobile
13			station is to exit the reduced slot cycle mode.
14	REQ_RSCI_INCL	-	REQ_RSCI included indicator.
15			If RSC_MODE_SUPPORTED is equal to '1', the base station
16			shall include this field and set it as specified below;
17			otherwise, the base station shall omit this field.
18			If the base station is requesting the mobile station to operate
19			in the reduced slot cycle mode following release of the traffic
20			channel, the base station shall set this field to '1'; otherwise,
21			the base station shall set this field to '0'.
22	REQ_RSCI	-	Requested reduced slot cycle index.
23			If REQ_RSCI_INCL is included and equal to '1', the base
24			station shall set this field as specified in Table 2.7.1.3.2.1-8
25			to the reduced slot cycle index value that it is requesting the
26			mobile station to operate with; otherwise, the base station
27			shall omit this field.
28	IGNORE_QPCH	-	Ignore QPCH indicators.
29			If RSC_MODE_SUPPORTED is equal to '1', the base station
30			shall include this field and set it as specified below;
31			otherwise, the base station shall omit this field.
32			The base station shall set this field to '1' to indicate to the
33			mobile station that it is not to check its assigned paging
34			indicators on the QPCH while operating in the reduced slot
35			cycle mode if the reduced slot cycle index is -3 or -4;
36			otherwise, the base station shall set this field to '0'.
37	TKZ_MODE_ENABLED	-	Tracking zone mode enabled indicator.
38			If USE_EXT_CH_IND is equal to '0' and CH_IND is equal to
39			'111', or the physical channels indicated by the two least
40			significant bits of CH_IND includes all the physical channels
41			(FCH, DCCH, or both) currently being processed by the
42			mobile station, the base station shall set this field as follows:
43			• If the tracking zone mode is enabled in this message, the
44			base station shall set this field to '1'; otherwise, the base
45			station shall set this field to '0'.

1		Otherwise, the base station shall set this field to '0'.
2	TKZ_ID	- Tracking zone identifier.
3		If TKZ_MODE_ENABLED is set to '0', the base station shall
4		omit this field; otherwise, the base station shall set this field
5		to its tracking zone identifier.
6	TKZ_MAX_NUM_MSG_IDX	- Maximum number of <i>Radio Environment Messages</i>
7		permitted while in tracking zone mode index.
8		If TKZ_MODE_ENABLED is set to '0', the base station shall
9		omit this field; otherwise, the base station shall include this
10		field and set it as follows:
11		The base station shall set this field to the maximum number
12		of <i>Radio Environment Messages</i> that the mobile station is
13		allowed to transmit while in tracking zone mode, expressed
14		as $2^{\text{TKZ\_MAX\_NUM\_MSG\_IDX}}$ where 0 •
15		TKZ_MAX_NUM_MSG_IDX • 6. If the mobile station is
16		allowed to transmit an unlimited number of <i>Radio</i>
17		<i>Environment Messages</i> , then the base station shall set this
18		field to '111'.
19	TKZ_UPDATE_PRD	- Tracking zone update period.
20		If TKZ_MODE_ENABLED is set to '0', the base station shall
21		omit this field; otherwise, the base station shall include this
22		field and set it as follows:
23		The base station shall set this field such that the desired
24		tracking zone update timer value is $2^{\text{TKZ\_UPDATE\_PRD}+6}$
25		seconds. If the value of the timer is infinite, then the base
26		station shall set this field to '1111'.
27	TKZ_LIST_LEN	- Tracking zone list length.
28		If TKZ_MODE_ENABLED is set to '0', the base station shall
29		omit this field; otherwise, the base station shall include this
30		field and set it as follows:
31		The base station shall set this field to the length of the
32		tracking zone list minus one.
33	TKZ_TIMER	- Tracking zone timer.
34		If TKZ_MODE_ENABLED is set to '0', the base station shall
35		omit this field; otherwise, the base station shall include this
36		field and set it as follows:
37		The base station shall set this field to the value of the
38		tracking zone timer (in units of seconds) minus one.
39	TBR_RAND_SUPPR_ENABLE	- Timer Based Registration Randomization Suppression
40		enable indicator.
41		The base station shall set this field to '1', if the mobile station
42		is allowed to suppress timer-based registration randomization
43		in order to eliminate unnecessary timer-based registrations
44		(see 2.6.5.1.3.1); otherwise, the base station shall set this
45		field to '0'.

1	TBR_RAND_WINDOW	-	Timer-based registration randomization window.
2			The base station shall set this field to the value shown in
3			Table 2.6.5.1.3-1 corresponding to the randomization for
4			timer-based registration (see 2.6.5.1.3).
5	BCMC_INFO_INCL	-	BCMC information Included Indicator
6			If RELEASE_TYPE field is not included or is included and is
7			equal to '011', the base station shall omit this field;
8			otherwise, the base station shall include this field and shall
9			set it as follows:
10			The base station shall set this field to '1' if BCMC information
11			is included in this message; otherwise, the base station shall
12			set this field to '0'.
13			The BCMC information included in this message is applicable
14			to all the pilots indicated by the DIRECT TO IDLE record in
15			this message.
16	NUM_FSCH	-	Number of Forward Supplemental Channels.
17			If BCMC_INFO_INCL field is not included or is included and
18			is equal to '0', the base station shall omit this field; otherwise,
19			the base station shall include this field and shall set it as
20			follows:
21			The base station shall set this field to the number of Forward
22			Supplemental Channels for which information is included in
23			this message minus one.
24	NUM_BCMC_PROGRAMS	-	Number of BCMC Programs
25			If BCMC_INFO_INCL field is not included or is included and
26			is equal to '0', the base station shall omit this field; otherwise,
27			the base station shall include this field and shall set it as
28			follows:
29			The base station shall set this field to the number of BCMC
30			programs for which information is included in this message
31			minus one.
32			
33	If NUM_FSCH field is included, the base station shall include NUM_FSCH plus one		
34	occurrences of the following variable length record:		
35	FSCH_RECORD_LEN	-	Forward Supplemental Channel record length.
36			The base station shall set this field to the number of octets
37			included in this Forward Supplemental Channel record
38			including this field.
39	FSCH_CODE_CHAN	-	Code channel index of the Forward Supplemental Channel.
40			The base station shall set this field to the code channel index
41			of this Forward Supplemental Channel as specified in [2].
42	FSCH_MUX_OPTION	-	Multiplex Option of the Forward Supplemental Channel

1		The base station shall set this field to the multiplex option of
2		this Forward Supplemental Channel as specified in [3].
3	FSCH_RC	- Radio configuration of the Forward Supplemental Channel.
4		The base station shall set this field to the radio configuration
5		of this Forward Supplemental Channel as specified in [2].
6	FSCH_CODING	- Coding type of the Forward Supplemental Channel.
7		The base station shall set this field to '1' if Convolutional
8		Coding will be used when the number of channel bits per
9		frame is less than 360 and Turbo Coding when the number of
10		channel bits per frame is equal to or greater than 360. The
11		base station shall set this field to '0' if Convolution Coding
12		will be used for all block sizes.
13	FSCH_OUTERCODE_INCL	- Forward Supplemental Channel Outer Code included
14		indicator.
15		The base station shall set this field to '1' if the Forward
16		Supplemental Channel outer code information is included in
17		this message; otherwise, the base station shall set this field
18		to '0'.
19	FSCH_OUTERCODE_RATE	- Outer Code Rate of the Forward Supplemental Channel.
20		If the FSCH_OUTERCODE_INCL field is set to '0', the base
21		station shall omit this field; otherwise, the base station shall
22		include this field and set it as follows:
23		The base station shall set this field to the outer code rate of
24		the Forward Supplemental Channel as specified in Table
25		3.7.2.3.2.38-3.
26	FSCH_OUTERCODE_OFFSET	- Outer Coding Buffer Offset of the Forward
27		Supplemental Channel.
28		If the FSCH_OUTERCODE_INCL field is set to '0', the base
29		station shall omit this field; otherwise, the base station shall
30		include this field and set it as follows:
31		The base station shall set this field to the outer coding buffer
32		offset of the Forward Supplemental Channel in units of 20ms
33		as specified in [2].
34	FSCH_RATE	- Data Rate of the Forward Supplemental Channel.
35		The base station shall set this field to the data rate of this
36		Forward Supplemental Channel as specified in [2].
37	FSCH_FRAME_40_USED	- Forward Supplemental Channel 40ms frame used indicator.
38		The base station shall set this field to '1' if 40ms frame is
39		used on this Forward Supplemental Channel; otherwise, the
40		base station shall set this field to '0'.
41		The base station shall not set both FSCH_FRAME_40_USED
42		and FSCH_FRAME_80_USED fields to '1'.
43	FSCH_FRAME_80_USED	- Forward Supplemental Channel 80ms frame used indicator.



1                   The base station shall set this field to '1' if 80ms frame is  
2                   used on this Forward Supplemental Channel; otherwise, the  
3                   base station shall set this field to '0'.

4                   The base station shall not set both FSCH\_FRAME\_40\_USED  
5                   and FSCH\_FRAME\_80\_USED fields to '1'.

6

7   FSCH\_RECORD\_RESERVED -   Forward Supplemental Channel record Reserved bits.

8                   The base station shall add reserved bits as needed in order to  
9                   make the length of this Forward Supplemental Channel  
10                  record equal to an integer number of octets. The base station  
11                  shall set these bits to '0'.

12   If NUM\_BCMC\_PROGRAMS field is included, the base station shall include  
13   NUM\_BCMC\_PROGRAMS plus one occurrences of the following variable length record:

14   BCMC\_PROGRAM\_ID\_LEN   -   Length of BCMC\_PROGRAM\_ID field

15                   The base station shall set this field to one less than the  
16                   length in bits of the BCMC\_PROGRAM\_ID of this program.

17   BCMC\_PROGRAM\_ID       -   BCMC program Identifier

18                   The length of this field shall be one more than the value of  
19                   BCMC\_PROGRAM\_ID\_LEN bits.

20                   The base station shall set this field to the BCMC program  
21                   identifier of this program.

22   BCMC\_FLOW\_DISCRIMINATOR\_LEN   -   Length of BCMC\_FLOW\_DISCRIMINATOR field

23                   The base station shall set this field to the length in bits of the  
24                   BCMC\_FLOW\_DISCRIMINATOR of this program.

25   NUM\_FLOW\_DISCRIMINATOR - Number of BCMC flow discriminators.

26                   The length of this field shall be determined by the value of  
27                   the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
28                   BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
29                   is omitted; otherwise, the length of this field shall be  
30                   BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

31                   The base station shall set this field to the number of flow  
32                   discriminators included for this program minus one.

33   If NUM\_FLOW\_DISCRIMINATOR field is included, the base station shall include  
34   NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;  
35   otherwise, the base station shall include 1 occurrence of the following variable length  
36   record:

37   BCMC\_FLOW\_DISCRIMINATOR -   BCMC flow discriminator

38                   The length of this field shall be determined by the value of  
39                   the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
40                   BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
41                   is omitted; otherwise, the length of this field shall be  
42                   BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

1			The base station shall set this field to the BCMC flow
2			discriminator of this flow.
3	NUM_LPM_ENTRIES	-	Number of Logical-to-Physical Mapping Entries
4			The base station shall set this field to one less than the
5			number of logical to physical mapping included for this
6			BCMC flow.
7	The base station shall include NUM_LPM_ENTRIES plus one occurrences of the following		
8	variable-length record:		
9	FSCH_ID	-	Forward Supplemental Channel Identifier
10			The base station shall set this field to the identifier
11			corresponding to the Forward Supplemental Channel on
12			which the above BCMC flow is being transmitted.
13			The F-SCH included first in this message is given the
14			FSCH_ID of '0000000', the second one listed is given the
15			FSCH_ID of '0000001', and so on.
16	BSR_ID	-	BCMC Service Reference Identifier
17			The base station shall set this field to the BCMC Service
18			Reference identifier corresponding to this BCMC flow on this
19			Forward Supplemental Channel.
20			The base station shall not set this field to a value of 0.
21			
22			

1 3.7.3.3.2.35 Extended Release Mini Message

2 MSG\_TAG: ERMM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
CH_IND	3
GATING_RATE_INCL	1
PILOT_GATING_RATE	0 or 2
USE_EXT_CH_IND	1
EXT_CH_IND	0 or 5
PDCH_CONTROL_HOLD	0 or 1

4

5 USE\_TIME - Use action time indicator.

6 This field indicates whether an ACTION\_TIME is specified in  
7 this message.

8 If an ACTION\_TIME is specified in this message, the base  
9 station shall set this field to '1'; otherwise, the base station  
10 shall set this field to '0'.

11 ACTION\_TIME - Action time.

12 If the USE\_TIME field is set to '1', the base station shall set  
13 this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$   
14 ms, in units of 80 ms (modulo 64), at which the message is to  
15 take effect. If the USE\_TIME field is set to '0', the base station  
16 shall omit this field.

17 CH\_IND - Channel Indicator.

18 The base station shall set this field as shown in Table  
19 3.7.3.3.2.34-1, to release physical resources.

20 GATING\_RATE\_INCL - Reverse pilot gating rate included flag.

21 The base station shall set this field to '1' if the  
22 PILOT\_GATING\_RATE field is included, otherwise it shall set  
23 this field to '0'.

24 PILOT\_GATING\_RATE - Actual Reverse Pilot gating Rate.

25 If the GATING\_RATE\_INCL field is set to '1', then the base  
26 station shall set this field to the PILOT\_GATING\_RATE field  
27 shown in Table 3.7.3.3.2.34-2 corresponding to the actual  
28 gating rate on the Reverse Pilot Channel; otherwise, the base  
29 station shall omit this field.

30 USE\_EXT\_CH\_IND - Use EXT\_CH\_IND to set channel configuration

1		The base station shall set this field to '1' if the EXT_CH_IND
2		is included in this message and is used to set the channel
3		configuration; otherwise, the base station shall set this field
4		to '0'.
5	EXT_CH_IND	- Extended Channel Indicator.
6		If the USE_EXT_CH_IND field is set to '0', the base station
7		shall omit this field; otherwise, the base station shall include
8		this field and set it as follows:
9		The base station shall set this field to the desired channel
10		configuration shown in Table 2.7.1.3.2.4-11.
11	PDCH_CONTROL_HOLD	- Packet Data Channel Control Hold mode indication.
12		If the USE_EXT_CH_IND field is set to '0', the base station
13		shall omit this field; otherwise, the base station shall include
14		this field and set it as follows:
15		The base station shall set this field to '1' to instruct the
16		mobile station to transition to the Packet Data Channel
17		Control Hold Mode.
18		If EXT_CH_IND signals the allocation of F-FCH, this field
19		shall be set to '0'.
20	Table 3.7.3.3.2.34-3 shows the valid combinations of CH_IND, EXT_CH_IND, and	
21	PDCH_CONTROL_HOLD.	
22		
23		
24		

## 1 3.7.3.3.2.36 Universal Handoff Direction Message

2 MSG\_TAG: UHDM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
HDM_SEQ	2
PARMS_INCL	1
P_REV	0 or 8
SERV_NEG_TYPE	0 or 1
SEARCH_INCLUDED	1
SRCH_WIN_A	0 or 4
SRCH_WIN_N	0 or 4
SRCH_WIN_R	0 or 4
T_ADD	0 or 6
T_DROP	0 or 6
T_COMP	0 or 4
T_TDROP	0 or 4
SOFT_SLOPE	0 or 6
ADD_INTERCEPT	0 or 6
DROP_INTERCEPT	0 or 6
EXTRA_PARMS	1
PACKET_ZONE_ID	0 or 8
FRAME_OFFSET	0 or 4
PRIVATE_LCM	0 or 1
RESET_L2	0 or 1
RESET_FPC	0 or 1

4

(continues on next page)

5

1

<b>Field</b>	<b>Length (bits)</b>
ENCRYPT_MODE	0 or 2
NOM_PWR_EXT	0 or 1
NOM_PWR	0 or 4
RLGAIN_TRAFFIC_PILOT	0 or 6
DEFAULT_RLAG	0 or 1
NUM_PREAMBLE	0 or 3
BAND_CLASS	0 or 5
CDMA_FREQ	0 or 11
RETURN_IF_HANDOFF_FAIL	0 or 1
COMPLETE_SEARCH	0 or 1
PERIODIC_SEARCH	0 or 1
SCR_INCLUDED	0 or 1
SERV_CON_SEQ	0 or 3
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$
NNSCR_INCLUDED	0 or 1
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$

2

(continues on next page)

3

1

Field	Length (bits)
USE_PWR_CNTL_STEP	1
PWR_CNTL_STEP	0 or 3
CLEAR_RETRY_DELAY	1
SCH_INCL	1
NUM_FOR_ASSIGN	0 or 2

The base station shall include NUM\_FOR\_ASSIGN occurrences of the following fields

{ (NUM\_FOR\_ASSIGN)

FOR_SCH_ID	1
FOR_SCH_DURATION	4
FOR_SCH_START_TIME_INCL	1
FOR_SCH_START_TIME	0 or 5
SCCL_INDEX	4
} (NUM_FOR_ASSIGN)	
NUM_REV_ASSIGN	0 or 2

The base station shall include NUM\_REV\_ASSIGN occurrences of the following fields

{ (NUM\_REV\_ASSIGN)

REV_SCH_ID	1
REV_SCH_DURATION	4
REV_SCH_START_TIME_INCL	1
REV_SCH_START_TIME	0 or 5
REV_SCH_NUM_BITS_IDX	4

} (NUM\_REV\_ASSIGN)

FPC_SUBCHAN_GAIN	5
USE_PC_TIME	1
PC_ACTION_TIME	0 or 6
CH_IND	3
ACTIVE_SET_REC_LEN	8
ACTIVE_SET_REC_FIELDS	8 × ACTIVE_SET_REC_LEN
REV_FCH_GATING_MODE	0 or 1
REV_PWR_CNTL_DELAY_INCL	0 or 1

<b>Field</b>	<b>Length (bits)</b>
REV_PWR_CNTL_DELAY	0 or 2
D_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3
3XFL_1XRL_INCL	1
1XRL_FREQ_OFFSET	0 or 2
SYNC_ID_INCL	0 or 1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
CC_INFO_INCL	0 or 1
NUM_CALLS_ASSIGN	0 or 8

NUM\_CALLS\_ASSIGN occurrences of the following variable length record:

{ (NUM\_CALLS\_ASSIGN)

CON_REF	8
RESPONSE_IND	1
TAG	0 or 4
BYPASS_ALERT_ANSWER	0 or 1

} (NUM\_CALLS\_ASSIGN)

CS_SUPPORTED	1
CHM_SUPPORTED	1
CDMA_OFF_TIME_REP_SUP_IND	1
CDMA_OFF_TIME_REP_THRESHO LD_UNIT	0 or 1
CDMA_OFF_TIME_REP_THRESHO LD	0 or 3
RELEASE_TO_IDLE_IND	1

(continues on next page)



<b>Field</b>	<b>Length (bits)</b>
MSG_INTEGRITY_SUP	1
GEN_2G_KEY	1
REGISTER_IN_IDLE	1
PLCM_TYPE_INCL	1
PLCM_TYPE	0 or 4
PLCM_39	0 or 39
T_TDROP_RANGE_INCL	0 or 1
T_TDROP_RANGE	0 or 4
FOR_PDCH_SUPPORTED	1
PDCH_CHM_SUPPORTED	0 or 1
PILOT_INFO_REQ_SUPPORTED	1
ENC_SUPPORTED	1
SIG_ENCRYPT_SUP	0 or 8
UI_ENCRYPT_SUP	0 or 8
USE_SYNC_ID	1
SID_INCL	1
SID	0 or 15
NID_INCL	1
NID	0 or 16
SDB_SUPPORTED	1
MOB_QOS	0 or 1
MS_INIT_POS_LOC_SUP_IND	1
REV_PDCH_SUPPORTED	0 or 1
PZ_HYST_ENABLED	0 or 1
PZ_HYST_INFO_INCL	0 or 1
PZ_HYST_LIST_LEN	0 or 4
PZ_HYST_ACT_TIMER	0 or 8
PZ_HYST_TIMER_MUL	0 or 3
PZ_HYST_TIMER_EXP	0 or 5
BCMC_ON_TRAFFIC_SUP	1
AUTO_REQ_TRAF_ALLOWED_IND	0 or 1
SCH_BCMC_IND	0 or 1
ADD_PLCM_FOR_SCH_INCL	0 or 1

Field	Length (bits)
ADD_PLCM_FOR_SCH_TYPE	0 or 1
ADD_PLCM_FOR_SCH_35	0 or 35

NUM\_FOR\_ASSIGN occurrence of the following record if SCH\_BCMC\_IND is included and is set to '1':

{ (NUM\_FOR\_ASSIGN)

USE_ADD_PLCM_FOR_SCH	1
FSCH_OUTERCODE_INCL	1
FSCH_OUTERCODE_RATE	0 or 3
FSCH_OUTERCODE_OFFSET	0 or 6

} (NUM\_FOR\_ASSIGN)

MAX_ADD_SERV_INSTANCE	0 or 3
USE_CH_CFG_RRM	1
TX_PWR_LIMIT_INCL	1
TX_PWR_LIMIT_DEFAULT	0 or 1
TX_PWR_LIMIT	0 or 6

1  
2

1 If CH\_IND = '101', the ACTIVE\_SET\_REC\_FIELDS shall be:

2

Field	Length (bits)
NUM_FOR_SCH	0 or 5
NUM_FOR_SCH occurrences of the following three fields: { (NUM_FOR_SCH)	
FOR_SCH_ID	1
SCCL_INDEX	4
FOR_SCH_NUM_BITS_IDX	4
} (NUM_FOR_SCH)	
NUM_REV_SCH	0 or 5
NUM_REV_SCH occurrences of the following three fields: { (NUM_REV_SCH)	
REV_SCH_ID	1
REV_WALSH_ID	1
REV_SCH_NUM_BITS_IDX	4
} (NUM_REV_SCH)	
NUM_PILOTS	3
SRCH_OFFSET_INCL	1
NUM_PILOTS occurrences of the following record: { (NUM_PILOTS)	
PILOT_PN	9
SRCH_OFFSET	0 or 3
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	8 × RECORD_LEN
PWR_COMB_IND	1
CODE_CHAN_FCH	11
QOF_MASK_ID_FCH	2

(continues on next page)

3

1

Field	Length (bits)
NUM_SCH	0 or 5

NUM\_SCH occurrences of the following record

{ (NUM\_SCH)

FOR_SCH_ID	1
SCCL_INDEX	4
PILOT_INCL	1
CODE_CHAN_SCH	0 or 11
QOF_MASK_ID_SCH	0 or 2
} (NUM_SCH)	
} ((NUM_PILOTS)	
3X_FCH_INFO_INCL	1

If 3X\_FCH\_INFO\_INCL is set to '1', NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

3X_FCH_LOW_INCL	1
QOF_MASK_ID_FCH_LOW	0 or 2
CODE_CHAN_FCH_LOW	0 or 11
3X_FCH_HIGH_INCL	1
QOF_MASK_ID_FCH_HIGH	0 or 2
CODE_CHAN_FCH_HIGH	0 or 11
3X_SCH_INFO_INCL	0 or 1

If 3X\_SCH\_INFO\_INCL is included and set to '1', NUM\_SCH occurrences of the following record:

{ (NUM\_SCH)

FOR_SCH_ID	1
3X_SCH_LOW_INCL	1
QOF_MASK_ID_SCH_LOW	0 or 2
CODE_CHAN_SCH_LOW	0 or 11
3X_SCH_HIGH_INCL	1
QOF_MASK_ID_SCH_HIGH	0 or 2

<b>Field</b>	<b>Length (bits)</b>
CODE_CHAN_SCH_HIGH	0 or 11
<i>} (NUM_SCH)</i>	
<i>} (NUM_PILOTS)</i>	
CCSH_INCLUDED	1
USE_CCSH_ENCODER_TIME	0 or 1
CCSH_ENCODER_ACTION_TIME	0 or 6
<i>{(NUM_PILOTS)</i>	
<i>{(NUM_SCH)</i>	
CCSH_ENCODER_TYPE	0 or 1
<i>}(NUM_SCH)</i>	
<i>}(NUM_PILOTS)</i>	
RESERVED	0 - 7 (as needed)

1  
2

- 1 If CH\_IND = '010' or '110', the ACTIVE\_SET\_REC\_FIELDS shall be:

Field	Length (bits)
NUM_FOR_SCH	0 or 5

NUM\_FOR\_SCH occurrences of the following three fields:

{ (NUM\_FOR\_SCH)

FOR_SCH_ID	1
SCCL_INDEX	4
FOR_SCH_NUM_BITS_IDX	4

} (NUM\_FOR\_SCH)

NUM_REV_SCH	0 or 5
-------------	--------

NUM\_REV\_SCH occurrences of the following three fields:

{ (NUM\_REV\_SCH)

REV_SCH_ID	1
REV_WALSH_ID	1
REV_SCH_NUM_BITS_IDX	4

} (NUM\_REV\_SCH)

NUM_PILOTS	3
SRCH_OFFSET_INCL	1

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

PILOT_PN	9
SRCH_OFFSET	0 or 3
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	$8 \times \text{RECORD\_LEN}$
PWR_COMB_IND	1
CODE_CHAN_DCCH	11
QOF_MASK_ID_DCCH	2

(continues on next page)

1

Field	Length (bits)
NUM_SCH	0 or 5

NUM\_SCH occurrences of the following five fields:

{ (NUM\_SCH)

FOR_SCH_ID	1
SCCL_INDEX	4
PILOT_INCL	1
CODE_CHAN_SCH	0 or 11
QOF_MASK_ID_SCH	0 or 2

} (NUM\_SCH)

} (NUM\_PILOTS)

3X_DCCH_INFO_INCL	1
-------------------	---

If 3X\_DCCH\_INFO\_INCL is set to '1', NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

3X_DCCH_LOW_INCL	1
QOF_MASK_ID_DCCH_LOW	0 or 2
CODE_CHAN_DCCH_LOW	0 or 11
3X_DCCH_HIGH_INCL	1
QOF_MASK_ID_DCCH_HIGH	0 or 2
CODE_CHAN_DCCH_HIGH	0 or 11
3X_SCH_INFO_INCL	0 or 1

If 3X\_SCH\_INFO\_INCL is included and set to '1', NUM\_SCH occurrences of the following record:

{ (NUM\_SCH)

FOR_SCH_ID	1
3X_SCH_LOW_INCL	1
QOF_MASK_ID_SCH_LOW	0 or 2
CODE_CHAN_SCH_LOW	0 or 11
3X_SCH_HIGH_INCL	1
QOF_MASK_ID_SCH_HIGH	0 or 2

Field	Length (bits)
CODE_CHAN_SCH_HIGH	0 or 11
} (NUM_SCH)	
} (NUM_PILOTS)	
CCSH_INCLUDED	1
USE_CCSH_ENCODER_TIME	0 or 1
CCSH_ENCODER_ACTION_TIME	0 or 6
{(NUM_PILOTS)	
{(NUM_SCH)	
CCSH_ENCODER_TYPE	0 or 1
}(NUM_SCH)	
}(NUM_PILOTS)	
FUNDICATED_BCNC_IND	1

NUM\_PILOTS occurrence of the following record:

{ (NUM\_PILOTS)

FOR_CPCCH_WALSH	7
FOR_CPCSCH	5
} (NUM_PILOTS)	
RESERVED	0 - 7 (as needed)

1  
2



- 1 If CH\_IND = '111', the ACTIVE\_SET\_REC\_FIELDS shall be:

Field	Length (bits)
NUM_FOR_SCH	0 or 5

NUM\_FOR\_SCH occurrences of the following three fields:

{ (NUM\_FOR\_SCH)

FOR_SCH_ID	1
SCCL_INDEX	4
FOR_SCH_NUM_BITS_IDX	4

} (NUM\_FOR\_SCH)

NUM_REV_SCH	0 or 5
-------------	--------

NUM\_REV\_SCH occurrences of the following three fields:

{ (NUM\_REV\_SCH)

REV_SCH_ID	1
REV_WALSH_ID	1
REV_SCH_NUM_BITS_IDX	4

} (NUM\_REV\_SCH)

NUM_PILOTS	3
SRCH_OFFSET_INCL	1

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

PILOT_PN	9
SRCH_OFFSET	0 or 3
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	$8 \times \text{RECORD\_LEN}$
PWR_COMB_IND	1
CODE_CHAN_FCH	11
QOF_MASK_ID_FCH	2
CODE_CHAN_DCCH	11
QOF_MASK_ID_DCCH	2

(continues on next page)

1

Field	Length (bits)
NUM_SCH	0 or 5

NUM\_SCH occurrences of the following five field record:

{ (NUM\_SCH)

FOR_SCH_ID	1
SCCL_INDEX	4
PILOT_INCL	1
CODE_CHAN_SCH	0 or 11
QOF_MASK_ID_SCH	0 or 2

} (NUM\_SCH)

} (NUM\_PILOTS)

3X_FCH_INFO_INCL	1
3X_DCCH_INFO_INCL	1

If 3X\_FCH\_INFO\_INCL or 3X\_DCCH\_INFO\_INCL is set to '1',  
NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

3X_FCH_LOW_INCL	0 or 1
QOF_MASK_ID_FCH_LOW	0 or 2
CODE_CHAN_FCH_LOW	0 or 11
3X_FCH_HIGH_INCL	0 or 1
QOF_MASK_ID_FCH_HIGH	0 or 2
CODE_CHAN_FCH_HIGH	0 or 11
3X_DCCH_LOW_INCL	0 or 1
QOF_MASK_ID_DCCH_LOW	0 or 2
CODE_CHAN_DCCH_LOW	0 or 11
3X_DCCH_HIGH_INCL	0 or 1
QOF_MASK_ID_DCCH_HIGH	0 or 2
CODE_CHAN_DCCH_HIGH	0 or 11
3X_SCH_INFO_INCL	0 or 1

Field	Length (bits)
-------	---------------

If 3X\_SCH\_INFO\_INCL is included and set to '1', NUM\_SCH occurrences of the following record:

{ (NUM\_SCH)

FOR_SCH_ID	1
3X_SCH_LOW_INCL	1
QOF_MASK_ID_SCH_LOW	0 or 2
CODE_CHAN_SCH_LOW	0 or 11
3X_SCH_HIGH_INCL	1
QOF_MASK_ID_SCH_HIGH	0 or 2
CODE_CHAN_SCH_HIGH	0 or 11

} (NUM\_SCH)

} (NUM\_PILOTS)

CCSH_INCLUDED	1
USE_CCSH_ENCODER_TIME	0 or 1
CCSH_ENCODER_ACTION_TIME	0 or 6

{(NUM\_PILOTS)

{(NUM\_SCH)

CCSH_ENCODER_TYPE	0 or 1
-------------------	--------

} (NUM\_SCH)

} (NUM\_PILOTS)

FUNDICATED_BCNC_IND	1
REV_FCH_ASSIGNED	0 or 1

1

Field	Length (bits)
ADD_PLCM_FOR_FCH_INCL	0 or 1
ADD_PLCM_FOR_FCH_TYPE	0 or 1
ADD_PLCM_FOR_FCH_39	0 or 39
FOR_CPCCH_INFO_INCL	0 or 1

NUM\_PILOTS occurrence of the following record if  
FOR\_CPCCH\_INFO\_INCL is set to '1':

{ (NUM_PILOTS)	
FOR_CPCCH_WALSH	7
FOR_CPCSCH	5
} (NUM_PILOTS)	
RESERVED	0 - 7 (as needed)

2

3

- 1 If CH\_IND = '000', the ACTIVE\_SET\_REC\_FIELDS shall be:

Field	Length (bits)
EXT_CH_IND	5
RESERVED	3
EXT_ACTIVE_SET_REC_FIELDS	8 × (ACTIVE_SET_REC_LEN-1)

- 2 The EXT\_ACTIVE\_SET\_REC\_FIELDS shall be:

3

PDCH_CONTROL_HOLD	1
FULL_CI_FEEDBACK_IND	1
FOR_CPCCH_RATE	0 or 2
FOR_CPCCH_UPDATE_RATE	0 or 2
REV_CQICH_FRAME_OFFSET	4
REV_CQICH_REPS	2
REV_ACKCH_REPS	2
NUM_FOR_SCH	0 or 5
NUM_FOR_SCH occurrences of the following three fields: { (NUM_FOR_SCH)	
FOR_SCH_ID	1
SCCL_INDEX	4
FOR_SCH_NUM_BITS_IDX	4
} (NUM_FOR_SCH)	
NUM_REV_SCH	0 or 5
NUM_REV_SCH occurrences of the following three fields: { (NUM_REV_SCH)	
REV_SCH_ID	1
REV_WALSH_ID	1
REV_SCH_NUM_BITS_IDX	4
} (NUM_REV_SCH)	

(continues on next page)

4

5

Field	Length (bits)
NUM_PILOTS	3
SRCH_OFFSET_INCL	1
PDCH_GROUP_IND_INCL	1
FOR_PDCH_PARMS_INCL	1
FOR_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_ACKCH_PILOT	0 or 6
RLGAIN_CQICH_PILOT	0 or 6
NUM_SOFT_SWITCHING_FRAMES	0 or 4
NUM_SOFTSWITCHING_FRAMES	0 or 4
NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTSWITCHING_SLOTS	0 or 2
CHM_SWITCHING_PARMS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFTSWITCHING_FRAMES_CHM	0 or 4
NUM_SOFT_SWITCHING_SLOTS_CHM	0 or 2
NUM_SOFTSWITCHING_SLOTS_CHM	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTSWITCHING_DELAY	0 or 8
FOR_PDCH_COMMON_PARMS	0 or 1
WALSH_TABLE_ID	0 or 3
NUM_PDCCH	0 or 3
NUM_PDCCH+1 occurrences of the following record: { (NUM_PDCCH+1)	
FOR_PDCCH_WALSH	0 or 6
} (NUM_PDCCH+1)	
TX_DISABLED_TIMER_INCL	1
TX_DISABLED_TIMER	0 or 8
FOR_GCH_ASSIGNED	0 or 1
FOR_RCCH_ASSIGNED	0 or 1
FOR_RCCH_DRC_MODE	0 or 1
FOR_RCCH_REPETITION	0 or 2

Field	Length (bits)
FOR_RCCH_UPDATE_RATE	0 or 2
FOR_ACKCH_ASSIGNED	0 or 1
FOR_ACKCH_MODE	0 or 2
FOR_ACKCH_COMB_SEL	0 or 1
REV_PDCH_PARMS_INCL	0 or 1
REV_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_SPICH_PILOT	0 or 6
RLGAIN_REQCH_PILOT	0 or 6
RLGAIN_PDCCH_PILOT	0 or 6
REV_PDCH_PARMS_1_INCL	0 or 1
REV_PDCH_TABLE_SEL	0 or 1
REV_PDCH_MAX_AUTO_TPR	0 or 8
NUM_PILOTS occurrences of the following record: { (NUM_PILOTS)	
PILOT_PN	9
SRCH_OFFSET	0 or 3
ADD_PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	8 × RECORD_LEN

(continues on next page)

1

<b>Field</b>	<b>Length (bits)</b>
FOR_PDCH_INCL	1
WALSH_TABLE_ID	0 or 3
NUM_PDCCH	0 or 3
NUM_PDCCH+1 occurrences of the following record: { (NUM_PDCCH+1)	
FOR_PDCCH_WALSH	0 or 6
} (NUM_PDCCH+1)	
MAC_ID	0 or 8
REV_CQICH_COVER	0 or 3
FOR_CPCCH_WALSH	0 or 7
FOR_CPCSCH	0 or 7
PWR_COMB_IND	1
PDCH_GROUP_IND	0 or 1
CODE_CHAN_FCH	0 or 11
QOF_MASK_ID_FCH	0 or 2
CODE_CHAN_DCCH	0 or 11
QOF_MASK_ID_DCCH	0 or 2
FOR_ACKCH_WALSH_INDEX	0 or 6
FOR_ACKSCH_INDEX	0 or 8
FOR_RCCH_INCL	0 or 1
FOR_RCCH_WALSH_INDEX	0 or 7
FOR_RCSCH_INDEX	0 or 7
NUM_FOR_GCH	0 or 2
NUM_FOR_GCH occurrences of the following record: { (NUM_FOR_GCH)	
FOR_GCH_WALSH_INDEX	0 or 8
} (NUM_FOR_GCH)	

(continues on next page)

2



1

Field	Length (bits)
NUM_SCH	0 or 5
NUM_SCH occurrences of the following five field record: { (NUM_SCH)	
FOR_SCH_ID	1
SCCL_INDEX	4
PILOT_INCL	1
CODE_CHAN_SCH	0 or 11
QOF_MASK_ID_SCH	0 or 2
} (NUM_SCH)	
} (NUM_PILOTS)	
CCSH_INCLUDED	1
USE_CCSH_ENCODER_TIME	0 or 1
CCSH_ENCODER_ACTION_TIME	0 or 6
{ (NUM_PILOTS)	
{ (NUM_SCH)	
CCSH_ENCODER_TYPE	0 or 1
} (NUM_SCH)	
} (NUM_PILOTS)	
FUNDICATED_BCNC_IND	1
ADD_PLCM_FOR_FCH_INCL	0 or 1
ADD_PLCM_FOR_FCH_TYPE	0 or 1
ADD_PLCM_FOR_FCH_39	0 or 39
RESERVED	0 - 7 (as needed)

2

3

USE\_TIME - Use action time indicator.

4

5

This field indicates whether an explicit action time is specified in this message.

6

7

8

If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

9

ACTION\_TIME - Action time.

1			If the USE_TIME field is set to '1', the base station shall set
2			this field to the System Time minus $\text{FRAME\_OFFSET}_S \times 1.25$
3			ms, in units of 80 ms (modulo 64), at which the handoff is to
4			take effect. If the USE_TIME field is set to '0', the base station
5			shall omit this field.
6	HDM_SEQ	-	<i>Universal Handoff Direction Message</i> sequence number.
7			This field is used by the mobile station in the <i>Power</i>
8			<i>Measurement Report Message</i> to identify the order in which
9			the reported pilot strengths are sent.
10			The base station shall set this field to the handoff message
11			sequence number, as specified in 2.6.6.2.2.10.
12	PARMS_INCL	-	Parameters included indicator.
13			The base station shall set this field to '1', if P_REV and
14			SERV_NEG_TYPE are included; otherwise, the base station
15			shall set this field '0'.
16	P_REV	-	Protocol revision level.
17			If PARMS_INCL is set to '1', the base station shall set this
18			field to the base station protocol revision level that the mobile
19			station is to use after completion of the handoff; otherwise,
20			the base station shall omit this field.
21	SERV_NEG_TYPE	-	Service negotiation type.
22			If PARMS_INCL is set to '1', the base station shall include the
23			field SERV_NEG_TYPE and set this field as described below;
24			otherwise, the base station shall omit this field.
25			If the mobile station is to use service negotiation, the base
26			station shall set this field to '1'. If the mobile station is to use
27			service option negotiation, the base station shall set this field
28			to '0'.
29	SEARCH_INCLUDED	-	Pilot search parameters included.
30			If the mobile station is to change its pilot search parameters,
31			the base station shall set this field to '1'; otherwise, the base
32			station shall set this field to '0'.
33	SRCH_WIN_A	-	Search window size for the Active Set and Candidate Set.
34			If SEARCH_INCLUDED is set to '1', the base station shall
35			include the field SRCH_WIN_A and set this field to the
36			window size parameter shown in Table 2.6.6.2.1-1
37			corresponding to the number of PN chips that the mobile
38			station is to search for pilots in the Active Set and the
39			Candidate Set; otherwise, the base station shall omit this
40			field.
41	SRCH_WIN_N	-	Search window size for the Neighbor Set.

1			If SEARCH_INCLUDED is set to '1', the base station shall
2			include the field SRCH_WIN_N and set this field to the
3			window size parameter shown in Table 2.6.6.2.1-1
4			corresponding to the search window size to be used by mobile
5			stations for the Neighbor Set after completion of the handoff;
6			otherwise, the base station shall omit this field.
7	SRCH_WIN_R	-	Search window size for the Remaining Set.
8			If SEARCH_INCLUDED is set to '1', the base station shall
9			include the field SRCH_WIN_R and set this field to the
10			window size parameter shown in Table 2.6.6.2.1-1
11			corresponding to the search window size to be used by mobile
12			stations for the Remaining Set after completion of the
13			handoff; otherwise, the base station shall omit this field.
14	T_ADD	-	Pilot detection threshold.
15			This value is used by the mobile station to trigger the transfer
16			of a pilot from the Neighbor Set or Remaining Set to the
17			Candidate Set (see 2.6.6.2.6) and to trigger the sending of the
18			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
19			<i>Strength Measurement Message</i> initiating the handoff process
20			(see 2.6.6.2.5.2).
21			If SEARCH_INCLUDED is set to '1', the base station shall
22			include the field T_ADD and set this field to the pilot
23			detection threshold, expressed as an unsigned binary
24			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ ; otherwise, the base
25			station shall omit this field.
26	T_DROP	-	Pilot drop threshold.
27			This value is used by mobile stations to start a handoff drop
28			timer for pilots in the Active Set and the Candidate Set (see
29			2.6.6.2.3).
30			If SEARCH_INCLUDED is set to '1', the base station shall
31			include the field T_DROP and set this field to the pilot drop
32			threshold, expressed as an unsigned binary number equal to
33			$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ ; otherwise, the base station shall omit
34			this field.
35	T_COMP	-	Active Set versus Candidate Set comparison threshold.
36			The mobile station transmits a <i>Pilot Strength Measurement</i>
37			<i>Message</i> or <i>Extended Pilot Strength Measurement Message</i>
38			when the strength of a pilot in the Candidate Set exceeds that
39			of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
40			If SEARCH_INCLUDED is set to '1', the base station shall
41			include the field T_COMP and set this field to the threshold
42			Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB;
43			otherwise, the base station shall omit this field.

1	T_TDROP	-	Drop timer value.
2			Timer value after which an action is taken by the mobile
3			station for a pilot that is a member of the Active Set or
4			Candidate Set, and whose strength has not become greater
5			than T_DROP. If the pilot is a member of the Active Set, a
6			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot</i>
7			<i>Strength Measurement Message</i> is issued. If the pilot is a
8			member of the Candidate Set, it will be moved to the Neighbor
9			Set.
10			If SEARCH_INCLUDED is set to '1', the base station shall
11			include the field T_TDROP and set this field to the T_TDROP
12			value shown in Table 2.6.6.2.3-1 corresponding to the drop
13			timer value to be used by the mobile station; otherwise, the
14			base station shall omit this field.
15	SOFT_SLOPE	-	The slope in the inequality criterion for adding a pilot to the
16			Active Set, or dropping a pilot from the Active Set (see
17			2.6.6.2.3 and 2.6.6.2.5.2).
18			If SEARCH_INCLUDED is set to '1', the base station shall
19			include the field SOFT_SLOPE in the additional fields and set
20			this field as an unsigned binary number; otherwise, the base
21			station shall omit this field.
22	ADD_INTERCEPT	-	The intercept in the inequality criterion for adding a pilot to
23			the Active Set (see 2.6.6.2.5.2).
24			If SEARCH_INCLUDED is set to '1', the base station shall
25			include the field ADD_INTERCEPT in the additional fields and
26			set this field as a two's complement signed binary number in
27			units of 0.5 dB; otherwise, the base station shall omit this
28			field.
29	DROP_INTERCEPT	-	The intercept in the inequality criterion for dropping a pilot
30			from the Active Set (see 2.6.6.2.3).
31			If SEARCH_INCLUDED is set to '1', the base station shall
32			include the field DROP_INTERCEPT in the additional fields
33			and set this field as a two's complement signed binary
34			number in units of 0.5 dB; otherwise, the base station shall
35			omit this field.
36	EXTRA_PARMS	-	Extra parameters included.
37			If the base station includes the fields PACKET_ZONE_ID,
38			FRAME_OFFSET, PRIVATE_LCM, RESET_L2, RESET_FPC,
39			SERV_NEG_TYPE, ENCRYPT_MODE, NOM_PWR_EXT,
40			NOM_PWR, RLGAİN_TRAFFIC_PILOT, DEFAULT_RLAG,
41			NUM_PREAMBLE, BAND_CLASS, PERIODIC_SEARCH, or
42			CDMA_FREQ in this message, the base station shall set this
43			field to '1'; otherwise, the base station shall set this field to
44			'0'.
45	PACKET_ZONE_ID	-	Packet data services zone identifier.
46			If EXTRA_PARMS is set to '1', the base station shall include
47			the field PACKET_ZONE_ID and set this field as described
48			below; otherwise, the base station shall omit this field.

1			If the base station supports a packet data service zone, the
2			base station shall set this field to the non-zero packet data
3			services zone identifier that the mobile station is to use after
4			completion of the handoff.
5			If the base station does not support a packet data service
6			zone, the base station shall set this field to '00000000'.
7	FRAME_OFFSET	-	Frame offset.
8			The Forward and Reverse Traffic Channel frames are delayed
9			FRAME_OFFSET $\times$ 1.25 ms relative to system timing (see [2]).
10			If EXTRA_PARMS is set to '1', the base station shall include
11			the field FRAME_OFFSET and set this field to the Forward
12			and Reverse Traffic Channel frame offset (the frame offset
13			does not apply to the F-PDCH); otherwise, the base station
14			shall omit this field.
15	PRIVATE_LCM	-	Private long code mask indicator.
16			This field is used to change the long code mask after a hard
17			handoff.
18			If EXTRA_PARMS is set to '1', the base station shall include
19			the field PRIVATE_LCM and set this field as described below;
20			otherwise, the base station shall omit this field.
21			If the private long code mask is to be used after the handoff,
22			the base station shall set this field to '1'; otherwise, the base
23			station shall set this field to '0'.
24	RESET_L2	-	Reset acknowledgment procedures command.
25			This field is used to reset acknowledgment processing in the
26			mobile station.
27			If EXTRA_PARMS is set to '1', the base station shall include
28			the field RESET_L2 and set this field as described below;
29			otherwise, the base station shall omit this field.
30			If the field is included and the mobile station is to reset its
31			acknowledgment procedures, the base station shall set this
32			field to '1'; otherwise, the base station shall set this field to
33			'0'.
34	RESET_FPC	-	Reset Forward Traffic Channel power control.
35			This field is used to reset the Forward Traffic Channel power
36			control counters.
37			If EXTRA_PARMS is set to '1', the base station shall include
38			the field RESET_FPC and set this field as described below;
39			otherwise, the base station shall omit this field.
40			The base station shall set this field to '0' if the Forward Traffic
41			Channel power control counters are to be maintained after
42			completion of the handoff. If the counters are to be initialized
43			as specified in 2.6.4.1.1.1, then the base station shall set this
44			field to '1'.

1	ENCRYPT_MODE	-	Message encryption mode.
2			If EXTRA_PARMS is set to '1', the base station shall include
3			the field ENCRYPT_MODE and set this field to the
4			ENCRYPT_MODE value shown in Table 3.7.2.3.2.8-2
5			corresponding to the encryption mode that is to be used for
6			messages sent on the Forward and Reverse Traffic Channels,
7			as specified in 2.3.12.2; otherwise, the base station shall omit
8			this field.
9	NOM_PWR_EXT	-	Extended nominal transmit power.
10			If EXTRA_PARMS is set to '1', the base station shall include
11			this field and set this field as described below; otherwise, the
12			base station shall omit this field.
13			If the mobile station is being handed off to a base station
14			operating in Band Class 0 or Band Class 3, the base station
15			shall set this field to '0'; otherwise, the base station shall set
16			it as follows:
17			If the correction factor to be used by the mobile station in the
18			open loop power estimate is between -24 dB and -9 dB
19			inclusive; otherwise (the correction factor is in the range -8
20			dB to 7 dB inclusive), the base station shall set this field to
21			'0'.
22	NOM_PWR	-	Nominal transmit power offset.
23			If EXTRA_PARMS is set to '1', the base station shall include
24			the field NOM_PWR and set this field to the correction factor
25			to be used by the mobile station in the open loop power
26			estimate, expressed as a two's complement value in units of 1
27			dB (see [2]); otherwise, the base station shall omit this field.
28	RLGAIN_TRAFFIC_PILOT	-	Gain adjustment of the Reverse Traffic Channel relative to the
29			Reverse Pilot Channel power for Radio configurations greater
30			than 2.
31			If EXTRA_PARMS is set to '1', the base station shall include
32			this field and set it to the correction factor to be used by
33			mobile stations in setting the power of a reverse traffic
34			channel, expressed as a two's complement value in units of
35			0.125 dB (see [2]); otherwise, the base station shall omit this
36			field.
37	DEFAULT_RLAG	-	Default reverse link attribute gain used indicator.
38			If EXTRA_PARMS is set to '0', the base station shall omit this
39			field; otherwise, the base station shall set this field as follows:
40			If the mobile station is to use the default values for the
41			reverse link attribute gain, as specified in [2] after completion
42			of handoff, the base station shall set this field to '1';
43			otherwise, the base station shall set this field to '0'.
44	NUM_PREAMBLE	-	Number of Traffic Channel preamble.

1 If EXTRA\_PARMS is set to '0', the base station shall omit the  
2 NUM\_PREAMBLE field; otherwise, the base station shall  
3 include this field and set it to the length of Traffic Channel  
4 preamble that the mobile station is to send when performing  
5 a handoff; as follows:

6 If, after the handoff, radio configuration 1 or radio  
7 configuration 2 is to be used, the base station shall set  
8 NUM\_PREAMBLE to the Traffic Channel preamble length in  
9 20 ms units; otherwise, the base station shall set  
10 NUM\_PREAMBLE to the value shown in Table 3.7.3.3.2.17-1  
11 corresponding to the Traffic Channel preamble length in 1.25  
12 ms units.

13 BAND\_CLASS - Band class.

14 If EXTRA\_PARMS is set to '1', the base station shall include  
15 the field BAND\_CLASS and set this field to the CDMA band  
16 class corresponding to the CDMA frequency assignment for  
17 the CDMA Channel as specified in [30]; otherwise, the base  
18 station shall omit this field.

19 CDMA\_FREQ - Frequency assignment.

20 If EXTRA\_PARMS is set to '0', the base station shall omit this  
21 field; otherwise, the base station shall set this field as follows:

22 If a Radio Configuration associated with Spreading Rate 1 is  
23 used, the base station shall set this field to the CDMA  
24 Channel number, in the specified CDMA band class,  
25 corresponding to the CDMA frequency assignment for the  
26 CDMA Channel as specified in [2]. If a Radio Configuration  
27 associated with Spreading Rate 3 is used, the base station  
28 shall include the field CDMA\_FREQ and set this field to the  
29 CDMA Channel number, in the specified CDMA band class,  
30 corresponding to the CDMA center SR3 frequency assignment  
31 for the CDMA Channel.

32 RETURN\_IF\_HANDOFF\_FAIL - Return on failure flag.

33 If EXTRA\_PARMS is set to '1', the base station shall include  
34 the field RETURN\_IF\_HANDOFF\_FAIL and set this field as  
35 described below; otherwise, the base station shall omit this  
36 field.

37 If the base station includes this field, it shall set this field to  
38 '1' if the mobile station is to resume the use of the Active Set  
39 on the Serving Frequency following an unsuccessful hard  
40 handoff attempt, as specified in 2.6.6.2.8.2; otherwise, the  
41 base station shall set this field to '0'.

42 COMPLETE\_SEARCH - Flag to complete search.

43 If RETURN\_IF\_HANDOFF\_FAIL is included and is set to '1',  
44 the base station shall include the field COMPLETE\_SEARCH  
45 and set this field as described below; otherwise, the base  
46 station shall omit this field.

1			If the base station includes this field, it shall set this field to
2			'1' if the mobile station is to complete the search of the
3			Candidate Frequency Search Set before resuming the use of
4			the Active Set on the Serving Frequency when an inter-
5			frequency handoff attempt is unsuccessful, as specified in
6			2.6.6.2.8.2; otherwise, the base station shall set this field to
7			'0'.
8	PERIODIC_SEARCH	-	Flag to search the Candidate Frequency periodically.
9			If EXTRA_PARMS is set to '1', the base station shall include
10			the field PERIODIC_SEARCH and set this field as described
11			below; otherwise, the base station shall omit this field.
12			If the base station includes this field, it shall set this field to
13			'1' if the mobile station is to periodically search the Candidate
14			Frequency, as specified in 2.6.6.2.8.3; otherwise, the base
15			station shall set this field to '0'.
16	SCR_INCLUDED	-	Service Configuration Record included indicator.
17			If EXTRA_PARMS is set to '1', the base station shall include
18			the field SCR_INCLUDED and shall set this field as described
19			below; otherwise, the base station shall omit this field.
20			The base station shall set this field to '1' if it includes the
21			Service Configuration Record in the message; otherwise, the
22			base station shall set this field to '0'.
23	SERV_CON_SEQ	-	Connect sequence number.
24			If SCR_INCLUDED is included and is set to '1', the base
25			station shall include the field SERV_CON_SEQ and shall set
26			this field to the connect sequence number pertaining to this
27			service configuration as specified in 3.6.4.1.2.1.2.
28	If SCR_INCLUDED is included and is set to '1', the base station shall include one		
29	occurrence of the following three-field record to specify the service configuration.		
30	RECORD_TYPE	-	Information record type.
31			If SCR_INCLUDED is included and is set to '1', the base
32			station shall include the field RECORD_TYPE and shall set
33			this field to the record type value shown in Table 3.7.5-1
34			corresponding to the Service Configuration information
35			record.
36	RECORD_LEN	-	Information record length.
37			If SCR_INCLUDED is included and is set to '1', the base
38			station shall include the field RECORD_LEN and shall set
39			this field to the number of octets included in the type-specific
40			fields of the Service Configuration information record.
41	Type-specific fields	-	Type-specific fields.
42			If SCR_INCLUDED is included and is set to '1', the base
43			station shall include the type specific fields and shall set
44			these fields as specified in 3.7.5.7 for the Service
45			Configuration information record.



1	NNSCR_INCLUDED	-	Non-negotiable Service Configuration Record Included indicator
2			
3			The base station shall omit this field, if EXTRA_PARMS is set to '0'; otherwise, the base station shall include this field and set this field as described below:
4			
5			
6			The base station shall set this field to '1', if the Non-negotiable Service Configuration record is included in this message; otherwise, the base station shall set this field to '0'.
7			
8			
9	If NNSCR_INCLUDED is included and is set to '1', the base station shall include one occurrence of the following three-field record to specify the non-negotiable service configuration.		
10			
11			
12	RECORD_TYPE	-	Information record type.
13			If NNSCR_INCLUDED is included and is set to '1', the base station shall include the field RECORD_TYPE and shall set this field to the record type value shown in Table 3.7.5-1 corresponding to the Non-Negotiable Service Configuration information record.
14			
15			
16			
17			
18	RECORD_LEN	-	Information record length.
19			If NNSCR_INCLUDED is included and is set to '1', the base station shall include the field RECORD_LEN and shall set this field to the number of octets included in the type-specific fields of the Non-Negotiable Service Configuration information record.
20			
21			
22			
23			
24	Type-specific fields	-	Type-specific fields.
25			If NNSCR_INCLUDED is included and is set to '1', the base station shall include the type specific fields and shall set these fields as specified in 3.7.5.20 for the Non-Negotiable Service Configuration information record.
26			
27			
28			
29	USE_PWR_CNTL_STEP	-	Power control step size indicator.
30			The base station shall set this field to '1' if the field PWR_CNTL_STEP is included in the message.
31			
32	PWR_CNTL_STEP	-	Power control step size.
33			If USE_PWR_CNTL_STEP is set to '1', then the base station shall include the field PWR_CNTL_STEP and set this field to the step size that the mobile station is to use for closed loop power control, according to Table 3.7.3.3.2.25-1; otherwise, the base station shall omit this field.
34			
35			
36			
37			
38	CLEAR_RETRY_DELAY	-	Clear retry delay indicator.
39			The base station shall set this field to '1' if the mobile station is to clear any existing retry delay which it has stored (see 2.6.6.2.5.1); otherwise, the base station shall set this field to '0'.
40			
41			
42			
43	SCH_INCL	-	Supplemental Channel related parameters included indicator.

1                   The base station shall set this field to '1' if this message  
2                   includes the NUM\_FOR\_ASSIGN, NUM\_REV\_ASSIGN,  
3                   NUM\_FOR\_SCH, NUM\_REV\_SCH, and NUM\_SCH fields.  
4                   Otherwise, the base station shall set this field to '0'.

5       NUM\_FOR\_ASSIGN   -   Number of Forward Supplemental Channel assigned.  
6                            If SCH\_INCL is set to '0', the base station shall omit this field;  
7                            otherwise, the base station shall set this field to the number  
8                            of Forward Supplemental Channel assigned.

9       The base station shall include NUM\_FOR\_ASSIGN occurrences of the following five fields  
10       (FOR\_SCH\_ID, FOR\_SCH\_DURATION, FOR\_SCH\_START\_TIME\_INCL,  
11       FOR\_SCH\_START\_TIME, and SCCL\_INDEX).

12       FOR\_SCH\_ID     -   Forward Supplemental Channel identifier.  
13                            The base station shall set this field to the Identifier of the  
14                            Forward Supplemental Channel.

15       FOR\_SCH\_DURATION   -   Duration of Forward Supplemental Channel assignment.  
16                            The base station shall set this field to the duration (see Table  
17                            3.7.3.3.2.37-3), starting at the start time of the message  
18                            specified by FOR\_SCH\_START\_TIME, during which the  
19                            mobile station is to process the Forward Supplemental  
20                            Channel.

21                            The base station shall set this field to '0000' to indicate that  
22                            the mobile station should stop processing the Forward  
23                            Supplemental Channel starting at the explicit start time of  
24                            the message specified by FOR\_SCH\_START\_TIME or at the  
25                            implicit start time if FOR\_SCH\_START\_TIME\_INCL is set to  
26                            '0'.

27                            The base station shall set this field to '1111' to indicate that  
28                            the mobile station should process the Forward Supplemental  
29                            Channel, starting at the start time of the message specified by  
30                            FOR\_SCH\_START\_TIME, until the start time specified by a  
31                            subsequent Forward Supplemental Channel assignment  
32                            corresponding to the same forward Supplemental Channel  
33                            (see 2.6.6.2.5.1.1).

34       FOR\_SCH\_START\_TIME\_INCL   -   Start time included indicator.  
35                            If FOR\_SCH\_DURATION is not equal to '0000', the base  
36                            station shall set this field to '1'. If FOR\_SCH\_DURATION is  
37                            equal to '0000', the base station shall set this field as follows:  
38                            The base station shall set this field to '1' if  
39                            FOR\_SCH\_START\_TIME is included in this message;  
40                            otherwise, the base station shall set this field to '0'.

41       FOR\_SCH\_START\_TIME   -   Start time for Forward Supplemental Channel Assignment.

1		If FOR_SCH_START_TIME_INCL is set to '0', the base station
2		shall omit this field; otherwise, the base station shall set this
3		field to the System Time, in units of time specified by
4		START_TIME_UNIT, (modulo 32) at which the mobile station
5		is to start processing (if FOR_SCH_DURATION is not equal to
6		'0000') or stop processing (if FOR_SCH_DURATION is equal to
7		'0000') the Forward Supplemental Channel specified in this
8		message. The explicit start time to start or stop processing
9		the Forward Supplemental Channels is the time for which
10		$\lfloor t / (\text{START\_TIME\_UNIT} + 1) \rfloor - \text{FOR\_SCH\_START\_TIME} \bmod 32 =$
11		0,
12		where t is the System Time in units of 20 ms.
13	SCCL_INDEX	- Supplemental Channel Code list index.
14		The base station shall set this field to the index of the record
15		in the Forward Supplemental Channel Code list
16		corresponding to the FOR_SCH_ID. The base station shall
17		include an SCCL_INDEX whose SCH Active Set is a subset of
18		the Active Set of the Fundamental Channel, Dedicated
19		Control Channel, or both.
20	NUM_REV_ASSIGN	- Number of Reverse Supplemental Channel assigned.
21		If SCH_INCL is set to '0', the base station shall omit this field;
22		otherwise, the base station shall set this field to the number
23		of Reverse Supplemental Channel assigned.
24	The base station shall include NUM_REV_ASSIGN occurrences of the following five fields	
25	(REV_SCH_ID, REV_SCH_DURATION, REV_SCH_START_TIME_INCL,	
26	REV_SCH_START_TIME, and REV_SCH_NUM_BITS_IDX).	
27	REV_SCH_ID	- Reverse Supplemental Channel Identifier.
28		The base station shall set this field to the identifier of the
29		Reverse Supplemental Channel.
30	REV_SCH_DURATION	- Duration of Reverse Supplemental Channel assignment.
31		The base station shall set this field to '0000' to indicate that
32		the mobile station is to stop transmitting on the Reverse
33		Supplemental Channel specified by REV_SCH_ID at the
34		explicit start time specified by REV_SCH_START_TIME or at
35		the implicit start time if REV_SCH_START_TIME_INCL is set
36		to '0'. The base station shall set this field to '1111' to indicate
37		that the mobile station may transmit on the Reverse
38		Supplemental Channel specified by REV_SCH_ID, starting at
39		the explicit start time specified by REV_SCH_START_TIME in
40		this message, until the start time specified by a subsequent
41		Reverse Supplemental Channel assignment corresponding to
42		the same Supplemental Channel (see 2.6.6.2.5.1.1). The base
43		station shall set this field to the duration according to Table
44		3.7.3.3.2.37-3, starting at the explicit start time specified by
45		REV_SCH_START_TIME, during which the mobile station
46		may transmit on the Reverse Supplemental Channel specified
47		by REV_SCH_ID.

1	REV_SCH_START_TIME_INCL	-	Start time included indicator.
2			If REV_SCH_DURATION is not equal to '0000', the base
3			station shall set this field to '1'. If REV_SCH_DURATION is
4			equal to '0000', the base station shall set this field as follows:
5			The base station shall set this field to '1' if
6			REV_SCH_START_TIME is included in this message;
7			otherwise, the base station shall set this field to '0'.
8	REV_SCH_START_TIME	-	Start time for Reverse Supplemental Channel Assignment.
9			If REV_SCH_START_TIME_INCL is set to '0', the base station
10			shall omit this field; otherwise, the base station shall set this
11			field to the System Time, in units of time specified by
12			START_TIME_UNIT, (modulo 32) at which the mobile station
13			may start transmitting (if REV_SCH_DURATION is not equal
14			to '0000') or stop transmitting (if REV_SCH_DURATION is
15			equal to '0000') on the Reverse Supplemental Channel
16			specified in this message. The explicit start time to start or
17			stop transmitting on the Reverse Supplemental Channel is
18			the time for which
19			$\lfloor t / (\text{START\_TIME\_UNIT}_s + 1) \rfloor - \text{REV\_SCH\_START\_TIME} \bmod$
20			$32 = 0,$
21			where t is the System Time in units of 20 ms.
22	REV_SCH_NUM_BITS_IDX	-	Reverse Supplemental Channel number of bits per frame
23			index granted by the base station.
24			If USE_FLEX_NUM_BITS is equal to '0' or if
25			USE_FLEX_NUM_BITS is equal to '1' and
26			RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
27			the base station shall set this field according to Table
28			3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
29			number of information bits per frame and the number of CRC
30			bits per frame, that the mobile station may transmit on the
31			reverse Supplemental Channel identified by REV_SCH_ID.
32			If USE_FLEX_NUM_BITS is equal to '1' and
33			RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
34			then the base station shall set this field to indicate the
35			Reverse Supplemental Channel number of information bits
36			per frame that the mobile station may transmit on the
37			Reverse Supplemental Channel identified by REV_SCH_ID to
38			be NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
39			[REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
40			Channel number of CRC bits per frame that the mobile
41			station may transmit on the Reverse Supplemental Channel
42			identified by REV_SCH_ID to be
43			CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
44			[REV_SCH_NUM_BITS_IDX].
45	FPC_SUBCHAN_GAIN	-	Forward power control subchannel relative gain.

1			The base station shall set FPC_SUBCHAN_GAIN equal to the
2			power level of the forward link power control subchannel
3			relative to that of 20 ms frames at a 9600 bps or 14400 bps
4			rate on the Forward Fundamental Channel or the Forward
5			Dedicated Control Channel indicated by FPC_PRI_CHAN <sub>S</sub> .
6			The base station shall set the value in units of 0.25 dB.
7	USE_PC_TIME	-	Use power control action time indicator.
8			This field indicates whether an explicit time
9			[PC_ACTION_TIME] at which a new value for power control
10			sub-channel to traffic ratio [FPC_SUBCHAN_GAIN] takes
11			effect is specified in the message.
12			If an explicit action time is specified in this message, the base
13			station shall set this field to '1'; otherwise, the base station
14			shall set this field to '0'.
15	PC_ACTION_TIME	-	Power Control Subchannel gain action time.
16			If the USE_PC_TIME field is set to '1', the base station shall
17			set this field to the System Time minus FRAME_OFFSET <sub>S</sub> ×
18			1.25 ms, in units of 80 ms (modulo 64), at which
19			FPC_SUBCHAN_GAIN specified in this message is to take
20			effect. If the USE_PC_TIME field is set to '0', the base station
21			shall omit this field.
22	CH_IND	-	Channel Indicator.
23			The base station shall set this field as shown in Table
24			3.7.3.3.2.36-1.

1

**Table 3.7.3.3.2.36-1. Channel Indicator**

<b>CH_IND (Binary)</b>	<b>Physical Resource(s) Allocated</b>
000	Refer to EXT_CH_IND.
001	Reserved
010	Dedicated Control Channel
011	Reserved
100	Reserved
101	For Radio Configuration greater than 2, Fundamental Channel and Continuous Reverse Pilot Channel; For Radio Configuration 1 or 2, Fundamental Channel only.
110	Dedicated Control Channel and Continuous Reverse Pilot Channel
111	Fundamental Channel, Dedicated Control Channel and Continuous Reverse Pilot Channel

2

3 ACTIVE\_SET\_REC\_LEN - Active Set record length.

4 The base station shall set this field to the number of octets in  
5 the ACTIVE\_SET\_REC\_FIELDS included in this message.

6 ACTIVE\_SET\_REC\_FIELDS - Active Set record fields.

7 The Active Set record fields are determined by the value of  
8 CH\_IND, as described below.

9 REV\_FCH\_GATING\_MODE - Reverse eighth gating mode indicator.

10 If CH\_IND is set to '010' or '110', or if EXT\_CH\_IND does not  
11 signal allocation of R-FCH, then the base station shall omit  
12 this field; otherwise, the base station include this field and  
13 set it as follows:14 The base station shall set this field to '1' if the mobile station  
15 is allowed to perform the reverse eighth gating mode after  
16 handoff; otherwise, the base station shall set this field to '0'.

17 REV\_PWR\_CNTL\_DELAY\_INCL - Reverse power control delay included indicator.

18 If REV\_FCH\_GATING\_MODE is not included, or is included  
19 and set to '0', then the base station shall omit this field;  
20 otherwise, the base station shall include this field and set it  
21 as follows.22 The base station shall set this field to '1' if  
23 REV\_PWR\_CNTL\_DELAY is included in this message;  
24 otherwise, the base station shall set this field to '0'.

1	REV_PWR_CNTL_DELAY	-	The reverse power control delay.
2			If REV_PWR_CNTL_DELAY_INCL is not included, or is
3			included and set to '0', then the base station shall omit this
4			field; otherwise, the base station shall include this field and
5			set it as follows:
6			The base station shall set this field to the closed-loop reverse
7			power control delay minus one (the closed-loop reverse power
8			control delay is the time between the end of a gated-on
9			reverse PCG and the beginning of the reverse PCG where the
10			corresponding feedback is sent on the Forward Power Control
11			Subchannel, see [2]), in units of 1.25 ms.
12	D_SIG_ENCRYPT_MODE	-	Dedicated channel signaling encryption mode indicator.
13			If ENCRYPT_MODE is included and is set to '11', the base station
14			shall include this field and shall set it to the dedicated channel
15			signaling encryption mode, as shown in Table 3.7.4.5-1;
16			otherwise the base station shall omit this field.
17	ENC_KEY_SIZE	-	Encryption key size indication.
18			If ENCRYPT_MODE is included and is set to '10' or '11', the
19			base station shall include this field and set it to the
20			encryption key size, as shown in Table 3.7.4.5-2; otherwise,
21			the base station shall omit this field.
22	3XFL_1XRL_INCL	-	3X Forward Link and 1X Reverse Link indicator.
23			The base station shall set this field to '1' if the base station is
24			assigning 3X traffic channel on the Forward Link and 1X
25			traffic channel on the Reverse Link; otherwise, the base
26			station shall set this field to '0'.
27	1XRL_FREQ_OFFSET	-	1X Reverse Link frequency offset.
28			If 3XFL_1XRL_INCL is set to '0', the base station shall omit
29			this field; otherwise, the base station shall set this field as
30			follows:
31			The base station shall set this field to the value shown in
32			Table 3.7.2.3.2.21-8 corresponding to the frequency offset of
33			the 1X reverse link.

1	SYNC_ID_INCL	-	Service Configuration synchronization identifier included indicator.
2			
3			If the SCR_INCLUDED field is included and is set to '1' or the
4			NNSCR_INCLUDED field is included and is set to '1', or
5			P_REV_IN_USE is equal or greater than 11, the base station
6			shall include this field; otherwise, the base station shall omit
7			this field. If included, the base station shall set this field as
8			follows:
9			The base station shall set this field to '1' if the SYNC_ID field
10			is included in this message; otherwise, the base station shall
11			set this field to '0'.
12	SYNC_ID_LEN	-	Service Configuration synchronization identifier length.
13			If the SYNC_ID_INCL field is not included or is included and
14			is set to '0', the base station shall omit this field; otherwise,
15			the base station shall include this field and set it as follows:
16			The base station shall set this field to the length (in octets) of
17			the SYNC_ID field included in this message. The base station
18			shall set this field to a value larger than zero.
19	SYNC_ID	-	Service Configuration synchronization identifier.
20			If the SYNC_ID_INCL field is not included or is included and
21			is set to '0', the base station shall omit this field; otherwise,
22			the base station shall include this field and set it as follows:
23			If the SCR_INCLUDED field is included and is set to '1' or the
24			NNSCR_INCLUDED field is included and is set to '1', the base
25			station shall set this field to the synchronization identifier
26			corresponding to the service configuration conveyed by this
27			message; otherwise, the base station shall set this field to the
28			updated synchronization identifier corresponding to the
29			current service configuration.
30	CC_INFO_INCL	-	Call Control information included indicator.
31			If the SCR_INCLUDED field is not included or is included but
32			is set to '0', the base station shall omit this field; otherwise,
33			the base station shall include this field and set it as follows:
34			The base station shall set this field to '1' if Call Control
35			related parameters (to assign new call(s)) are included in this
36			message; otherwise, the base station shall set this field to '0'.
37	NUM_CALLS_ASSIGN	-	Number of call assignments.



1 If the CC\_INFO\_INCL field is not included or is included but  
 2 is set to '0', the base station shall omit this field; otherwise,  
 3 the base station shall include this field and set it as follows:

4 The base station shall set this field to the number of new call  
 5 assignments included in this message.

6 The base station shall include NUM\_CALLS\_ASSIGN occurrences of the following variable  
 7 length record (CON\_REF, RESPONSE\_IND, TAG, BYPASS\_ALERT\_ANSWER as per the  
 8 following requirements).

9 CON\_REF - Connection reference.

10 The base station shall set this field to the connection  
 11 reference of the service option connection corresponding to  
 12 this call.

13 RESPONSE\_IND - Response indicator.

14 The base station shall set this field to '1' if this call  
 15 assignment is a response to an *Enhanced Origination*  
 16 *Message* from the mobile station; otherwise, the base station  
 17 shall set this field to '0'.

18 TAG - Transaction identifier.

19 If the RESPONSE\_IND field is set to '0', the base station shall  
 20 omit this field; otherwise, the base station shall include this  
 21 field and set it as follows:

22 The base station shall set this field to the value of the TAG  
 23 field received in the *Enhanced Origination Message* to which  
 24 this call assignment is the response.

25 BYPASS\_ALERT\_ANSWER - Bypass alert indicator.

26 If the RESPONSE\_IND field is set to '1', the base station shall  
 27 omit this field; otherwise, the base station shall include this  
 28 field and set it as follows:

29 If the mobile station is to bypass the *Waiting for Order*  
 30 *Substate* and the *Waiting for Mobile Station Answer Substate*  
 31 for this call, the base station shall set this field to '1';  
 32 otherwise, the base station shall set this field to '0'.

33 CS\_SUPPORTED - Concurrent Services supported indicator.

34 If the base station supports concurrent services, the base  
 35 station shall set this field to '1'; otherwise, the base station  
 36 shall set this field to '0'.

1	CHM_SUPPORTED	-	Control Hold Mode supported indicator.
2			The base station shall set this field to '1' to indicate that the
3			base station supports the Control Hold Mode; otherwise, the
4			base station shall set this field to '0'.
5	CDMA_OFF_TIME_REP_SUP_IND	-	CDMA off time report supported indicator.
6			If the base station supports mobile station report for CDMA
7			off time information using the <i>CDMA Off Time Report</i>
8			<i>Message</i> , the base station shall set this field to '1'; otherwise,
9			the base station shall set this field to '0'.
10	CDMA_OFF_TIME_REP_THRESHOLD_UNIT	-	CDMA off time report threshold unit
11			If CDMA_OFF_TIME_REP_SUP_IND is set to '0', the base
12			station shall omit this field; otherwise, the base station shall
13			include this field and set it as follows:
14			The base station shall set this field to the time unit used in
15			CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table
16			3.7.2.3.2.13-5
17	CDMA_OFF_TIME_REP_THRESHOLD	-	CDMA off time report threshold
18			If CDMA_OFF_TIME_REP_SUP_IND is set to '0', the base
19			station shall omit this field; otherwise, the base station shall
20			include this field and set it as follows:
21			The base station shall set this field to the time in units of
22			CDMA_OFF_TIME_REP_THRESHOLD_UNIT such that if the
23			mobile station goes away from the CDMA traffic channel
24			longer than this value, the mobile station is to send a <i>CDMA</i>
25			<i>Off Time Report Message</i> .
26	RELEASE_TO_IDLE_IND	-	Release to Idle State allowed indicator.
27			If the mobile station is allowed to return to the <i>Mobile Station</i>
28			<i>Idle State</i> upon call release, the base station shall set this
29			field to '1'; otherwise, the base station shall set this field to
30			'0'.
31	MSG_INTEGRITY_SUP	-	Message integrity supported indicator.
32			If the base station supports message integrity, the base
33			station shall set this field to '1'; otherwise, the base station
34			shall set this field to '0'.
35	GEN_2G_KEY	-	Generate 2G encryption key indicator.
36			If the base station is to generate a new CMEKEY from the
37			current CK, the base station shall set this field to '1' to order
38			the mobile station to perform similar procedures; otherwise,
39			the base station shall set this field to '0'.
40	REGISTER_IN_IDLE	-	Register in idle state indicator.
41			If the mobile station is to perform registration after
42			transitioning back to the <i>Mobile Station Idle State</i> , the base
43			station shall set this field to '1'; otherwise, the base station
44			shall set this field to '0'.

1	PLCM_TYPE_INCL	-	The Public Long Code Mask type Included Indicator.
2			If the mobile station is to change its public long code mask
3			after handoff, the base station shall set this field to '1';
4			otherwise, the base station shall set this field to '0'.
5	PLCM_TYPE	-	The Public Long Code Mask Type.
6			If PLCM_TYPE_INCL is set to '0', the base station shall omit
7			this field; otherwise, the base station shall include this field
8			and set it as follows:
9			The base station shall set this field to the Public Long Code
10			Mask type to be used by the mobile station after the handoff
11			as specified in Table 3.7.2.3.2.21-5.
12			PLCM_TYPE '0010' shall not be used when the mobile station
13			is not in its home country (i.e., the MCC of the mobile station
14			is different from the MCC of this base station).
15			PLCM_TYPE '0011' shall not be used when the mobile station
16			is not in its home network (i.e., the MCC or MNC of the
17			mobile station is different from the MCC or MNC of this base
18			station).
19	PLCM_39	-	The 39 LSBs of the Public Long Code Mask.
20			If PLCM_TYPE is included and set to '0001', the base station
21			shall include this field and set it to the 39 least significant
22			bits of the public long code mask to be used by the mobile
23			station after the handoff as defined in Table 3.6.4.1.10;
24			otherwise, the base station shall omit this field.
25	T_TDROP_RANGE_INCL	-	Drop timer range value included indicator.
26			If SEARCH_INCLUDED is set to '0', the base station shall
27			omit this field; otherwise, the base station shall include this
28			field and set it as follows:
29			The base station shall set this field to '1' if the
30			T_TDROP_RANGE field is included in this message;
31			otherwise, the base station shall set this field to '0'.
32	T_TDROP_RANGE	-	Drop timer range value.
33			Timer range value to use in association with the T_TDROP
34			parameter when determining the drop timer expiration.
35			If T_TDROP_RANGE_INCL is not included, or included and
36			set to '0', the base station shall omit this field; otherwise, the
37			base station shall set this field to the T_TDROP_RANGE value
38			shown in Table 2.6.6.2.3-2 corresponding to the timer
39			expiration range value to be used by the mobile station.
40	FOR_PDCH_SUPPORTED	-	Forward Packet Data Channel supported indicator.
41			If the base station supports Forward Packet Data Channel,
42			the base station shall set this field to '1'; otherwise, the base
43			station shall set this field to '0'.
44	PDCH_CHM_SUPPORTED	-	PDCH Control Hold Mode supported indicator.

1		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
2		omit this field; otherwise, the base station shall include this
3		field and set it as follows:
4		The base station shall set this field to '1' to indicate that the
5		base station supports the PDCH Control Hold Mode; otherwise,
6		the base station shall set this field to '0'.
7	PILOT_INFO_REQ_SUPPORTED	- Pilot information request supported indicator.
8		If the base station supports mobile station request for pilot
9		information using the "Pilot Information" record in the <i>Base</i>
10		<i>Station Status Request Message</i> , the base station shall set
11		this field to '1'; otherwise, the base station shall set this field
12		to '0'.
13	ENC_SUPPORTED	- Encryption fields included.
14		The base station shall set this field to '1' if the encryption
15		related fields are included; otherwise, the base station shall
16		set this field to '0'.
17	SIG_ENCRYPT_SUP	- Signaling Encryption supported indicator.
18		If ENC_SUPPORTED is equal to '1', the base station shall
19		include this field; otherwise, the base station shall omit this
20		field. If this field is included, this field indicates which
21		signaling encryption algorithms are supported by the base
22		station.
23		This field consists of the subfields shown in Table
24		2.7.1.3.2.1-5.
25		If this field is included, the base station shall set the
26		subfields as follows:
27		The base station shall set the CMEA subfield to '1'.
28		The base station shall set each other subfield to '1' if the
29		corresponding signaling algorithm is supported by the base
30		station; otherwise, the base station shall set the subfield to
31		'0'.
32		The base station shall set the RESERVED subfield to '00000'.
33	UI_ENCRYPT_SUP	- User information Encryption supported indicator.
34		If ENC_SUPPORTED is equal to '1', the base station shall
35		include this field; otherwise, the base station shall omit this
36		field. If this field is included, the base station shall set this
37		field to indicate the supported user information encryption
38		algorithms.
39		This field consists of the subfields shown in Table
40		2.7.1.3.2.4-9.
41		The base station shall set each subfield to '1' if the
42		corresponding user information encryption algorithm is
43		supported by the base station; otherwise, the base station
44		shall set the subfield to '0'.
45	USE_SYNC_ID	- Sync ID supported indicator.

1			The base station shall set this field to '1' to indicate that the
2			mobile station is permitted to include the SYNC_ID field in
3			the <i>Page Response Message</i> , the <i>Reconnect Message</i> , the
4			<i>Origination Message</i> , and the <i>Enhanced Origination Message</i> ;
5			otherwise, the base station shall set this field to '0'.
6	SID_INCL	-	SID included indicator.
7			If the SID field is included in this message, the base station
8			shall set this field to '1'; otherwise, the base station shall set
9			this field to '0'.
10	SID	-	System identification.
11			If the SID_INCL field is set to '0', the base station shall omit
12			this field; otherwise, the base station shall include this field
13			and set it as follows:
14			The base station shall set this field to the system
15			identification number for this wireless system (see 2.6.5.2).
16	NID_INCL	-	NID included indicator.
17			If the NID field is included in this message, the base station
18			shall set this field to '1'; otherwise, the base station shall set
19			this field to '0'.
20	NID	-	Network identification.
21			If the NID_INCL field is set to '0', the base station shall omit
22			this field; otherwise, the base station shall include this field
23			and set it as follows:
24			This field serves as a sub-identifier of a system as defined by
25			the owner of the SID.
26			The base station shall set this field to the network
27			identification number for this network (see 2.6.5.2).
28	SDB_SUPPORTED	-	Short Data Burst supported indicator.
29			The base station shall set this field to '1' if the mobile station
30			is permitted to send a Short Data Burst; otherwise, the base
31			station shall set this field to '0'.
32	MOB_QOS	-	Indicator granting permission to the mobile station to request
33			QoS parameter settings in the <i>Origination Message</i> ,
34			<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
35			<i>Message</i> .
36			If CS_SUPPORTED is equal to '0', the base station shall omit
37			this field; otherwise the base station shall include this field
38			and shall set it as follows:
39			The base station shall set this field to '1', if the mobile station
40			is allowed to include a QoS record in the <i>Origination Message</i> ,
41			<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
42			<i>Message</i> ; otherwise, the base station shall set this field to '0'.
43	MS_INIT_POS_LOC_SUP_IND	-	Mobile station initiated position location
44			determination supported indicator.

1		If the target base station supports mobile station initiated
2		position determination, the base station shall set this field to
3		'1'; otherwise, the base station shall set this field to '0'.
4	REV_PDCH_SUPPORTED	- Reverse Packet Data Channel supported indicator.
5		If FOR_PDCH_SUPPORTED is set to '0', the base station shall
6		omit this field; otherwise, the base station shall include this
7		field and set it as follows:
8		If the base station supports the Reverse Packet Data Channel
9		(R-PDCH), the base station shall set this field to '1';
10		otherwise, the base station shall set this field to '0'.
11	PZ_HYST_ENABLED	- Packet zone hysteresis enabled.
12		If the PACKET_ZONE_ID field is set to '00000000', the base
13		station shall omit this field; otherwise, the base station shall
14		include this field and set it as follows:
15		If the packet zone hysteresis feature is to be enabled at the
16		mobile station, the base station shall set this field to '1';
17		otherwise, the base station shall set this field to '0'.
18	PZ_HYST_INFO_INCL	- Packet zone hysteresis information included indicator.
19		If the PZ_HYST_ENABLED field is included and is set to '1',
20		the base station shall include this field and set it as follows;
21		otherwise, the base station shall omit this field.
22		If the base includes the PZ_HYST_LIST_LEN,
23		PZ_HYST_ACT_TIMER and packet zone hysteresis timer
24		related fields, the base station shall set this field to '1';
25		otherwise, the base station shall set this field to '0'.
26	PZ_HYST_LIST_LEN	- Packet zone hysteresis list length.
27		If the PZ_HYST_INFO_INCL field is included and is set to '1',
28		the base station shall include this field and set it as follows;
29		otherwise, the base station shall omit this field.
30		The base station shall set this field to the length of the packet
31		zone hysteresis list. This field shall be within the range '0001'
32		through '1111', inclusive.
33	PZ_HYST_ACT_TIMER	- Packet zone hysteresis activation timer.
34		If the PZ_HYST_INFO_INCL field is included and is set to '1',
35		the base station shall include this field and set it as follows;
36		otherwise, the base station shall omit this field.
37		The base station shall set to the value of the packet zone
38		hysteresis activation timer (in units of seconds). This field
39		shall be within the range '00000001' through '11111111',
40		inclusive.
41	PZ_HYST_TIMER_MUL	- Packet zone hysteresis timer multiplier.
42		If the PZ_HYST_INFO_INCL field is included and is set to '1',
43		the base station shall include this field and set it as follows;
44		otherwise, the base station shall omit this field.

1		The base station shall set the field to $x$ , where $x \times 8^y$
2		seconds is the value of the hysteresis timer and $y$ is the value
3		indicated in the PZ_HYST_TIMER_EXP field. The base station
4		shall set this field to a value that is between 1 and 7
5		inclusive. The value 0 is reserved.
6	PZ_HYST_TIMER_EXP	- Packet zone hysteresis timer exponent.
7		If the PZ_HYST_INFO_INCL field is included and is set to '1',
8		the base station shall include this field and set it as follows;
9		otherwise, the base station shall omit this field.
10		The base station shall set the field to $y$ , where $x \times 8^y$
11		seconds is the value of the hysteresis timer and $x$ is the value
12		indicated in the PZ_HYST_TIMER_MUL field. The base station
13		shall set this field to a value that is between 0 and 4
14		inclusive. All the other values are reserved.
15	BCMC_ON_TRAFFIC_SUP	- BCMC on traffic channel supported indicator.
16		The base station shall set this field to '1' to indicate that the
17		BCMC feature is supported on traffic channel; otherwise, the
18		base station shall set this field to '0'.
19	AUTO_REQ_TRAF_ALLOWED_IND	- Autonomous BCMC request on traffic channel
20		allowed indicator.
21		If the BCMC_ON_TRAFFIC_SUP field is set to '0', the base
22		station shall omit this field; otherwise, the base station shall
23		include this field and set it as follows:
24		The base station shall set this field to '1' to indicate that the
25		mobile station is allowed to request for a BCMC flow
26		autonomously on traffic channel; otherwise, the base station
27		shall set this field to '0'.
28	SCH_BCMC_IND	- BCMC on supplemental channel Indicator.
29		If the BCMC_ON_TRAFFIC_SUP field is set to '0', or if
30		NUM_FOR_ASSIGN field is not included or is included and is
31		set to '00', the base station shall omit this field; otherwise,
32		the base station shall include this field and set it as follows:
33		If the channel assignment in this message contains a
34		Forward Supplemental Channel used for BCMC
35		transmission, the base station shall set this field to '1';
36		otherwise, the base station shall set this field to '0'.
37	ADD_PLCM_FOR_SCH_INCL	- Additional PLCM for forward SCH included indicator.
38		If the SCH_BCMC_IND field is not included or is included and
39		is set to '0', the base station shall omit this field; otherwise,
40		the base station shall include this field and set it as follows:
41		If the additional PLCM for forward SCH is included in this
42		message, the base station shall set this field to '1'; otherwise,
43		the base station shall set this field to '0'.

1 ADD\_PLCM\_FOR\_SCH\_TYPE- The Additional Public Long Code Mask for forward SCH  
2 type indicator.  
3 If ADD\_PLCM\_FOR\_SCH\_INCL is not included or is included  
4 and is set to '0', the base station shall omit this field;  
5 otherwise, the base station shall include this field and set it  
6 as follows:  
7 The base station shall set this field to '1' to indicate PLCM  
8 specified by the base station. The field value '0' is reserved.

9 ADD\_PLCM\_FOR\_SCH\_35 - The 35 LSB bits of the additional Public Long Code Mask  
10 for forward SCH.  
11 If ADD\_PLCM\_FOR\_SCH\_TYPE field is included and is set to  
12 '1', the base station shall include this field and set it to the 35  
13 least significant bits of the public long code mask used by the  
14 mobile station; otherwise, the base station shall omit this  
15 field.

16 If SCH\_BCNC\_IND field is included and is set to '1', the base station shall include  
17 NUM\_FOR\_ASSIGN occurrences of the following record:

18 USE\_ADD\_PLCM\_FOR\_SCH - Use additional PLCM indicator for forward SCH.  
19 The base station shall set this field to '1' if the additional  
20 PLCM included for forward SCH in this message is to be used  
21 for this Forward Supplemental Channel; otherwise, the base  
22 station shall set this field to '0'.

23 FSCH\_OUTERCODE\_INCL - Forward Supplemental Channel Outer Code included  
24 indicator.  
25 The base station shall set this field to '1' if the Forward  
26 Supplemental Channel outer code information is included in  
27 this message; otherwise, the base station shall set this field  
28 to '0'.

29 FSCH\_OUTERCODE\_RATE - Outer Code Rate of the Forward Supplemental Channel.  
30 If the FSCH\_OUTERCODE\_INCL field is not included or is  
31 included and is set to '0', the base station shall omit this  
32 field; otherwise, the base station shall include this field and  
33 set it as follows:  
34 The base station shall set this field to the outer code rate of  
35 the Forward Supplemental Channel as specified in Table  
36 3.7.2.3.2.38-3.

37 FSCH\_OUTERCODE\_OFFSET - Outer Coding Buffer Offset of the Forward  
38 Supplemental Channel.  
39 If the FSCH\_OUTERCODE\_INCL field is not included or is  
40 included and is set to '0', the base station shall omit this  
41 field; otherwise, the base station shall include this field and  
42 set it as follows:  
43 The base station shall set this field to the outer coding buffer  
44 offset of the Forward Supplemental Channel in units of 20ms  
45 as specified in [2].



- 1 MAX\_ADD\_SERV\_INSTANCE- Maximum number of additional service reference  
 2 identifiers allowed in origination
- 3 If the CS\_SUPPORTED field is set to '0', the base station shall  
 4 omit this field; otherwise, the base station shall include this  
 5 field and set it as follows:
- 6 The base station shall set this field to the maximum number  
 7 of additional service reference identifiers that can be included  
 8 in the *Origination Message* or *Enhanced Origination Message*.
- 9 USE\_CH\_CFG\_RRM - Channel configuration request allowed indicator.
- 10 The base station shall set this field to '1' to indicate that the  
 11 mobile station is permitted to include the CH\_IND and  
 12 EXT\_CH\_IND fields in the *Resource Request Message*, and the  
 13 *Resource Request Mini Message*; otherwise, the base station  
 14 shall set this field to '0'.
- 15 TX\_PWR\_LIMIT\_INCL - Transmit Power Limit inclusion for the current base station
- 16 If TX\_PWR\_LIMIT\_DEFAULT is included in this message, the  
 17 base station shall set this field to '1'; otherwise, the base  
 18 station shall set this field to '0'.
- 19 TX\_PWR\_LIMIT\_DEFAULT - Use the Default Transmit Power Limit
- 20 If TX\_PWR\_LIMIT\_INCL is set to '0', the base station shall  
 21 omit this field; otherwise, the base station shall include this  
 22 field and set to as follows.
- 23 The base station shall set this field to '1' if the mobile station  
 24 is to limit its transmission power in the 1915MHz – 1920MHz  
 25 block of the PCS band to no more than the default value  
 26 defined in [11]; otherwise, the base station shall set this field  
 27 to '0' if the mobile station is to limit its transmission power to  
 28 no more than the value indicated by TX\_PWR\_LIMIT.
- 29 TX\_PWR\_LIMIT - Transmit Power Limit for the current base station
- 30 If TX\_PWR\_LIMIT\_DEFAULT is omitted, or if it is included and  
 31 set to '1', the base station shall omit this field; otherwise, the  
 32 base station shall include this field and set to as follows.
- 33 The base station shall set this field to thirty dB more than  
 34 transmit power limit in dBm EIRP, in steps of 1 dB. This field  
 35 can take the values 30 to 53 corresponding to maximum  
 36 transmit power values 0 dBm to 23 dBm.
- 37 If the CH\_IND field is set to '101', the base station shall include the following fields:
- 38 NUM\_FOR\_SCH - Number of Forward Supplemental Channel records.
- 39 If SCH\_INCL is set to '0', the base station shall omit this field;  
 40 otherwise, the base station shall set this field as follows:
- 41 The base station shall set this field to the number of the  
 42 Forward Supplemental Channel records need to be updated.
- 43 If NUM\_FOR\_SCH is included and not equal to '00000', the base station shall include

1 NUM\_FOR\_SCH occurrence of the following three fields:

2       FOR\_SCH\_ID   -   Forward Supplemental Channel identifier.

3                    The base station shall set this field to the identifier of the

4                    Forward Supplemental Channel.

5       SCCL\_INDEX   -   Supplemental Channel Code list index.

6                    The base station shall set this field to the index of the record

7                    in the Supplemental Channel Code list.

8       FOR\_SCH\_NUM\_BITS\_IDX - Forward Supplemental Channel number of information

9                    bits index.

10                   If USE\_FLEX\_NUM\_BITS is equal to '0' or if

11                   USE\_FLEX\_NUM\_BITS is equal to '1' and

12                   FSCH\_NBIT\_TABLE\_ID for FOR\_SCH\_ID is equal to '0000',

13                   then the base station shall set this field according to Table

14                   3.7.3.3.2.37-4 to indicate the number of information bits per

15                   frame and the length of the CRC field for the Forward

16                   Supplemental Channel identified by FOR\_SCH\_ID

17                   corresponding to SCCL\_INDEX.

18                   If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and

19                   FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID] is not equal to '0000',

20                   then the base station shall set this field to indicate that the

21                   number of information bits per frame for the Forward

22                   Supplemental channel identified by FOR\_SCH\_ID to be

23                   NUM\_BITS[FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID]][FOR\_SCH\_

24                   NUM\_BITS\_IDX] and the number of CRC bits per frame for

25                   the Forward Supplemental channel identified by

26                   FOR\_SCH\_ID to be

27                   CRC\_LEN\_IDX[FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID]][FOR\_S

28                   CH\_NUM\_BITS\_IDX].

29       NUM\_REV\_SCH   -   Number of Reverse Supplemental Channel records.

30                    If SCH\_INCL is set to '0', the base station shall omit this field;

31                    otherwise, the base station shall set this field as follows:

32                    The base station shall set this field to the number of the

33                    Reverse Supplemental Channels need to be updated.

34   If NUM\_REV\_SCH is included and not equal to '00000', the base station shall include

35   NUM\_REV\_SCH occurrence of the following three fields:

36       REV\_SCH\_ID   -   Reverse Supplemental Channel identifier.

37                    The base station shall set this field to the identifier of the

38                    Reverse Supplemental Channel.

39       REV\_WALSH\_ID   -   Reverse Supplemental Channel Walsh cover Identifier.

1		The base station shall set this field according to Table
2		3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
3		station is to use when transmitting at the rate specified by
4		REV_SCH_NUM_BITS_IDX on the Reverse Supplemental
5		Channel specified by REV_SCH_ID. If only one reverse
6		supplemental channel is assigned, the base station should set
7		this field to the default value for the REV_WALSH_ID as
8		specified in 2.6.4.2.
9	REV_SCH_NUM_BITS_IDX	- Reverse Supplemental Channel number of bits per frame
10		index.
11		If USE_FLEX_NUM_BITS is equal to '0' or if
12		USE_FLEX_NUM_BITS is equal to '1' and
13		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
14		the base station shall set this field according to Table
15		3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
16		number of information bits per frame and the CRC bits per
17		frame, corresponding to REV_WALSH_ID field.
18		If USE_FLEX_NUM_BITS is equal to '1' and
19		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
20		then the base station shall set this field to indicate the
21		Reverse Supplemental Channel number of information bits
22		per frame, corresponding to REV_WALSH_ID field to be
23		NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
24		[REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
25		Channel number of CRC bits per frame corresponding to
26		REV_WALSH_ID field to be
27		CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
28		[REV_SCH_NUM_BITS_IDX].
29	NUM_PILOTS	- Number of pilots included in the message.
30		The base station shall set this field to the number of pilots
31		included in the message. The base station shall set this field
32		to an integer that is equal to or greater than 1.
33	SRCH_OFFSET_INCL	- Target pilot channel search window offset included.
34		If the SRCH_OFFSET field is included in the following
35		records, the base station shall set this field to '1'; otherwise,
36		the base station shall set this field to '0'.
37	The base station shall include one occurrence of the following record for each of the	
38	NUM_PILOTS pilots included in the message:	
39	PILOT_PN	- Pilot PN sequence offset index.
40		The base station shall set this field to the pilot PN sequence
41		offset for this pilot in units of 64 PN chips.
42	SRCH_OFFSET	- Target pilot channel search window offset.
43		If SRCH_OFFSET_INCL equals to '1', then the base station
44		shall set this field to the value shown in Table 2.6.6.2.1-2
45		corresponding to the search window offset to be used by the
46		mobile station for this target pilot. Otherwise, the base
47		station shall omit this field.

1	ADD_PILOT_REC_INCL	-	Additional pilot information included indicator.
2			The base station shall set this field to '1' if additional pilot
3			information listed in PILOT_REC_TYPE and RECORD_LEN
4			fields are included. The base station shall set this field to '0'
5			if the corresponding pilot is the common pilot and there is no
6			additional pilot information included.
7	PILOT_REC_TYPE	-	Pilot record type.
8			If ADD_PILOT_REC_INCL is set to '1', the base station shall
9			set this field to the PILOT_REC_TYPE value shown in Table
10			3.7.2.3.2.21-9 corresponding to the type of Pilot Record
11			specified by this record.
12			If ADD_PILOT_REC_INCL is set to '0', the base station shall
13			omit this field.
14	RECORD_LEN	-	Pilot record length.
15			If ADD_PILOT_REC_INCL is set to '1', the base station shall
16			set this field to the number of octets in the type-specific fields
17			of this pilot record.
18			If ADD_PILOT_REC_INCL is set to '0', the base station shall
19			omit this field.
20	Type-specific fields	-	Pilot record type-specific fields.
21			If ADD_PILOT_REC_INCL is set to '1', the base station shall
22			include type-specific fields based on the PILOT_REC_TYPE of
23			this pilot record as described in 3.7.6.1.
24			If ADD_PILOT_REC_INCL is set to '0', the base station shall
25			omit this field.
26	PWR_COMB_IND	-	Power control symbol combining indicator.
27			If the Forward Traffic Channel associated with this pilot will
28			carry the same closed-loop power control subchannel bits as
29			that of the previous pilot in this message, the base station
30			shall set this field to '1'; otherwise, the base station shall set
31			this field to '0'. The base station shall set this field to '0' in
32			the first record in the pilot list.
33	CODE_CHAN_FCH	-	Code channel on the Fundamental Channel.
34			If a Radio Configuration associated with Spreading Rate 1 is
35			used, the base station shall set this field to the code channel
36			index (see [2]) that the mobile station is to use on the
37			Fundamental Channel of the Forward Traffic Channel. If a
38			Radio Configuration associated with Spreading Rate 3 is
39			used, the base station shall set this field to the code channel
40			index that the mobile station is to use for the Fundamental
41			Channel on the center SR3 frequency.

1			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
2			station shall set this field in the range 1 to 63 inclusive. If
3			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
4			station shall set this field in the range 1 to 127 inclusive. If
5			Radio Configuration 7 or 9 is used, the base station shall set
6			this field in the range 1 to 255 inclusive.
7	QOF_MASK_ID_FCH	-	Quasi-orthogonal function index on the Fundamental
8			Channel.
9			If a Radio Configuration associated with Spreading Rate 1 is
10			used, the base station shall set this field to the index of the
11			Quasi-orthogonal function (see [2]). If a Radio Configuration
12			associated with Spreading Rate 3 is used, the base station
13			shall set this field to the index of the Quasi-orthogonal
14			function on the center SR3 frequency.
15	NUM_SCH	-	Number of Supplemental Channel records.
16			If SCH_INCL is set to '0', the base station shall omit this field;
17			otherwise, the base station shall set this field as follows:
18			The base station shall set this field to the number of the
19			Supplemental Channel records need to be updated.
20	If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH		
21	occurrence of the following five fields:		
22	FOR_SCH_ID	-	Forward Supplemental Channel identifier.
23			The base station shall set this field the identifier of the
24			Forward Supplemental Channel pertaining to this record.
25	SCCL_INDEX	-	Supplemental Channel Code list index.
26			The base station shall set this field to the index of the record
27			in the Supplemental Channel Code list.
28	PILOT_INCL	-	The corresponding pilot included in Supplemental Channel
29			Active Set indicator.
30			The base station shall set this field to '1' if the corresponding
31			pilot is included in the Active Set of Supplemental Channel;
32			otherwise, the base station shall set this field to '0'.
33	CODE_CHAN_SCH	-	Code channel on the Supplemental Channel.
34			If PILOT_INCL is included and set to '1', the base station shall
35			set this field as follows; otherwise, the base station shall omit
36			this field.
37			The base station shall set this field to the code channel index
38			(see [2]) that the mobile station is to use on the Supplemental
39			Channel of the Forward Traffic Channel indexed by
40			SCCL_INDEX.
41	QOF_MASK_ID_SCH	-	Quasi-orthogonal function index on the Supplemental
42			Channel.
43			If PILOT_INCL is included and set to '1', the base station shall
44			set this field as follows; otherwise, the base station shall omit
45			this field.

1		The base station shall set this field to the index of the Quasi-
2		orthogonal function (see [2]).
3	3X_FCH_INFO_INCL	- 3X Fundamental Channel information included indicator.
4		If the 3X Fundamental Channel information is included, the
5		base station shall set this field to '1'; otherwise, the base
6		station shall set this field to '0'.
7	The base station shall include NUM_PILOTS occurrences of the following record if	
8	3X_FCH_INFO_INCL is set to '1'. The base station shall use the same order for the	
9	following fields as is used for the PILOT_PN fields listed in this message.	
10	3X_FCH_LOW_INCL	- FCH code channel on the lowest SR3 frequency included
11		indicator.
12		If the Fundamental Channel on the lowest SR3 frequencies
13		has a different code channel than the Fundamental Channel
14		on the center SR3 frequency, the base station shall set this
15		field to '1'; otherwise, the base station shall set this field to
16		'0'.
17	QOF_MASK_ID_FCH_LOW	- QOF index for the Fundamental Channel on the lowest
18		SR3 frequency.
19		If 3X_FCH_LOW_INCL is set to '0', the base station shall omit
20		this field; otherwise, the base station shall set this field as
21		follows:
22		The base station shall set this field to the index of the Quasi-
23		orthogonal function (see [2]) corresponding to the QOF index
24		for the Fundamental Channel on the lowest SR3 frequency.
25	CODE_CHAN_FCH_LOW	- Code channel for the Fundamental Channel on the lowest
26		SR3 frequency.
27		If 3X_FCH_LOW_INCL is set to '0', the base station shall omit
28		this field; otherwise, the base station shall set this field as
29		follows:
30		The base station shall set this field to the code channel index
31		(see [2]) that the mobile station is to use on the Fundamental
32		Channel on the lowest SR3 frequency. If Radio Configuration
33		6 or 8 is used, the base station shall set this field in the range
34		1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
35		base station shall set this field in the range 1 to 255
36		inclusive.
37	3X_FCH_HIGH_INCL	- FCH code channel on the highest SR3 frequency included
38		indicator.
39		If the Fundamental Channel on the highest SR3 frequencies
40		has a different code channel than the Fundamental Channel
41		on the center SR3 frequency, the base station shall set this
42		field to '1'; otherwise, the base station shall set this field to
43		'0'.
44	QOF_MASK_ID_FCH_HIGH	- QOF index for the Fundamental Channel on the
45		highest SR3 frequency.

1		If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
2		this field; otherwise, the base station shall set this field as
3		follows:
4		The base station shall set this field to the index of the Quasi-
5		orthogonal function (see [2]) corresponding to the QOF index
6		for the Fundamental Channel on the highest SR3 frequency.
7	CODE_CHAN_FCH_HIGH	- Code channel for the Fundamental Channel on the
8		highest SR3 frequency.
9		If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
10		this field; otherwise, the base station shall set this field as
11		follows:
12		The base station shall set this field to the code channel index
13		(see [2]) that the mobile station is to use on the Fundamental
14		Channel on the highest SR3 frequency. If Radio
15		Configuration 6 or 8 is used, the base station shall set this
16		field in the range 1 to 127 inclusive. If Radio Configuration 7
17		or 9 is used, the base station shall set this field in the range 1
18		to 255 inclusive.
19	3X_SCH_INFO_INCL	- 3X Supplemental Channel information included indicator.
20		If SCH_INCL is set to '0', the base station shall omit this field;
21		otherwise, the base station shall set this field as follows:
22		If the 3X Supplemental Channel information is included, the
23		base station shall set this field to '1'; otherwise, the base
24		station shall set this field to '0'.
25	The base station shall include NUM_SCH occurrences of the following seven fields record if	
26	3X_SCH_INFO_INCL is included and set to '1'.	
27	FOR_SCH_ID	- Forward Supplemental Channel identifier.
28		The base station shall set this field the identifier of the
29		Forward Supplemental Channel pertaining to this record.
30	3X_SCH_LOW_INCL	- SCH code channel on the lowest SR3 frequency included
31		indicator.
32		If the Supplemental Channel on the lowest SR3 frequencies
33		has a different code channel than the Supplemental Channel
34		on the center SR3 frequency, the base station shall set this
35		field to '1'; otherwise, the base station shall set this field to
36		'0'.
37	QOF_MASK_ID_SCH_LOW	- QOF index for the Supplemental Channel on the lowest
38		SR3 frequency.
39		If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
40		this field; otherwise, the base station shall set this field as
41		follows:
42		The base station shall set this field to the index of the Quasi-
43		orthogonal function (see [2]) corresponding to the QOF index
44		for the Supplemental Channel on the lowest SR3 frequency.

1	CODE_CHAN_SCH_LOW -	Code channel for the Supplemental Channel on the lowest
2		SR3 frequency.
3		If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
4		this field; otherwise, the base station shall set this field as
5		follows:
6		The base station shall set this field to the code channel index
7		(see [2]) that the mobile station is to use on the Supplemental
8		Channel on the lowest SR3 frequency. If Radio Configuration
9		6 or 8 is used, the base station shall set this field in the range
10		1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
11		base station shall set this field in the range 1 to 255
12		inclusive.
13	3X_SCH_HIGH_INCL -	SCH code channel on the highest SR3 frequency included
14		indicator.
15		If the Supplemental Channel on the highest SR3 frequencies
16		has a different code channel than the Supplemental Channel
17		on the center SR3 frequency, the base station shall set this
18		field to '1'; otherwise, the base station shall set this field to
19		'0'.
20	QOF_MASK_ID_SCH_HIGH -	QOF index for the Supplemental Channel on the
21		highest SR3 frequency.
22		If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
23		this field; otherwise, the base station shall set this field as
24		follows:
25		The base station shall set this field to the index of the Quasi-
26		orthogonal function (see [2]) corresponding to the QOF index
27		for the Supplemental Channel on the highest SR3 frequency.
28	CODE_CHAN-_SCH_HIGH -	Code channel for the Supplemental Channel on the
29		highest SR3 frequency.
30		If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
31		this field; otherwise, the base station shall set this field as
32		follows:
33		The base station shall set this field to the code channel index
34		(see [2]) that the mobile station is to use on the Supplemental
35		Channel on the highest SR3 frequency. If Radio
36		Configuration 6 or 8 is used, the base station shall set this
37		field in the range 1 to 127 inclusive. If Radio Configuration 7
38		or 9 is used, the base station shall set this field in the range 1
39		to 255 inclusive.
40	CCSH_INCLUDED -	Code Combining Soft Handoff information included indicator.
41		The base station shall set this field to '1' if Code Combining
42		Soft Handoff information is included in this message;
43		otherwise, the base station shall set this field to '0'.
44	USE_CCSH_ENCODER_TIME -	Use Code Combining Soft Handoff Turbo Encoder
45		swapping action time indicator.



1 If the CASH\_INCLUDED field is set to '0', the base station  
2 shall omit this field; otherwise, the base station shall include  
3 this field and set it as follows.

4 If an explicit action time at which Turbo Encoder types  
5 (CASH\_ENCODER\_TYPE) included in this message takes  
6 effect is specified, the base station shall set this field to '1';  
7 otherwise, the base station shall set this field to '0'.

8 CASH\_ENCODER\_ACTION\_TIME - Code Combining Soft Handoff Turbo Encoder  
9 swapping action time.

10 If the USE\_CASH\_ENCODER\_TIME field is included and set  
11 to '1', the base station shall set this field to the System Time  
12 minus FRAME\_OFFSET<sub>s</sub> × 1.25 ms, in units of 80ms (modulo  
13 64), at which Turbo Encoder types included in this message  
14 are to take effect; otherwise, the base station shall omit this  
15 field.

16 If the CASH\_INCLUDED field is set to '1', the base station shall include one occurrence of  
17 the following one field for each of the Forward Supplemental Channel records (as specified  
18 by NUM\_PILOTS and NUM\_SCH) with PILOT\_INCL field set to '1'. The base station shall  
19 use the same order for the following field as is used for the Forward Supplemental Channel  
20 records.

21 CASH\_ENCODER\_TYPE - Code Combining Soft Handoff Turbo Encoder type.

22 The base station shall set this field to '0' if the Turbo Encoder  
23 type to be used on the Forward Supplemental Channel  
24 identified by FOR\_SCH\_ID and SCCL\_INDEX is the default  
25 encoder type. The base station shall set this field to '1' if the  
26 Turbo Encoder to be used is the complementary type.

27 RESERVED - Reserved bits.

28 The base station shall add reserved bits as needed in order to  
29 make the length of the ACTIVE\_SET\_REC\_FIELDS record  
30 equal to an integer number of octets. The base station shall  
31 set these bits to '0'.

32 If the CH\_IND field is set to '010' or '110', the base station shall include the following  
33 fields:

34 NUM\_FOR\_SCH - Number of Forward Supplemental Channel records.

35 If SCH\_INCL is set to '0', the base station shall omit this field;  
36 otherwise, the base station shall set this field as follows:

37 The base station shall set this field to the number of the  
38 Forward Supplemental Channel records need to be updated.

39 If NUM\_FOR\_SCH is included and not equal to '00000', the base station shall include  
40 NUM\_FOR\_SCH occurrence of the following three fields:

41 FOR\_SCH\_ID - Forward Supplemental Channel identifier.

42 The base station shall set this field to identifier of the  
43 Forward Supplemental Channel.

44 SCCL\_INDEX - Supplemental Channel Code list index.

1		The base station shall set this field to the index of the record
2		in the Supplemental Channel Code list.
3	FOR_SCH_NUM_BITS_IDX	- Forward Supplemental Channel number of information
4		bits index.
5		If USE_FLEX_NUM_BITS is equal to '0' or if
6		USE_FLEX_NUM_BITS is equal to '1' and
7		FSCH_NBIT_TABLE_ID for FOR_SCH_ID is equal to '0000',
8		then the base station shall set this field according to Table
9		3.7.3.3.2.37-4 to indicate the number of information bits per
10		frame and the length of the CRC field for the Forward
11		Supplemental Channel identified by FOR_SCH_ID
12		corresponding to SCCL_INDEX.
13		If USE_FLEX_NUM_BITS <sub>s</sub> is equal to '1' and
14		FSCH_NBIT_TABLE_ID[FOR_SCH_ID] is not equal to '0000',
15		then the base station shall set this field to indicate that the
16		number of information bits per frame for the Forward
17		Supplemental channel identified by FOR_SCH_ID to be
18		NUM_BITS[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SCH_
19		NUM_BITS_IDX] and the number of CRC bits per frame for
20		the Forward Supplemental channel identified by
21		FOR_SCH_ID to be
22		CRC_LEN_IDX[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_S
23		CH_NUM_BITS_IDX].
24	NUM_REV_SCH	- Number of Reverse Supplemental Channel records.
25		If SCH_INCL is set to '0', the base station shall omit this field;
26		otherwise, the base station shall set this field as follows:
27		The base station shall set this field to the number of the
28		Reverse Supplemental Channels need to be updated.
29	If NUM_REV_SCH is included and not equal to '00000', the base station shall include	
30	NUM_REV_SCH occurrence of the following three fields:	
31	REV_SCH_ID	- Reverse Supplemental Channel identifier.
32		The base station shall set this field to the identifier of the
33		Reverse Supplemental Channel.
34	REV_WALSH_ID	- Reverse Supplemental Channel Walsh cover Identifier.
35		The base station shall set this field according to Table
36		3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
37		station is to use when transmitting at the rate specified by
38		REV_SCH_NUM_BITS_IDX on the Reverse Supplemental
39		Channel specified by REV_SCH_ID. If only one reverse
40		supplemental channel is assigned, the base station should
41		set this field to the default value for the REV_WALSH_ID as
42		specified in 2.6.4.2.
43	REV_SCH_NUM_BITS_IDX	- Reverse Supplemental Channel number of bits per frame
44		index.

1			If USE_FLEX_NUM_BITS is equal to '0' or if
2			USE_FLEX_NUM_BITS is equal to '1' and
3			RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
4			the base station shall set this field according to Table
5			3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
6			number of information bits per frame and the number of CRC
7			bits per frame, corresponding to REV_WALSH_ID field.
8			If USE_FLEX_NUM_BITS is equal to '1' and
9			RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
10			then the base station shall set the REV_SCH_NUM_BITS_IDX
11			field to indicate the Reverse Supplemental Channel number
12			of information bits per frame, corresponding to
13			REV_WALSH_ID field to be
14			NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
15			[REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
16			Channel number of CRC bits per frame, corresponding to
17			REV_WALSH_ID field to be
18			CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
19			[REV_SCH_NUM_BITS_IDX].
20	NUM_PILOTS	-	Number of pilots included in the message.
21			The base station shall set this field to the number of pilots
22			included in the message. The base station shall set this field
23			to an integer that is equal to or greater than 1.
24	SRCH_OFFSET_INCL	-	Target pilot channel search window offset included.
25			If the SRCH_OFFSET field is included in the following
26			records, the base station shall set this field to '1'; otherwise,
27			the base station shall set this field to '0'.
28	The base station shall include one occurrence of the following record for each of the		
29	NUM_PILOTS pilots included in the message:		
30	PILOT_PN	-	Pilot PN sequence offset index.
31			The base station shall set this field to the pilot PN sequence
32			offset for this pilot in units of 64 PN chips.
33	SRCH_OFFSET	-	Target pilot channel search window offset.
34			If SRCH_OFFSET_INCL equals to '1', then the base station
35			shall set this field to the value shown in Table 2.6.6.2.1-2
36			corresponding to the search window offset to be used by the
37			mobile station for this target pilot. Otherwise, the base
38			station shall omit this field.
39	ADD_PILOT_REC_INCL	-	Additional pilot information included indicator.
40			The base station shall set this field to '1' if additional pilot
41			information listed in PILOT_REC_TYPE and RECORD_LEN
42			fields are included. The base station shall set this field to '0'
43			if the corresponding pilot is the common pilot and there is no
44			additional pilot information included.
45	PILOT_REC_TYPE	-	Pilot record type.

1			If ADD_PILOT_REC_INCL is set to '1', the base station shall
2			set this field to the PILOT_REC_TYPE value shown in Table
3			3.7.2.3.2.21-9 corresponding to the type of Pilot Record
4			specified by this record.
5			If ADD_PILOT_REC_INCL is set to '0', the base station shall
6			omit this field.
7	RECORD_LEN	-	Pilot record length.
8			If ADD_PILOT_REC_INCL is set to '1', the base station shall
9			set this field to the number of octets in the type-specific fields
10			of this pilot record.
11			If ADD_PILOT_REC_INCL is set to '0', the base station shall
12			omit this field.
13	Type-specific fields	-	Pilot record type-specific fields.
14			If ADD_PILOT_REC_INCL is set to '1', the base station shall
15			include type-specific fields based on the PILOT_REC_TYPE of
16			this pilot record as described in 3.7.6.1.
17			If ADD_PILOT_REC_INCL is set to '0', the base station shall
18			omit this field.
19	PWR_COMB_IND	-	Power control symbol combining indicator.
20			If this pilot will carry the same closed-loop power control
21			subchannel bits as that of the previous pilot in this message,
22			the base station shall set this field to '1'; otherwise, the base
23			station shall set this field to '0'. The base station shall set
24			this field to '0' in the first record in the pilot list.
25	CODE_CHAN_DCCH	-	Code channel on the Dedicated Control Channel.
26			If a Radio Configuration associated with Spreading Rate 1 is
27			used, the base station shall set this field to the code channel
28			index (see [2]), in the range of 1 to 127 inclusive, that the
29			mobile station is to use on the Dedicated Control Channel of
30			the Forward Traffic Channel. If a Radio Configuration
31			associated with Spreading Rate 3, the base station shall set
32			this field to the code channel index (see [2]), in the range of 1
33			to 255 inclusive, that the mobile station is to use for the
34			Dedicated Control Channel on the center SR3 frequency.
35			If Radio Configuration 3 or 5 (see [2]) is used, the base station
36			shall set this field in the range 1 to 63 inclusive. If Radio
37			Configuration 4, 6 or 8 is used, the base station shall set this
38			field in the range 1 to 127 inclusive. If Radio Configuration 7
39			or 9 is used, the base station shall set this field in the range 1
40			to 255 inclusive.
41	QOF_MASK_ID_DCCH	-	Quasi-orthogonal function index on the Dedicated Control
42			Channel.

1			If a Radio Configuration associated with Spreading Rate 1 is
2			used, the base station shall set this field to the index of the
3			Quasi-orthogonal function (see [2]). If a Radio Configuration
4			associated with Spreading Rate 3 is used, the base station
5			shall set this field to the index of the Quasi-orthogonal
6			function (see [2]).
7	NUM_SCH	-	Number of Supplemental Channel records.
8			If SCH_INCL is set to '0', the base station shall omit this field;
9			otherwise, the base station shall set this field as follows:
10			The base station shall set this field to the number of the
11			Supplemental Channel records need to be updated.
12	If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH		
13	occurrence of the following five fields:		
14	FOR_SCH_ID	-	Forward Supplemental Channel identifier
15			The base station shall set this field to the identifier of the
16			Forward Supplemental Channel pertaining to this record.
17	SCCL_INDEX	-	Supplemental Channel Code list index.
18			The base station shall set this field to the index of the record
19			in the Supplemental Channel Code list.
20	PILOT_INCL	-	The corresponding pilot included in Supplemental Channel
21			Active Set indicator.
22			The base station shall set this field to '1' if the corresponding
23			pilot is included in the Active Set of Supplemental Channel;
24			otherwise, the base station shall set this field to '0'.
25	CODE_CHAN_SCH	-	Code channel on the Supplemental Channel.
26			The base station shall set this field to the code channel index
27			(see [2]) that the mobile station is to use on the Supplemental
28			Channel of the Forward Traffic Channel indexed by
29			SCCL_INDEX.
30	QOF_MASK_ID_SCH	-	Quasi-orthogonal function index on the Supplemental
31			Channel.
32			If SCH_INCL is set to '0', the base station shall omit this field;
33			otherwise, the base station shall set this field as follows:
34			The base station shall set this field to the index of the Quasi-
35			orthogonal function (see [2]).
36	3X_DCCH_INFO_INCL	-	3X Dedicated Control Channel information included
37			indicator.
38			If the 3X Dedicated Control Channel information is included,
39			the base station shall set this field to '1'; otherwise, the base
40			station shall set this field to '0'.
41	The base station shall include NUM_PILOTS occurrences of the following record if		
42	3X_DCCH_INFO_INCL is set to '1'. The base station shall use the same order for the		
43	following fields as is used for the PILOT_PN fields listed in this message.		

1	3X_DCCH_LOW_INCL	-	DCCH code channel on the lowest SR3 frequency included
2			indicator.
3			If the Dedicated Control Channel on the lowest SR3
4			frequencies has a different code channel than the Dedicated
5			Control Channel on the center SR3 frequency, the base
6			station shall set this field to '1'; otherwise, the base station
7			shall set this field to '0'.
8	QOF_MASK_ID_DCCH_LOW	-	QOF index for the Dedicated Control Channel on the
9			lowest SR3 frequency.
10			If 3X_DCCH_LOW_INCL is set to '0', the base station shall
11			omit this field; otherwise, the base station shall set this field
12			as follows:
13			The base station shall set this field to the index of the Quasi-
14			orthogonal function (see [2]) corresponding to the QOF index
15			for the Dedicated Control Channel on the lowest SR3
16			frequency.
17	CODE_CHAN_DCCH_LOW	-	Code channel for the Dedicated Control Channel on the
18			lowest SR3 frequency.
19			If 3X_DCCH_LOW_INCL is set to '0', the base station shall
20			omit this field; otherwise, the base station shall set this field
21			as follows:
22			The base station shall set this field to the code channel index
23			(see [2]) that the mobile station is to use on the Dedicated
24			Control Channel on the lowest SR3 frequency. If Radio
25			Configuration 6 or 8 is used, the base station shall set this
26			field in the range 1 to 127 inclusive. If Radio Configuration 7
27			or 9 is used, the base station shall set this field in the range 1
28			to 255 inclusive.
29	3X_DCCH_HIGH_INCL	-	DCCH code channel on the highest SR3 frequency included
30			indicator.
31			If the Dedicated Control Channel on the highest SR3
32			frequencies has a different code channel than the Dedicated
33			Control Channel on the center SR3 frequency, the base
34			station shall set this field to '1'; otherwise, the base station
35			shall set this field to '0'.
36	QOF_MASK_ID_DCCH_HIGH	-	QOF index for the Dedicated Control Channel on
37			the highest SR3 frequency.
38			If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
39			omit this field; otherwise, the base station shall set this field
40			as follows:
41			The base station shall set this field to the index of the Quasi-
42			orthogonal function (see [2]) corresponding to the QOF index
43			for the Dedicated Control Channel on the highest SR3
44			frequency.

1	CODE_CHAN_DCCH_HIGH	-	Code channel for the Dedicated Control Channel on the
2			highest SR3 frequency.
3			If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
4			omit this field; otherwise, the base station shall set this field
5			as follows:
6			The base station shall set this field to the code channel index
7			(see [2]) that the mobile station is to use on the Dedicated
8			Control Channel on the highest SR3 frequency. If Radio
9			Configuration 6 or 8 is used, the base station shall set this
10			field in the range 1 to 127 inclusive. If Radio Configuration 7
11			or 9 is used, the base station shall set this field in the range 1
12			to 255 inclusive.
13	3X_SCH_INFO_INCL	-	3X Supplemental Channel information included indicator.
14			If SCH_INCL is set to '0', the base station shall omit this field;
15			otherwise, the base station shall set this field as follows:
16			If the 3X Supplemental Channel information is included, the
17			base station shall set this field to '1'; otherwise, the base
18			station shall set this field to '0'.
19	The base station shall include NUM_SCH occurrences of the following seven fields record if		
20	3X_SCH_INFO_INCL is included and set to '1'.		
21	FOR_SCH_ID	-	Forward Supplemental Channel identifier.
22			The base station shall set this field the identifier of the
23			Forward Supplemental Channel pertaining to this record.
24	3X_SCH_LOW_INCL	-	SCH code channel on the lowest SR3 frequency included
25			indicator.
26			If the Supplemental Channel on the lowest SR3 frequencies
27			has a different code channel than the Supplemental Channel
28			on the center SR3 frequency, the base station shall set this
29			field to '1'; otherwise, the base station shall set this field to
30			'0'.
31	QOF_MASK_ID_SCH_LOW	-	QOF index for the Supplemental Channel on the lowest
32			SR3 frequency.
33			If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
34			this field; otherwise, the base station shall set this field as
35			follows:
36			The base station shall set this field to the index of the Quasi-
37			orthogonal function (see [2]) corresponding to the QOF index
38			for the Supplemental Channel on the lowest SR3 frequency.
39	CODE_CHAN_SCH_LOW	-	Code channel for the Supplemental Channel on the lowest
40			SR3 frequency.
41			If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
42			this field; otherwise, the base station shall set this field as
43			follows:

1		The base station shall set this field to the code channel index
2		(see [2]) that the mobile station is to use on the Supplemental
3		Channel on the lowest SR3 frequency. If Radio Configuration
4		6 or 8 is used, the base station shall set this field in the range
5		1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
6		base station shall set this field in the range 1 to 255
7		inclusive.
8	3X_SCH_HIGH_INCL	- Supplemental Channel code channel on the highest SR3
9		frequency included indicator.
10		If the Supplemental Channel on the highest SR3 frequencies
11		has a different code channel than the Supplemental Channel
12		on the center SR3 frequency, the base station shall set this
13		field to '1'; otherwise, the base station shall set this field to
14		'0'.
15	QOF_MASK_ID_SCH_HIGH	- QOF index for the Supplemental Channel on the
16		highest SR3 frequency.
17		If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
18		this field; otherwise, the base station shall set this field as
19		follows:
20		The base station shall set this field to the index of the Quasi-
21		orthogonal function (see [2]) corresponding to the QOF index
22		for the Supplemental Channel on the highest SR3 frequency.
23	CODE_CHAN_SCH_HIGH	- Code channel for the Supplemental Channel on the
24		highest SR3 frequency.
25		If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
26		this field; otherwise, the base station shall set this field as
27		follows:
28		The base station shall set this field to the code channel index
29		(see [2]) that the mobile station is to use on the Supplemental
30		Channel on the highest SR3 frequency. If Radio
31		Configuration 6 or 8 is used, the base station shall set this
32		field in the range 1 to 127 inclusive. If Radio Configuration 7
33		or 9 is used, the base station shall set this field in the range 1
34		to 255 inclusive.
35	CCSH_INCLUDED	- Code Combining Soft Handoff information included indicator.
36		The base station shall set this field to '1' if Code Combining
37		Soft Handoff information is included in this message;
38		otherwise, the base station shall set this field to '0'.
39	USE_CCSH_ENCODER_TIME	- Use Code Combining Soft Handoff Turbo Encoder
40		swapping action time indicator.
41		If the CCSH_INCLUDED field is set to '0', the base station
42		shall omit this field; otherwise, the base station shall include
43		this field and set it as follows.
44		If an explicit action time at which Turbo Encoder types
45		(CCSH_ENCODER_TYPE) included in this message takes
46		effect is specified, the base station shall set this field to '1';
47		otherwise, the base station shall set this field to '0'.



- 1 CSH\_ENCODER\_ACTION\_TIME - Code Combining Soft Handoff Turbo Encoder  
 2 swapping action time.
- 3 If the USE\_CCSH\_ENCODER\_TIME field is included and set  
 4 to '1', the base station shall set this field to the System Time  
 5 minus  $\text{FRAME\_OFFSET}_s \times 1.25$  ms, in units of 80ms (modulo  
 6 64), at which Turbo Encoder types included in this message  
 7 are to take effect; otherwise, the base station shall omit this  
 8 field.
- 9 If the CCSH\_INCLUDED field is set to '1', the base station shall include one occurrence of  
 10 the following one field for each of the Forward Supplemental Channel records (as specified  
 11 by NUM\_PILOTS and NUM\_SCH) with PILOT\_INCL field set to '1'. The base station shall  
 12 use the same order for the following field as is used for the Forward Supplemental Channel  
 13 records.
- 14 CSH\_ENCODER\_TYPE - Code Combining Soft Handoff Turbo Encoder type.
- 15 The base station shall set this field to '0' if the Turbo Encoder  
 16 type to be used on the Forward Supplemental Channel  
 17 identified by FOR\_SCH\_ID and SCCL\_INDEX is the default  
 18 encoder type. The base station shall set this field to '1' if the  
 19 Turbo Encoder to be used is the complementary type.
- 20 FUNDICATED\_BCNC\_IND - BCNC on fundicated channel Indicator.
- 21 If the channel assignment in this message contains a  
 22 Forward Fundicated Channel used for BCNC transmission,  
 23 the base station shall set this field to '1'; otherwise, the base  
 24 station shall set this field to '0'.
- 25 If FUNDICATED\_BCNC\_IND field is set to '1', the base station shall include NUM\_PILOT  
 26 occurrences of the following record:
- 27 FOR\_CPCCH\_WALSH - The Forward Common Power Control Channel Walsh code  
 28 assignment.
- 29 The base station shall set this field to the Walsh code  
 30 assignment for the Forward Common Power Control Channel.
- 31 FOR\_CPCSCH - The Forward Common Power Control Channel Subchannel.
- 32 The base station shall set this field to the Forward Common  
 33 Power Control Channel Subchannel associated with this base  
 34 station.
- 35 RESERVED - Reserved bits.
- 36 The base station shall add reserved bits as needed in order to  
 37 make the length of the ACTIVE\_SET\_REC\_FIELDS record  
 38 equal to an integer number of octets. The base station shall  
 39 set these bits to '0'.
- 40 If the CH\_IND field is set to '111', the base station shall include the following fields:
- 41 NUM\_FOR\_SCH - Number of Forward Supplemental Channel records.
- 42 If SCH\_INCL is set to '0', the base station shall omit this field;  
 43 otherwise, the base station shall set this field as follows:

1                   The base station shall set this field to the number of the  
2                   Forward Supplemental Channel records need to be updated.

3   If NUM\_FOR\_SCH is included and not equal to '00000', the base station shall include  
4   NUM\_FOR\_SCH occurrence of the following three fields:

5           FOR\_SCH\_ID   -   Forward Supplemental Channel identifier.  
6                   The base station shall set this field to the identifier of the  
7                   Forward Supplemental Channel.

8           SCCL\_INDEX   -   Supplemental Channel Code list index.  
9                   The base station shall set this field to the index of the record  
10                  in the Supplemental Channel Code list.

11   FOR\_SCH\_NUM\_BITS\_IDX -   Forward Supplemental Channel number of information  
12                   bits index.

13                   If USE\_FLEX\_NUM\_BITS is equal to '0' or if  
14                   USE\_FLEX\_NUM\_BITS is equal to '1' and  
15                   FSCH\_NBIT\_TABLE\_ID for FOR\_SCH\_ID is equal to '0000',  
16                   then the base station shall set this field according to Table  
17                   3.7.3.3.2.37-4 to indicate the number of information bits per  
18                   frame and the length of the CRC field for the Forward  
19                   Supplemental Channel identified by FOR\_SCH\_ID  
20                   corresponding to SCCL\_INDEX.

21                   If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and  
22                   FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID] is not equal to '0000',  
23                   then the base station shall set this field to indicate that the  
24                   number of information bits per frame for the Forward  
25                   Supplemental channel identified by FOR\_SCH\_ID to be  
26                   NUM\_BITS[FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID]][FOR\_SCH\_  
27                   NUM\_BITS\_IDX] and the number of CRC bits per frame for  
28                   the Forward Supplemental channel identified by  
29                   FOR\_SCH\_ID to be  
30                   CRC\_LEN\_IDX[FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID]][FOR\_S  
31                   CH\_NUM\_BITS\_IDX].

32           NUM\_REV\_SCH   -   Number of Reverse Supplemental Channel records.  
33                   If SCH\_INCL is set to '0', the base station shall omit this field;  
34                   otherwise, the base station shall set this field as follows:  
35                   The base station shall set this field to the number of the  
36                   Reverse Supplemental Channels need to be updated.

37   If NUM\_REV\_SCH is included and not equal to '00000', the base station shall include  
38   NUM\_REV\_SCH occurrence of the following three fields:

39           REV\_SCH\_ID   -   Reverse Supplemental Channel identifier.  
40                   The base station shall set this field to the identifier of the  
41                   Reverse Supplemental Channel.

42           REV\_WALSH\_ID   -   Reverse Supplemental Channel Walsh cover Identifier.

1		The base station shall set this field according to Table
2		3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
3		station is to use when transmitting at the rate specified by
4		REV_SCH_NUM_BITS_IDX on the Reverse Supplemental
5		Channel specified by REV_SCH_ID. If only one reverse
6		supplemental channel is assigned, the base station should set
7		this field to the default value for the REV_WALSH_ID as
8		specified in 2.6.4.2.
9	REV_SCH_NUM_BITS_IDX	- Reverse Supplemental Channel number of bits per frame
10		index.
11		If USE_FLEX_NUM_BITS is equal to '0' or if
12		USE_FLEX_NUM_BITS is equal to '1' and
13		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
14		the base station shall set this field according to Table
15		3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
16		number of information bits per frame and the number of CRC
17		bits per frame, corresponding to REV_WALSH_ID field.
18		If USE_FLEX_NUM_BITS is equal to '1' and
19		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
20		then the base station shall set the REV_SCH_NUM_BITS_IDX
21		field to indicate the Reverse Supplemental Channel number
22		of information bits per frame, corresponding to
23		REV_WALSH_ID field to be
24		NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
25		[REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
26		Channel number of information bits per frame, corresponding
27		to REV_WALSH_ID field to be to be
28		CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
29		[REV_SCH_NUM_BITS_IDX].
30	NUM_PILOTS	- Number of pilots included in the message.
31		The base station shall set this field to the number of pilots
32		included in the message. The base station shall set this field
33		to an integer that is equal to or greater than 1.
34	SRCH_OFFSET_INCL	- Target pilot channel search window offset included.
35		If the SRCH_OFFSET field is included in the following
36		records, the base station shall set this field to '1'; otherwise,
37		the base station shall set this field to '0'.
38	The base station shall include one occurrence of the following record for each of the	
39	NUM_PILOTS pilots included in the message:	
40	PILOT_PN	- Pilot PN sequence offset index.
41		The base station shall set this field to the pilot PN sequence
42		offset for this pilot in units of 64 PN chips.

1	SRCH_OFFSET	-	Target pilot channel search window offset.
2			If SRCH_OFFSET_INCL equals to '1', then the base station
3			shall set this field to the value shown in Table 2.6.6.2.1-2
4			corresponding to the search window offset to be used by the
5			mobile station for this target pilot. Otherwise, the base
6			station shall omit this field.
7	ADD_PILOT_REC_INCL	-	Additional pilot information included indicator.
8			The base station shall set this field to '1' if additional pilot
9			information listed in PILOT_REC_TYPE and RECORD_LEN
10			fields are included. The base station shall set this field to '0'
11			if the corresponding pilot is the common pilot and there is no
12			additional pilot information included.
13	PILOT_REC_TYPE	-	Pilot record type.
14			If ADD_PILOT_REC_INCL is set to '1', the base station shall
15			set this field to the PILOT_REC_TYPE value shown in Table
16			3.7.2.3.2.21-9 corresponding to the type of Pilot Record
17			specified by this record.
18			If ADD_PILOT_REC_INCL is set to '0', the base station shall
19			omit this field.
20	RECORD_LEN	-	Pilot record length.
21			If ADD_PILOT_REC_INCL is set to '1', the base station shall
22			set this field to the number of octets in the type-specific fields
23			of this pilot record.
24			If ADD_PILOT_REC_INCL is set to '0', the base station shall
25			omit this field.
26	Type-specific fields	-	Pilot record type-specific fields.
27			If ADD_PILOT_REC_INCL is set to '1', the base station shall
28			include type-specific fields based on the PILOT_REC_TYPE of
29			this pilot record as described in 3.7.6.1.
30			If ADD_PILOT_REC_INCL is set to '0', the base station shall
31			omit this field.
32	PWR_COMB_IND	-	Power control symbol combining indicator.
33			If this pilot will carry the same closed-loop power control
34			subchannel bits as that of the previous pilot in this message,
35			the base station shall set this field to '1'; otherwise, the base
36			station shall set this field to '0'. The base station shall set
37			this field to '0' in the first record in the pilot list.
38	CODE_CHAN_FCH	-	Code Channel on the Fundamental Channel.
39			If a Radio Configuration associated with Spreading Rate 1 is
40			used, the base station shall set this field to the code channel
41			index (see [2]) that the mobile station is to use on the
42			Fundamental Channel of the Forward Traffic Channel. If a
43			Radio Configuration associated with Spreading Rate 3 is
44			used, the base station shall set this field to the code channel
45			index that the mobile station is to use for the Fundamental
46			Channel on the center SR3 frequency.

1			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
2			station shall set this field in the range 1 to 63 inclusive. If
3			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
4			station shall set this field in the range 1 to 127 inclusive. If
5			Radio Configuration 7 or 9 is used, the base station shall set
6			this field in the range 1 to 255 inclusive.
7	QOF_MASK_ID_FCH	-	Quasi-orthogonal function index on the Fundamental
8			Channel.
9			If a Radio Configuration associated with Spreading Rate 1 is
10			used, the base station shall set this field to the index of the
11			Quasi-orthogonal function (see [2]). If a Radio Configuration
12			associated with Spreading Rate 3 is used, the base station
13			shall set this field to the index of the Quasi-orthogonal
14			function on the center SR3 frequency.
15	CODE_CHAN_DCCH	-	Code channel on the Dedicated Control Channel.
16			If a Radio Configuration associated with Spreading Rate 1 is
17			used, the base station shall set this field to the code channel
18			index (see [2]), in the range of 1 to 127 inclusive, that the
19			mobile station is to use on the Dedicated Control Channel of
20			the Forward Traffic Channel. If a Radio Configuration
21			associated with Spreading Rate 3 is used, the base station
22			shall set this field to the code channel index in the range of 1
23			to 255 inclusive, that the mobile station is to use for the
24			Dedicated Control Channel on the center SR3 frequency.
25			If Radio Configuration 3 or 5 (see [2]) is used, the base station
26			shall set this field in the range 1 to 63 inclusive. If Radio
27			Configuration 4, 6 or 8 is used, the base station shall set this
28			field in the range 1 to 127 inclusive. If Radio Configuration 7
29			or 9 is used, the base station shall set this field in the range 1
30			to 255 inclusive.
31	QOF_MASK_ID_DCCH	-	Quasi-orthogonal function index on the Dedicated Control
32			Channel.
33			If a Radio Configuration associated with Spreading Rate 1 is
34			used, the base station shall set this field to the index of the
35			Quasi-orthogonal function (see [2]). If a Radio Configuration
36			associated with Spreading Rate 1 is used, the base station
37			shall set this field to the index of the Quasi-orthogonal
38			function on the center SR3 frequency.
39	NUM_SCH	-	Number of Supplemental Channel records.
40			The base station shall set this field to the number of the
41			Supplemental Channel records need to be updated.
42	If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH		
43	occurrence of the following fields:		
44	FOR_SCH_ID	-	Forward Supplemental Channel identifier.
45			The base station shall set this field to the identifier of the
46			Forward Supplemental Channel pertaining to this record.
47	SCCL_INDEX	-	Supplemental Channel Code list index.

1			The base station shall set this field to the index of the record
2			in the Supplemental Channel Code List Table.
3	PILOT_INCL	-	The corresponding pilot included in Supplemental Channel
4			Active Set indicator.
5			The base station shall set this field to '1' if the corresponding
6			pilot is included in the Active Set of Supplemental Channel;
7			otherwise, the base station shall set this field to '0'.
8	CODE_CHAN_SCH	-	Code Channel on the Supplemental Channel.
9			If SCH_INCL is set to '0', the base station shall omit this field;
10			otherwise, the base station shall set this field as follows:
11			The base station shall set this field to the code channel index
12			(see [2]) that the mobile station is to use on the Supplemental
13			Channel of the Forward Traffic Channel indexed by
14			SCCL_INDEX.
15	QOF_MASK_ID_SCH	-	Quasi-orthogonal function index on the Supplemental
16			Channel.
17			If SCH_INCL is set to '0', the base station shall omit this field;
18			otherwise, the base station shall set this field as follows:
19			The base station shall set this field to the index of the Quasi-
20			orthogonal function (see [2]).
21	3X_FCH_INFO_INCL	-	3X Fundamental Channel information included indicator.
22			If the 3X Fundamental Channel information is included, the
23			base station shall set this field to '1'; otherwise, the base
24			station shall set this field to '0'.
25	3X_DCCH_INFO_INCL	-	3X Dedicated Control Channel information included
26			indicator.
27			If the 3X Dedicated Control Channel information is included,
28			the base station shall set this field to '1'; otherwise, the base
29			station shall set this field to '0'.
30	The base station shall include NUM_PILOTS occurrences of the following record if		
31	3X_FCH_INFO_INCL or 3X_FCH_INFO_INCL is set to '1'. The base station shall use the		
32	same order for the following fields as is used for the PILOT_PN fields listed in this message.		
33	3X_FCH_LOW_INCL	-	FCH code channel on the lowest SR3 frequency included
34			indicator.
35			If 3X_FCH_INFO_INCL is set to '0', the base station shall set
36			omit this field; otherwise, the base station shall set this field
37			as follows:
38			If the Fundamental Channel on the lowest SR3 frequencies
39			has a different code channel than the Fundamental Channel
40			on the center SR3 frequency, the base station shall set this
41			field to '1'; otherwise, the base station shall set this field to
42			'0'.
43	QOF_MASK_ID_FCH_LOW	-	QOF index for the Fundamental Channel on the lowest
44			SR3 frequency.

1		If 3X_FCH_LOW_INCL is included and set to '1', the base
2		station shall set this field as follows; otherwise, the base
3		station shall omit this field:
4		The base station shall set this field to the index of the Quasi-
5		orthogonal function (see [2]) corresponding to the QOF index
6		for the Fundamental Channel on the lowest SR3 frequency.
7	CODE_CHAN_FCH_LOW -	Code channel for the Fundamental Channel on the lowest
8		SR3 frequency.
9		If 3X_FCH_LOW_INCL is included and set to '1', the base
10		station shall set this field as follows; otherwise, the base
11		station shall omit this field:
12		The base station shall set this field to the code channel index
13		(see [2]) that the mobile station is to use on the Fundamental
14		Channel on the lowest SR3 frequency. If Radio Configuration
15		6 or 8 is used, the base station shall set this field in the range
16		1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
17		base station shall set this field in the range 1 to 255
18		inclusive.
19	3X_FCH_HIGH_INCL -	FCH code channel on the highest SR3 frequency included
20		indicator.
21		If 3X_FCH_INFO_INCL is set to '0', the base station shall omit
22		this field; otherwise, the base station shall set this field as
23		follows:
24		If the Fundamental Channel on the highest SR3 frequencies
25		has a different code channel than the Fundamental Channel
26		on the center SR3 frequency, the base station shall set this
27		field to '1'; otherwise, the base station shall set this field to
28		'0'.
29	QOF_MASK_ID_FCH_HIGH -	QOF index for the Fundamental Channel on the
30		highest SR3 frequency.
31		If 3X_FCH_HIGH_INCL is included and set to '1', the base
32		station shall set this field as follows; otherwise, the base
33		station shall omit this field:
34		The base station shall set this field to the index of the Quasi-
35		orthogonal function (see [2]) corresponding to the QOF index
36		for the Fundamental Channel on the highest SR3 frequency.
37	CODE_CHAN_FCH_HIGH -	Code channel for the Fundamental Channel on the
38		highest SR3 frequency.
39		If 3X_FCH_HIGH_INCL is included and set to '1', the base
40		station shall set this field as follows; otherwise, the base
41		station shall omit this field:

1			The base station shall set this field to the code channel index
2			(see [2]) that the mobile station is to use on the Fundamental
3			Channel on the highest SR3 frequency. If Radio
4			Configuration 6 or 8 is used, the base station shall set this
5			field in the range 1 to 127 inclusive. If Radio Configuration 7
6			or 9 is used, the base station shall set this field in the range 1
7			to 255 inclusive.
8	3X_DCCH_LOW_INCL	-	DCCH code channel on the lowest SR3 frequency included
9			indicator.
10			If 3X_DCCH_INFO_INCL is set to '0', the base station shall
11			omit this field; otherwise, the base station shall set this field
12			as follows:
13			If the Dedicated Control Channel on the lowest SR3
14			frequencies has a different code channel than the Dedicated
15			Control Channel on the center SR3 frequency, the base
16			station shall set this field to '1'; otherwise, the base station
17			shall set this field to '0'.
18	QOF_MASK_ID_DCCH_LOW	-	QOF index for the Dedicated Control Channel on the
19			lowest SR3 frequency.
20			If 3X_DCCH_LOW_INCL is included and set to '1', the base
21			station shall set this field as follows; otherwise, the base
22			station shall omit this field:
23			The base station shall set this field to the index of the Quasi-
24			orthogonal function (see [2]) corresponding to the QOF index
25			for the Dedicated Control Channel on the lowest SR3
26			frequency.
27	CODE_CHAN_DCCH_LOW	-	Code channel for the Dedicated Control Channel on the
28			lowest SR3 frequency.
29			If 3X_DCCH_LOW_INCL is included and set to '1', the base
30			station shall set this field as follows; otherwise, the base
31			station shall omit this field:
32			The base station shall set this field to the code channel index
33			(see [2]) that the mobile station is to use on the Dedicated
34			Control Channel on the lowest SR3 frequency. If Radio
35			Configuration 6 or 8 is used, the base station shall set this
36			field in the range 1 to 127 inclusive. If Radio Configuration 7
37			or 9 is used, the base station shall set this field in the range 1
38			to 255 inclusive.
39	3X_DCCH_HIGH_INCL	-	DCCH code channel on the highest SR3 frequency included
40			indicator.
41			If 3X_DCCH_INFO_INCL is set to '0', the base station shall
42			omit this field; otherwise, the base station shall set this field
43			as follows:
44			If the Dedicated Control Channel on the highest SR3
45			frequencies has a different code channel than the Dedicated
46			Control Channel on the center SR3 frequency, the base
47			station shall set this field to '1'; otherwise, the base station
48			shall set this field to '0'.



1	QOF_MASK_ID_DCCH_HIGH	-	QOF index for the Dedicated Control Channel on
2			the highest SR3 frequency.
3			If 3X_DCCH_HIGH_INCL is included and set to '1', the base
4			station shall set this field as follows; otherwise, the base
5			station shall omit this field:
6			The base station shall set this field to the index of the Quasi-
7			orthogonal function (see [2]) corresponding to the QOF index
8			for the Dedicated Control Channel on the highest SR3
9			frequency.
10	CODE_CHAN_DCCH_HIGH	-	Code channel for the Dedicated Control Channel on the
11			highest SR3 frequency.
12			If 3X_DCCH_HIGH_INCL is included and set to '1', the base
13			station shall set this field as follows; otherwise, the base
14			station shall omit this field:
15			The base station shall set this field to the code channel index
16			(see [2]) that the mobile station is to use on the Dedicated
17			Control Channel on the highest SR3 frequency. If Radio
18			Configuration 6 or 8 is used, the base station shall set this
19			field in the range 1 to 127 inclusive. If Radio Configuration 7
20			or 9 is used, the base station shall set this field in the range 1
21			to 255 inclusive.
22	3X_SCH_INFO_INCL	-	3X Supplemental Channel information included indicator.
23			If SCH_INCL is set to '0', the base station shall omit this field;
24			otherwise, the base station shall set this field as follows:
25			If the 3X Supplemental Channel information is included, the
26			base station shall set this field to '1'; otherwise, the base
27			station shall set this field to '0'.
28	The base station shall include NUM_SCH occurrences of the following seven fields record if		
29	3X_SCH_INFO_INCL is included and set to '1'.		
30	FOR_SCH_ID	-	Forward Supplemental Channel identifier.
31			The base station shall set this field the identifier of the
32			Forward Supplemental Channel pertaining to this record.
33	3X_SCH_LOW_INCL	-	SCH code channel on the lowest SR3 frequency included
34			indicator.
35			If the Supplemental Channel on the lowest SR3 frequencies
36			has a different code channel than the Supplemental Channel
37			on the center SR3 frequency, the base station shall set this
38			field to '1'; otherwise, the base station shall set this field to
39			'0'.
40	QOF_MASK_ID_SCH_LOW	-	QOF index for the Supplemental Channel on the lowest
41			SR3 frequency.
42			If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
43			this field; otherwise, the base station shall set this field as
44			follows:

1		The base station shall set this field to the index of the Quasi-
2		orthogonal function (see [2]) corresponding to the QOF index
3		for the Supplemental Channel on the lowest SR3 frequency.
4	CODE_CHAN_SCH_LOW -	Code channel for the Supplemental Channel on the lowest
5		SR3 frequency.
6		If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
7		this field; otherwise, the base station shall set this field as
8		follows:
9		The base station shall set this field to the code channel index
10		(see [2]) that the mobile station is to use on the Supplemental
11		Channel on the lowest SR3 frequency. If Radio Configuration
12		6 or 8 is used, the base station shall set this field in the range
13		1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
14		base station shall set this field in the range 1 to 255
15		inclusive.
16	3X_SCH_HIGH_INCL -	SCH code channel on the highest SR3 frequency included
17		indicator.
18		If the Supplemental Channel on the highest SR3 frequencies
19		has a different code channel than the Supplemental Channel
20		on the center SR3 frequency, the base station shall set this
21		field to '1'; otherwise, the base station shall set this field to
22		'0'.
23	QOF_MASK_ID_SCH_HIGH -	QOF index for the Supplemental Channel on the highest
24		SR3 frequency.
25		If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
26		this field; otherwise, the base station shall set this field as
27		follows:
28		The base station shall set this field to the index of the Quasi-
29		orthogonal function (see [2]) corresponding to the QOF index
30		for the Supplemental Channel on the highest SR3 frequency.
31	CODE_CHAN_SCH_HIGH -	Code channel for the Supplemental Channel on the
32		highest SR3 frequency.
33		If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
34		this field; otherwise, the base station shall set this field as
35		follows:
36		The base station shall set this field to the code channel index
37		(see [2]) that the mobile station is to use on the Supplemental
38		Channel on the highest SR3 frequency. If Radio
39		Configuration 6 or 8 is used, the base station shall set this
40		field in the range 1 to 127 inclusive. If Radio Configuration 7
41		or 9 is used, the base station shall set this field in the range 1
42		to 255 inclusive.
43	CCSH_INCLUDED -	Code Combining Soft Handoff information included indicator.
44		The base station shall set this field to '1' if Code Combining
45		Soft Handoff information is included in this message;
46		otherwise, the base station shall set this field to '0'.

1	USE_CCSH_ENCODER_TIME	- Use Code Combining Soft Handoff Turbo Encoder
2		swapping action time indicator.
3		If the CCSH_INCLUDED field is set to '0', the base station
4		shall omit this field; otherwise, the base station shall include
5		this field and set it as follows.
6		If an explicit action time at which Turbo Encoder types
7		(CCSH_ENCODER_TYPE) included in this message takes
8		effect is specified, the base station shall set this field to '1';
9		otherwise, the base station shall set this field to '0'.
10	CCSH_ENCODER_ACTION_TIME	- Code Combining Soft Handoff Turbo Encoder
11		swapping action time.
12		If the USE_CCSH_ENCODER_TIME field is included and set
13		to '1', the base station shall set this field to the System Time
14		minus $\text{FRAME\_OFFSET}_s \times 1.25 \text{ ms}$ , in units of 80ms (modulo
15		64), at which Turbo Encoder types included in this message
16		are to take effect; otherwise, the base station shall omit this
17		field.
18	If the CCSH_INCLUDED field is set to '1', the base station shall include one occurrence of	
19	the following one field for each of the Forward Supplemental Channel records (as specified	
20	by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to '1'. The base station shall	
21	use the same order for the following field as is used for the Forward Supplemental Channel	
22	records.	
23	CCSH_ENCODER_TYPE	- Code Combining Soft Handoff Turbo Encoder type.
24		The base station shall set this field to '0' if the Turbo Encoder
25		type to be used on the Forward Supplemental Channel
26		identified by FOR_SCH_ID and SCCL_INDEX is the default
27		encoder type. The base station shall set this field to '1' if the
28		Turbo Encoder to be used is the complementary type.
29	FUNDICATED_BCNC_IND	- BCNC on fundicated channel Indicator.
30		If the channel assignment in this message contains a
31		Forward Fundicated Channel used for BCNC transmission,
32		the base station shall set this field to '1'; otherwise, the base
33		station shall set this field to '0'.
34	REV_FCH_ASSIGNED	- Reverse FCH channel assigned indicator.
35		If the FUNDICATED_BCNC_IND field is set to '0', the base
36		station shall omit this field; otherwise, the base station shall
37		include this field and set it as follows:
38		If the reverse FCH is assigned in this message, the base
39		station shall set this field to '1'; otherwise, the base station
40		shall set this field to '0'.
41	ADD_PLCM_FOR_FCH_INCL	- Additional PLCM for forward FCH included indicator.
42		If the FUNDICATED_BCNC_IND field is set to '0', the base
43		station shall omit this field; otherwise, the base station shall
44		include this field and set it as follows:

1		If the additional PLCM for forward FCH is included in this
2		message, the base station shall set this field to '1'; otherwise,
3		the base station shall set this field to '0'.
4	ADD_PLCM_FOR_FCH_TYPE-	The Additional Public Long Code Mask for forward FCH
5		type indicator.
6		If ADD_PLCM_FOR_FCH_INCL not included or is included
7		and is set to '0', the base station shall omit this field;
8		otherwise, the base station shall include this field and set it
9		as follows.
10		The base station shall set this field to '1' to indicate PLCM
11		specified by the base station. The field value '0' is reserved.
12	ADD_PLCM_FOR_FCH_39	- The 39 LSB bits of the additional Public Long Code Mask
13		for forward FCH.
14		If ADD_PLCM_FOR_FCH_TYPE field is included and is set to
15		'1', the base station shall include this field and set it to the 39
16		least significant bits of the public long code mask used by the
17		mobile station; otherwise, the base station shall omit this
18		field.
19	FOR_CPCCH_INFO_INCL -	CPCCH information included indicator.
20		If the FUNDICATED_BCNC_IND field is set to '0', the base
21		station shall omit this field; otherwise, the base station shall
22		include this field and set it as follows:
23		If the F-CPCCH information is included in this message, the
24		base station shall set this field to '1'; otherwise, the base
25		station shall set this field to '0'.
26	If FOR_CPCCH_INFO_INCL field is included and is set to '1', the base station shall include	
27	NUM_PILOT occurrences of the following record:	
28	FOR_CPCCH_WALSH	- The Forward Common Power Control Channel Walsh code
29		assignment.
30		The base station shall set this field to the Walsh code
31		assignment for the Forward Common Power Control Channel.
32	FOR_CPCSCH	- The Forward Common Power Control Channel Subchannel.
33		The base station shall set this field to the Forward Common
34		Power Control Channel Subchannel associated with this base
35		station.
36	RESERVED	- Reserved bits.
37		The base station shall add reserved bits as needed in order to
38		make the length of the ACTIVE_SET_REC_FIELDS record
39		equal to an integer number of octets. The base station shall
40		set these bits to '0'.
41	If the CH_IND field is set to '000', the base station shall include the following fields:	
42	EXT_CH_IND	- Extended Channel Indicator.
43		The base station shall set this field as shown in
44		Table 2.7.1.3.2.4-11.

1	RESERVED	-	Reserved bits for octet alignment.
2			Reserved bits to align the octets between ACTIVE_SET-
3			_REC_FIELDS and EXT_ACTIVE_SET_REC_FIELDS so that
4			the latter has a length of ACTIVE_SET_REC_LEN-1 bytes.
5	EXT_ACTIVE_SET_REC_FIELDS	-	Extended Active Set record fields.
6			The Active Set record fields are determined by the value of
7			EXT_CH_IND, as described below.
8	The EXT_ACTIVE_SET_REC_FIELDS shall be:		
9	PDCH_CONTROL_HOLD	-	Packet Data Channel Control Hold mode indication.
10			The base station shall set this field to '1' to instruct the
11			mobile station to transition to the Packet Data Channel
12			Control Hold Mode.
13			If EXT_CH_IND signals the allocation of a F-FCH this field
14			shall be set to '0'.
15	FULL_CI_FEEDBACK_IND	-	Full C/I feedback rate indicator.
16			If the mobile station is to send full C/I feedback every 1.25
17			ms, the base station shall set this field to '1'. If the mobile
18			station is to transmit full C/I feedback every 20 ms, the base
19			station shall set this field to '0'.
20	FOR_CPCCH_RATE	-	The Forward Common Power Control Channel Rate.
21			If EXT_CH_IND equals '01000', the base station shall include
22			this field and shall set it as follows; otherwise, the base
23			station shall omit this field.
24			The base station shall set this field to the rate of the Forward
25			Common Power Control Channel as specified in Table
26			3.7.2.3.2.21-12. See [2].
27	FOR_CPCCH_UPDATE_RATE	-	Forward Common Power Control update rate.
28			If EXT_CH_IND equals '01000', the base station shall include
29			this field and shall set it as follows; otherwise, the base
30			station shall omit this field.
31			The base station shall set this field to the update rate of the
32			Forward Common Power Control as specified in Table
33			3.7.2.3.2.21-13. See [2].
34	REV_CQICH_FRAME_OFFSET	-	Reverse Channel Quality Indicator Channel Frame
35			Offset.
36			The C/I feedback reports on the Reverse Channel Quality
37			Indicator Channel are delayed REV_CQICH_FRAME_OFFSET
38			× 1.25 ms relative to system timing (see [2]).
39			The base station shall set this field to the Reverse Channel
40			Quality Indicator Channel frame offset.
41	REV_CQICH_REPS	-	Reverse Channel Quality Indicator Channel repetition factor.

1		The base station shall set this field according to Table
2		3.7.3.3.2.49-1.
3	REV_ACKCH_REPS	- Reverse Acknowledgment Channel repetition factor.
4		The base station shall set this field according to Table
5		3.7.3.3.2.49-2.
6	NUM_FOR_SCH	- Number of Forward Supplemental Channel records.
7		If EXT_CH_IND does not signal the allocation of neither a F-
8		FCH nor a F-DCCH, or if SCH_INCL is set to '0', the base
9		station shall omit this field; otherwise, the base station shall
10		include this field and shall set it as follows:
11		The base station shall set this field to the number of Forward
12		Supplemental Channel records that need to be updated.
13	If NUM_FOR_SCH is included and not equal to '00000', the base station shall include	
14	NUM_FOR_SCH occurrence of the following three fields:	
15	FOR_SCH_ID	- Forward Supplemental Channel identifier.
16		The base station shall set this field to the identifier of the
17		Forward Supplemental Channel.
18	SCCL_INDEX	- Supplemental Channel Code list index.
19		The base station shall set this field to the index of the record
20		in the Supplemental Channel Code list.
21	FOR_SCH_NUM_BITS_IDX	- Forward Supplemental Channel number of information
22		bits index.
23		If USE_FLEX_NUM_BITS is equal to '0' or if
24		USE_FLEX_NUM_BITS is equal to '1' and
25		FSCH_NBIT_TABLE_ID for FOR_SCH_ID is equal to '0000',
26		then the base station shall set this field according to Table
27		3.7.3.3.2.37-4 to indicate the number of information bits per
28		frame and the length of the CRC field for the Forward
29		Supplemental Channel identified by FOR_SCH_ID
30		corresponding to SCCL_INDEX.
31		If USE_FLEX_NUM_BITS <sub>s</sub> is equal to '1' and
32		FSCH_NBIT_TABLE_ID[FOR_SCH_ID] is not equal to '0000',
33		then the base station shall set this field to indicate that the
34		number of information bits per frame for the Forward
35		Supplemental channel identified by FOR_SCH_ID to be
36		NUM_BITS[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SCH_
37		NUM_BITS_IDX] and the number of CRC bits per frame for
38		the Forward Supplemental channel identified by
39		FOR_SCH_ID to be
40		CRC_LEN_IDX[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_S
41		CH_NUM_BITS_IDX].
42	NUM_REV_SCH	- Number of Reverse Supplemental Channel records.
43		If SCH_INCL is set to '0', the base station shall omit this field;
44		otherwise, the base station shall include this field and shall
45		set it as follows:

1		The base station shall set this field to the number of the
2		Reverse Supplemental Channels need to be updated.
3	If NUM_REV_SCH is included and not equal to '00000', the base station shall include	
4	NUM_REV_SCH occurrence of the following three fields:	
5	REV_SCH_ID	- Reverse Supplemental Channel identifier.
6		The base station shall set this field to the identifier of the
7		Reverse Supplemental Channel.
8	REV_WALSH_ID	- Reverse Supplemental Channel Walsh cover Identifier.
9		The base station shall set this field according to Table
10		3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
11		station is to use when transmitting at the rate specified by
12		REV_SCH_NUM_BITS_IDX on the Reverse Supplemental
13		Channel specified by REV_SCH_ID. If only one reverse
14		supplemental channel is assigned, the base station should
15		set this field to the default value for the REV_WALSH_ID as
16		specified in 2.6.4.2.
17	REV_SCH_NUM_BITS_IDX	- Reverse Supplemental Channel number of bits per frame
18		index.
19		If USE_FLEX_NUM_BITS is equal to '0' or if
20		USE_FLEX_NUM_BITS is equal to '1' and
21		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
22		the base station shall set this field according to Table
23		3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
24		number of information bits per frame and the CRC bits per
25		frame, corresponding to REV_WALSH_ID field.
26		If USE_FLEX_NUM_BITS is equal to '1' and
27		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
28		then the base station shall set this field to indicate the
29		Reverse Supplemental Channel number of information bits
30		per frame, corresponding to REV_WALSH_ID field to be
31		NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
32		[REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
33		Channel number of CRC bits per frame corresponding to
34		REV_WALSH_ID field to be
35		CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
36		[REV_SCH_NUM_BITS_IDX].
37	NUM_PILOTS	- Number of pilots included in the message.
38		The base station shall set this field to the number of pilots
39		included in the message. The base station shall set this field
40		to an integer that is equal to or greater than 1.
41	SRCH_OFFSET_INCL	- Target pilot channel search window offset included.
42		If the SRCH_OFFSET field is included in the following
43		records, the base station shall set this field to '1'; otherwise,
44		the base station shall set this field to '0'.
45	PDCH_GROUP_IND_INCL	- Packet Data Channel Group Indicator included flag.

1		The base station shall set this field to '1' if the
2		PDCH_GROUP_IND fields are included; otherwise, the base
3		station shall set this field to '0'.
4		If this field is set to '0', the mobile station is to use
5		PWR_COMB_IND to determine whether the softer or soft
6		reselection parameters are used when re-pointing between
7		pilots in its Active Set (see [3]).
8	FOR_PDCH_PARDS_INCL	- Indicator of the inclusion of Forward Packet Data Channel
9		configuration fields.
10		The base station shall set this field to '1' if the Forward
11		Packet Data Channel configuration fields are included;
12		otherwise, the base station shall set this field to '0'.
13	FOR_PDCH_RLGAIN_INCL	- Forward Packet Data Channel parameters related to
14		reverse link adjustment gains included indicator.
15		If FOR_PDCH_PARDS_INCL is omitted, or if it is included and
16		set to '0', the base station shall omit this field; otherwise, the
17		base station shall include this field, and set it as follows.
18		The base station shall set this field to '1' if the following F-
19		PDCH gain related fields are included in this message;
20		otherwise, the base station shall set this field to '0'.
21	RLGAIN_ACKCH_PILOT	- Reverse Acknowledgment Channel to pilot adjustment gain.
22		If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included
23		and set to '0', the base station shall omit this field; otherwise,
24		the base station shall include this field, and set it as follows.
25		The base station shall set this field to the Reverse
26		Acknowledgment Channel to pilot adjustment gain expressed
27		as a two's complement value in units of 0.125 dB (see [2]).
28	RLGAIN_CQICH_PILOT	- Reverse Channel Quality Indicator Channel to pilot
29		adjustment gain.
30		If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included
31		and set to '0', the base station shall omit this field; otherwise,
32		the base station shall include this field, and set it as follows.
33		The base station shall set this field to the Reverse Channel
34		Quality Indicator Channel to pilot adjustment gain expressed
35		as a two's complement value in units of 0.125 dB (see [2]).
36	NUM_SOFT_SWITCHING_FRAMES	- Number of frames for R-CQICH soft switching.
37		If FOR_PDCH_PARDS_INCL is equal to '0', the base station
38		shall omit this field; otherwise, the base station shall include
39		this field and set it as follows:
40		The base station shall set this field to the duration of the cell
41		switching period, in units of 20 ms, minus one, during which
42		the mobile station is to transmit the cell switch sequence on
43		the R-CQICH channel when it switches between two pilots
44		which are in different groups.



1                   If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
2                   indicated by PDCH\_GROUP\_IND; otherwise, they are  
3                   indicated by PWR\_COMB\_IND.

4   NUM\_SOFTSWITCHING\_FRAMES - Number of frames for R-CQICH softer  
5                   switching.

6                   If FOR\_PDCH\_PARMES\_INCL is equal to '0', the base station  
7                   shall omit this field; otherwise, the base station shall include  
8                   this field and set it as follows:

9                   The base station shall set this field to the duration of the cell  
10                  switching period, in units of 20 ms, minus one, during which  
11                  the mobile station is to transmit the cell switch sequence on  
12                  the R-CQICH channel when it switches between two pilots  
13                  which are in the same group.

14                  If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
15                  indicated by PDCH\_GROUP\_IND; otherwise, they are  
16                  indicated by PWR\_COMB\_IND.

17

18   NUM\_SOFTSWITCHING\_SLOTS - Number of slots per frame for R-CQICH soft  
19                   switching.

20                  If FOR\_PDCH\_PARMES\_INCL is equal to '0', the base station  
21                  shall omit this field; otherwise, the base station shall include  
22                  this field and set it as follows:

23                  The base station shall set this field to the duration of the cell  
24                  switching slots within a switching frame, in units of 1.25 ms  
25                  as specified in Table 3.7.2.3.2.21-10, during which the mobile  
26                  station is to transmit the cell switch indication by using  
27                  Walsh cover of target on the R-CQICH when it switches  
28                  between two pilots which are in different groups.

29                  If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
30                  indicated by PDCH\_GROUP\_IND; otherwise, they are  
31                  indicated by PWR\_COMB\_IND.

32   NUM\_SOFTSWITCHING\_SLOTS - Number of slots per frame for R-CQICH softer  
33                   switching.

34                  If FOR\_PDCH\_PARMES\_INCL is equal to '0', the base station  
35                  shall omit this field; otherwise, the base station shall include  
36                  this field and set it as follows:

37                  The base station shall set this field to the duration of the cell  
38                  switching slots within a switching frame, in units of 1.25 ms  
39                  as specified in Table 3.7.2.3.2.21-10, during which the mobile  
40                  station is to transmit the cell switch indication by using  
41                  Walsh cover of target on the R-CQICH when it switches  
42                  between two pilots which are in the same group.

43                  If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
44                  indicated by PDCH\_GROUP\_IND; otherwise, they are  
45                  indicated by PWR\_COMB\_IND.

46   CHM\_SWITCHING\_PARMES\_INCL - Control Hold Mode fields included indicator.

1 If FOR\_PDCH\_PARMS\_INCL is equal to '0', the base station  
2 shall omit this field; otherwise, the base station shall include  
3 this field and set it as follows.

4 The base station shall set this field to '1' if the switching  
5 parameters for Control Hold Mode are included; otherwise,  
6 the base station shall set this field to '0'.

7 NUM\_SOFT\_SWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH soft  
8 switching while in Control Hold.

9 If CHM\_SWITCHING\_PARMS\_INCL is omitted or equal to '0',  
10 the base station shall omit this field; otherwise, the base  
11 station shall include this field and set it as follows:

12 The base station shall set this field to the duration of the cell  
13 switching period, in units of 20 ms, minus one, during which  
14 the mobile station, while in Control Hold, is to transmit the  
15 cell switch sequence on the R-CQICH when it switches  
16 between two pilots which are in different groups.

17 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
18 indicated by PDCH\_GROUP\_IND; otherwise, they are  
19 indicated by PWR\_COMB\_IND.

20 NUM\_SOFTSWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH softer  
21 switching while in Control Hold.

22 If CHM\_SWITCHING\_PARMS\_INCL is omitted or equal to '0',  
23 the base station shall omit this field; otherwise, the base  
24 station shall include this field and set it as follows:

25 The base station shall set this field to the duration of the cell  
26 switching period, in units of 20 ms, minus one, during which  
27 the mobile station, while in Control Hold, is to transmit the  
28 cell switch sequence on the R-CQICH when it switches  
29 between two pilots which are in the same group.

30 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
31 indicated by PDCH\_GROUP\_IND; otherwise, they are  
32 indicated by PWR\_COMB\_IND.

33 NUM\_SOFT\_SWITCHING\_SLOTS\_CHM - Number of slots per frame for R-CQICH soft  
34 switching while in Control Hold.

35 If CHM\_SWITCHING\_PARMS\_INCL is omitted or equal to '0',  
36 the base station shall omit this field; otherwise, the base  
37 station shall include this field and set it as follows:

38 The base station shall set this field to the duration of the cell  
39 switching slots within a switching frame, in units of 1.25 ms  
40 as specified in Table 3.7.2.3.2.21-10, during which the mobile  
41 station, while in Control Hold, is to transmit the cell switch  
42 indication by using Walsh cover of target on the R-CQICH  
43 when it switches between two pilots which are in different  
44 groups.

45 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
46 indicated by PDCH\_GROUP\_IND; otherwise, they are  
47 indicated by PWR\_COMB\_IND.

1 NUM\_SOFTEN\_SWITCHING\_SLOTS\_CHM - Number of slots per frame for R-CQICH  
2 softer switching while in Control Hold.

3 If CHM\_SWITCHING\_PARMES\_INCL is omitted or equal to '0',  
4 the base station shall omit this field; otherwise, the base  
5 station shall include this field and set it as follows:

6 The base station shall set this field to the duration of the cell  
7 switching slots within a switching frame, in units of 1.25 ms  
8 as specified in Table 3.7.2.3.2.21-10, during which the mobile  
9 station, while in Control Hold, is to transmit the cell switch  
10 indication by using Walsh cover of target on the R-CQICH  
11 when it switches between two pilots which are in the same  
12 group.

13 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
14 indicated by PDCH\_GROUP\_IND; otherwise, they are  
15 indicated by PWR\_COMB\_IND.

16 PDCH\_SOFT\_SWITCHING\_DELAY - F-PDCH Soft Switching Delay.

17 If FOR\_PDCH\_PARMES\_INCL is equal to '0', the base station  
18 shall omit this field; otherwise, the base station shall include  
19 this field and set it as follows:

20 The base station shall set this field to the minimum  
21 interruption seen by the mobile station, in units of 10 ms,  
22 minus one, when the mobile station is to transmit the cell  
23 switch sequence on the R-CQICH when it switches between  
24 two pilots which are in different groups.

25 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
26 indicated by PDCH\_GROUP\_IND; otherwise, they are  
27 indicated by PWR\_COMB\_IND.

28 PDCH\_SOFTEN\_SWITCHING\_DELAY - F-PDCH Soft Switching Delay.

29 If FOR\_PDCH\_PARMES\_INCL is equal to '0', the base station  
30 shall omit this field; otherwise, the base station shall include  
31 this field and set it as follows:

32 The base station shall set this field to the minimum  
33 interruption seen by the mobile station, in units of 10 ms,  
34 minus one, when the mobile station is to transmit the cell  
35 switch sequence on the R-CQICH when it switches between  
36 two pilots which are in the same group.

37 If PDCH\_GROUP\_IND\_INCL is set to '1', these groups are  
38 indicated by PDCH\_GROUP\_IND; otherwise, they are  
39 indicated by PWR\_COMB\_IND.

40 FOR\_PDCH\_COMMON\_PARMES - Common Forward Packet Data Channel configuration  
41 fields indicator.

42 If FOR\_PDCH\_PARMES\_INCL is set to '1', the base station shall  
43 include this field and set it as follows; otherwise, the base  
44 station shall omit this field.

1		The base station shall set this field to '1' if the following
2		Forward Packet Data Channel configuration fields
3		(WALSH_TABLE_ID, NUM_PDCCH, and
4		FOR_PDCCH_WALSH) are common for all the pilots in the
5		Active Set; otherwise, it shall be set to '0'.
6	WALSH_TABLE_ID	- The index of the Walsh Table used.
7		If FOR_PDCH_COMMON_PARMS is included and set to '1',
8		the base station shall include this field and set it as follows;
9		otherwise, the base station shall omit this field.
10		The base station shall set this field to the index of the Walsh
11		Table being used by the Packet Data Channel. (See [3]).
12	NUM_PDCCH	- The number of Packet Data Control Channels supported.
13		If FOR_PDCH_COMMON_PARMS is included and set to '1',
14		the base station shall include this field and set it as follows;
15		otherwise, the base station shall omit this field.
16		The base station shall set this field to '000' if the pilot
17		supports one Packet Data Control Channel. The base station
18		shall set this field to '001' if the pilot supports two Packet
19		Data Control Channels. The base station shall not set this
20		field to any other value.
21	The base station shall include NUM_PDCCH+1 occurrences of the following one-field	
22	record:	
23	FOR_PDCCH_WALSH	- Forward Packet Data Control Channel Walsh code
24		assignment.
25		If FOR_PDCH_COMMON_PARMS is included and set to '1',
26		the base station shall include this field and set it as follows;
27		otherwise, the base station shall omit this field.
28		The base station shall set this field to the Walsh code
29		assignment for the Forward Packet Data Control Channel.
30		If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
31		shall be included first, followed by the Walsh code for
32		PDCCH1.
33	TX_DISABLED_TIMER_INCL	- Transmitter disabled timer included flag.
34		The base station shall set this field to '1' if the following
35		TX_DISABLED_TIMER field is included; otherwise, the base
36		station shall set this field to '0'.
37	TX_DISABLED_TIMER	- Transmitter disabled timer.
38		If TX_DISABLED_TIMER_INCL is equal to '0', the base station
39		shall omit this field; otherwise, the base station shall include
40		this field and set it as follows:

1		The base station shall set this field to the maximum time, in
2		units of 20ms, the mobile station's transmitter can be
3		disabled before the MAC Layer is to perform Forward Packet
4		Data Channel initialization (see [3]).
5	FOR_GCH_ASSIGNED -	Forward Grant Channel assignment indicator.
6		If EXT_CH_IND signals the allocation of a R-PDCH, the base
7		station shall include this field and shall set it as follows;
8		otherwise, the base station shall omit this field.
9		The base station shall set this field to '1' if the mobile station
10		is to listen to grants on the Forward Grant Channel;
11		otherwise, the base station shall set this field to '0' (see [3]).
12	FOR_RCCH_ASSIGNED -	Forward Rate Control Channel assignment indicator.
13		If EXT_CH_IND signals the allocation of a R-PDCH, the base
14		station shall include this field and shall set it as follows;
15		otherwise, the base station shall omit this field.
16		The base station shall set this field to '1' if the mobile station
17		is to follow rate control indicators on the Forward Rate
18		Control Channel; otherwise, the base station shall set this
19		field to '0' (see [3]).
20	FOR_RCCH_DRC_MODE -	Forward Rate Control Channel Dedicated Rate Control Mode
21		Indicator.
22		If FOR_RCCH_ASSIGNED is omitted, or if it is included and
23		set to '0', the base station shall omit this field; otherwise, the
24		base station shall include this field and set it as follows.
25		The base station shall set this field to '1' if the dedicated rate
26		control mode is being used on the Forward Rate Control
27		Channel; otherwise, the base station shall set this field to '0'
28		if the common rate control mode is being used (see [3]).
29	FOR_RCCH_REPETITION -	Forward Rate Control Subchannel repetition factor.
30		If FOR_RCCH_ASSIGNED is omitted, or if it is included and
31		set to '0', the base station shall omit this field; otherwise, the
32		base station shall include this field and set it as follows.
33		The base station shall set this field to the subchannel
34		repetition factor of the Rate Control Subchannel on all pilots
35		as specified in Table 3.7.2.3.2.21-11 (see [2]).
36	FOR_RCCH_UPDATE_RATE -	Forward Rate Control Subchannel update rate.
37		If FOR_RCCH_ASSIGNED is omitted, or if it is included and
38		set to '0', the base station shall omit this field; otherwise, the
39		base station shall include this field and set it as follows.
40		The base station shall set this field to the update rate of the
41		Rate Control Subchannel on all pilots as specified in Table
42		3.7.2.3.2.21-13. See [2].
43	FOR_ACKCH_ASSIGNED -	Forward Acknowledgment Channel assignment indicator.

1		If EXT_CH_IND signals the allocation of a R-PDCH, the base
2		station shall include this field and shall set it as follows;
3		otherwise, the base station shall omit this field.
4		The base station shall set this field to '1' if the mobile station
5		is to listen to acknowledgments on the Forward
6		Acknowledgment Channel; otherwise, the base station shall
7		set this field to '0' (see [2] and [3]).
8	FOR_ACKCH_MODE	- Forward Acknowledgment Channel Mode.
9		If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
10		set to '0', the base station shall omit this field; otherwise, the
11		base station shall include this field and set it as follows.
12		The base station shall set this field to the Acknowledgement
13		Channel mode identifier that governs how the
14		Acknowledgment channel is demodulated. See [2] and [3] for
15		the details.
16		The base station shall set this field to '00' if the mobile
17		station is to attempt the reception of the Forward
18		Acknowledgment Channel from all members of the reduced
19		active set of the Forward Packet Data Channel.
20		The base station shall set this field to '01' if the mobile
21		station is to attempt reception of the Forward
22		Acknowledgment Channel from all members of the reduced
23		active set, and is to combine the acknowledgments from all
24		sectors in the same combining indicator set.
25		The base station shall set this field to '10' if the mobile
26		station is to attempt reception of the Forward
27		Acknowledgment Channel from the serving sector only.
28		The base station shall set this field to '11' if the mobile
29		station is to combine the Forward Acknowledgment Channel
30		from all sectors in the same combining indicator set as the
31		serving sector.
32	FOR_ACKCH_COMB_SEL	- Forward Acknowledgment Channel Combining method
33		selector.
34		If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
35		set to '0', or if FOR_ACKCH_MODE is omitted, or if it is
36		included and set to '00' or '10', or if PDCH_GROUP_IND_INCL
37		is set to '0', the base station shall omit this field; otherwise, it
38		shall include it and set it as follows.
39		The base station shall set this field to '0' if the mobile station
40		is to use PWR_COMB_IND as a combining indicator when
41		receiving the Forward Acknowledgment Channel; otherwise, it
42		shall set it to '1' if the mobile station is to use
43		PDCH_GROUP_IND as the indicator for combining sectors.
44	REV_PDCH_PARMS_INCL	- Reverse Packet Data Channel related parameters included
45		indicator.

1		If EXT_CH_IND signals the allocation of a R-PDCH, the base
2		station shall include this field and shall set it as follows;
3		otherwise, the base station shall omit this field.
4		The base station shall set this field to '1' if the following R-
5		PDCH parameters are included in this message; otherwise,
6		the base station shall set this field to '0'.
7	REV_PDCH_RLGAIN_INCL	- Reverse Packet Data Channel parameters related to
8		reverse link adjustment gains included indicator.
9		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
10		set to '0', the base station shall omit this field; otherwise, the
11		base station shall include this field, and set it as follows.
12		The base station shall set this field to '1' if the following R-
13		PDCH gain related fields are included in this message;
14		otherwise, the base station shall set this field to '0'.
15	RLGAIN_SPICH_PILOT	- Reverse Secondary Pilot Channel to pilot adjustment gain.
16		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
17		and set to '0', the base station shall omit this field; otherwise,
18		the base station shall include this field, and set it as follows.
19		The base station shall set this field to the Reverse Secondary
20		Pilot Channel to pilot adjustment gain expressed as a two's
21		complement value in units of 0.125 dB (see [2]).
22	RLGAIN_REQCH_PILOT	- Reverse Request Channel to pilot adjustment gain.
23		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
24		and set to '0', the base station shall omit this field; otherwise,
25		the base station shall include this field, and set it as follows.
26		The base station shall set this field to the Reverse Request
27		Channel to pilot adjustment gain expressed as a two's
28		complement value in units of 0.125 dB (see [2]).
29	RLGAIN_PDCCH_PILOT	- Reverse Packet Data Control Channel to pilot adjustment
30		gain.
31		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included
32		and set to '0', the base station shall omit this field; otherwise,
33		the base station shall include this field, and set it as follows.
34		The base station shall set this field to the Reverse Packet
35		Data Channel to pilot adjustment gain expressed as a two's
36		complement value in units of 0.125 dB (see [2]).
37	REV_PDCH_PARMS_1_INCL	- Reverse Packet Data Channel parameters subset included
38		indicator.
39		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
40		set to '0', the base station shall omit this field; otherwise, the
41		base station shall include this field, and set it as follows.
42		The base station shall set this field to '1' if the following R-
43		PDCH parameters are included in this message; otherwise,
44		the base station shall set this field to '0'.
45	REV_PDCH_TABLE_SEL	- Reverse Packet Data Channel Table selector.

1		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
2		and set to '0', the base station shall omit this field; otherwise,
3		the base station shall include this field, and set it as follows.
4		The base station shall set this field to the Reverse Packet
5		Data Channel Table selector (see [2]).
6	REV_PDCH_MAX_AUTO_TPR	- Reverse Packet Data Channel maximum traffic to pilot
7		ratio for autonomous transmission.
8		If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
9		and set to '0', the base station shall omit this field; otherwise,
10		the base station shall include this field and set it as follows.
11		The base station shall set this field to the maximum traffic to
12		pilot ratio for autonomous transmission on the Reverse
13		Packet Data Channel (see [2] and [3]).
14		The base station shall set this field to a value in the range 0
15		to 18 dB inclusive in units of 0.125 dB.
16	The base station shall include NUM_PILOTS occurrences of the following record:	
17	PILOT_PN	- Pilot PN sequence offset index.
18		The base station shall set this field to the pilot PN sequence
19		offset for this pilot in units of 64 PN chips.
20	SRCH_OFFSET	- Target pilot channel search window offset.
21		If SRCH_OFFSET_INCL equals to '1', then the base station
22		shall include this field and set it to the value shown in Table
23		2.6.6.2.1-2 corresponding to the search window offset to be
24		used by the mobile station for this target pilot; otherwise, the
25		base station shall omit this field.
26	ADD_PILOT_REC_INCL	- Additional pilot information included indicator.
27		The base station shall set this field to '1' if additional pilot
28		information listed in PILOT_REC_TYPE and RECORD_LEN
29		fields are included. The base station shall set this field to '0'
30		if the corresponding pilot is the common pilot and there is no
31		additional pilot information included.
32	PILOT_REC_TYPE	- Pilot record type.
33		If ADD_PILOT_REC_INCL is set to '1', the base station shall
34		set this field to the PILOT_REC_TYPE value shown in Table
35		3.7.2.3.2.21-9 corresponding to the type of Pilot Record
36		specified by this record.
37		If ADD_PILOT_REC_INCL is set to '0', the base station shall
38		omit this field.
39	RECORD_LEN	- Pilot record length.
40		If ADD_PILOT_REC_INCL is set to '1', the base station shall
41		set this field to the number of octets in the type-specific fields
42		of this pilot record.
43		If ADD_PILOT_REC_INCL is set to '0', the base station shall
44		omit this field.



1	Type-specific fields	- Pilot record type-specific fields.
2		If ADD_PILOT_REC_INCL is set to '1', the base station shall
3		include type-specific fields based on the PILOT_REC_TYPE of
4		this pilot record as described in 3.7.6.1.
5		If ADD_PILOT_REC_INCL is set to '0', the base station shall
6		omit this field.
7	FOR_PDCH_INCL	- Forward Packet Data Channel configuration field included
8		indicator.
9		The base station shall set this field to '1' if the MS is assigned
10		resources on the PDCH channel; otherwise, the base station
11		shall set this field to '0'. This field shall be set to '1' for at
12		least one of the pilots included in this message.
13	WALSH_TABLE_ID	- The index of the Walsh Table used.
14		If FOR_PDCH_INCL is set to '1', and if
15		FOR_PDCH_COMMON_PARMs is included and set to '0', the
16		base station shall include this field and set it as follows;
17		otherwise, the base station shall omit this field.
18		The base station shall set this field to the index of the Walsh
19		Table being used by the Packet Data Channel. (See [3]).
20	NUM_PDCCH	- The number of Packet Data Control Channels supported.
21		If FOR_PDCH_INCL is set to '1', and if
22		FOR_PDCH_COMMON_PARMs is included and set to '0', the
23		base station shall include this field and set it as follows;
24		otherwise, the base station shall omit this field.
25		The base station shall set this field to '000' if the pilot
26		supports one Packet Data Control Channel. The base station
27		shall set this field to '1' if the pilot supports two Packet Data
28		Control Channels. The base station shall not set this field to
29		any other value.
30	The base station shall include <i>NUM_PDCCH+1</i> occurrences of the following one-field	
31	record:	
32	FOR_PDCCH_WALSH	- Forward Packet Data Control Channel Walsh code
33		assignment.
34		If FOR_PDCH_INCL is set to '1', and if
35		FOR_PDCH_COMMON_PARMs is included and set to '0', the
36		base station shall include this field and set it as follows;
37		otherwise, the base station shall omit this field.
38		The base station shall set this field to the Walsh code
39		assignment for the Forward Packet Data Control Channel.
40		If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
41		shall be included first, followed by the Walsh code for
42		PDCCH1.
43	MAC_ID	- Medium Access Control index.

1			If FOR_PDCH_INCL is set to '0', the base station shall omit
2			this field; otherwise, the base station shall include this field
3			and set it as follows:
4			The base station shall set this field to the MAC index
5			assigned to the mobile station by this pilot.
6			The base station shall set this field to an integer value larger
7			than 63.
8	REV_CQICH_COVER	-	Reverse Channel Quality Indicator Channel cover.
9			If FOR_PDCH_INCL is set to '0', the base station shall omit
10			this field; otherwise, the base station shall include this field
11			and set it as follows:
12			The base station shall set this field to the index of the R-
13			CQICH cover associated with this pilot.
14			If this pilot is a member of the mobile station's current Active
15			Set, the base station should assign the same value for the
16			Walsh cover that is in the mobile station's current Active Set.
17			If this pilot is not a member of the mobile station's current
18			Active Set, the base station should assign a value for the
19			Walsh cover that was not recently assigned (See [2]).
20	FOR_CPCCH_WALSH	-	The Forward Common Power Control Channel Walsh code
21			assignment.
22			If EXT_CH_IND signals the allocation of a F-CPCCH, and
23			either of the following conditions is true:
24		-	EXT_CH_IND signals the allocation of a F-FCH or a F-
25			DCCH
26		-	all of the following conditions are true:
27		+	FOR_PDCH_INCL is set to '1'
28		+	EXT_CH_IND does not signal allocation of a F-FCH
29		+	EXT_CH_IND does not signal allocation of a F-DCCH
30			the base station shall include this field and shall set it as
31			follows; otherwise, the base station shall omit this field
32			The base station shall set this field to the Walsh code
33			assignment for the Forward Common Power Control Channel.
34	FOR_CPCSCH	-	The Forward Common Power Control Channel Subchannel.
35			If EXT_CH_IND signals the allocation of a F-CPCCH, and
36			either of the following conditions is true:
37		-	EXT_CH_IND signals the allocation of a F-FCH or a F-
38			DCCH
39		-	all of the following conditions are true:
40		+	FOR_PDCH_INCL is set to '1'
41		+	EXT_CH_IND does not signal allocation of a F-FCH
42		+	EXT_CH_IND does not signal allocation of a F-DCCH

1		the base station shall include this field and shall set it as
2		follows; otherwise, the base station shall omit this field
3		The base station shall set this field to the Forward Common
4		Power Control Channel Subchannel associated with this base
5		station.
6		If FOR_CPCCH_RATE is omitted, or if it is included and set to
7		'00', the base station shall set this field to a value in the
8		range 0 to 23 inclusive. If FOR_CPCCH_RATE is included and
9		set set to '01', the base station shall set this field to a value in
10		the range 0 to 47 inclusive. If FOR_CPCCH_RATE is included
11		and set set to '10', the base station shall set this field to a
12		value in the range 0 to 95 inclusive.
13	PWR_COMB_IND	- Power control symbol combining indicator.
14		If the Forward Traffic Channel or Forward Common Power
15		Control Channel associated with this pilot will carry the same
16		closed-loop power control subchannel bits as that of the
17		previous pilot in this message, the base station shall set this
18		field to '1'; otherwise, the base station shall set this field to
19		'0'. The base station shall set this field to '0' in the first
20		record in the pilot list.
21	PDCH_GROUP_IND	- Packet Data Channel Group Indicator.
22		If PDCH_GROUP_IND_INCL is set to '1', the base station shall
23		include this field and shall set it as follows; otherwise, the
24		base station shall omit this field.
25		If the mobile station is to use the softer reselection
26		parameters when re-pointing between this pilot and the
27		previous pilot in this message that has a F-PDCH assigned to
28		this mobile station (i.e. FOR_PDCH_INCL is set to '1'), the
29		base station shall set this field to '1' (See [3]).
30		If the mobile station is to use the soft reselection parameters
31		when re-pointing between this pilot and the previous pilot in
32		this message that has a F-PDCH assigned to this mobile
33		station (i.e. FOR_PDCH_INCL is set to '1'), the base station
34		shall set this field to '0' (See [3]).
35		The base station shall set this field to '0' in the first record in
36		the pilot list that has a F-PDCH assigned to this mobile
37		station (i.e. FOR_PDCH_INCL is set to '1').
38	CODE_CHAN_FCH	- Code channel on the Fundamental Channel.
39		If EXT_CH_IND signals the allocation of a F-FCH, the base
40		station shall include this field and shall set it as follows;
41		otherwise it shall be omitted.
42		The base station shall set this field to the code channel index
43		(see [2]) that the mobile station is to use on the Fundamental
44		Channel of the Forward Traffic Channel.

1			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
2			station shall set this field in the range 1 to 63 inclusive. If
3			Radio Configuration 4, 11, or 12 is used, the base station
4			shall set this field in the range 1 to 127 inclusive.
5	QOF_MASK_ID_FCH	-	Quasi-orthogonal function index on the Fundamental
6			Channel.
7			If EXT_CH_IND signals the allocation of a F-FCH, the base
8			station shall include this field and shall set it as follows;
9			otherwise it shall be omitted.
10			The base station shall set this field to the index of the Quasi-
11			orthogonal function (see [2]).
12	CODE_CHAN_DCCH	-	Code channel on the Dedicated Control Channel.
13			If EXT_CH_IND signals the allocation of a F-DCCH, the base
14			station shall include this field and shall set it as follows;
15			otherwise it shall be omitted.
16			The base station shall set this field to the code channel index
17			(see [2]), in the range of 1 to 127 inclusive, that the mobile
18			station is to use on the Dedicated Control Channel of the
19			Forward Traffic Channel.
20			If Radio Configuration 3 or 5 (see [2]) is used, the base station
21			shall set this field in the range 1 to 63 inclusive. If Radio
22			Configuration 4 is used, the base station shall set this field in
23			the range 1 to 127 inclusive.
24	QOF_MASK_ID_DCCH	-	Quasi-orthogonal function index on the Dedicated Control
25			Channel.
26			If EXT_CH_IND signals the allocation of a F-DCCH', the base
27			station shall include this field and shall set it as follows;
28			otherwise it shall be omitted.
29			The base station shall set this field to the index of the Quasi-
30			orthogonal function (see [2]).
31	FOR_ACKCH_WALSH_INDEX	-	Walsh Code for the Forward Acknowledgment
32			Channel.
33			If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
34			set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND
35			does not signal the allocation of a R-PDCH, the base station
36			shall omit this field; otherwise, it shall include it and set it as
37			follows.
38			The base station shall set this field to the Walsh code of the
39			Forward Acknowledgment Channel (see [2]).
40	FOR_ACKSCH_INDEX	-	Forward Acknowledgment Subchannel Index.
41			If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
42			set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND
43			does not signal the allocation of a R-PDCH, the base station
44			shall omit this field; otherwise, it shall include it and set it as
45			follows.

1		The base station shall set this field to the subchannel index
2		of the Forward Acknowledgment Channel (see [2]). The base
3		station should not use FOR_ACKSCH_INDEX = 0, 1, 2, 96, 97,
4		or 98.
5	FOR_RCCH_INCL	- Forward Rate Control Subchannel included flag.
6		If FOR_PDCH_INCL is set to '0', or if FOR_RCCH_ASSIGNED
7		is omitted, or if it is included and set to '0', the base station
8		shall omit this field; otherwise, the base station shall include
9		this field and set it as follows.
10		The base station shall set this field to '1' if a Forward Rate
11		Control Channel Subchannel is allocated on this pilot (see
12		[2]); otherwise, the base station shall set this field to '0'.
13		The base station shall set this field to a non zero value for at
14		least one pilot in this message.
15	FOR_RCCH_WALSH_INDEX	- Walsh Code for the Forward Rate Control Channel
16		Subchannel.
17		If FOR_RCCH_INCL is omitted, or if it is included and set to
18		'0', the base station shall omit this field; otherwise, the base
19		station shall include this field and set it as follows.
20		The base station shall set this field to the Walsh code of the
21		Forward Rate Control Channel Subchannel (see [2]).
22	FOR_RCSCH_INDEX	- Forward Rate Control Subchannel.
23		If FOR_RCCH_INCL is omitted, or if it is included and set to
24		'0', the base station shall omit this field; otherwise, the base
25		station shall include this field and set it as follows.
26		The base station shall set this field to the subchannel index
27		of the Rate Control Subchannel on this pilot (see [2]).
28		If FOR_RCCH_REPETITION is set to '00' this field shall take
29		values in the range 0 to 96. If FOR_RCCH_REPETITION is set
30		to '01' this field shall take values in the range 0 to 48. If
31		FOR_RCCH_REPETITION is set to '10' this field shall take
32		values in the range 0 to 24.
33	NUM_FOR_GCH	- Number of Forward Grant Channels
34		If FOR_PDCH_INCL is set to '0', or if FOR_GCH_ASSIGNED is
35		omitted, or if it is included and set to '0', the base station
36		shall omit this field; otherwise, the base station shall include
37		this field and set it as follows.
38		The base station shall set this field to the number of assigned
39		Forward Grant Channels on this pilot. The base station shall
40		set this field to 0, 1, or 2.
41		The base station shall set this field to a non zero value for at
42		least one pilot in this message.
43	If FOR_PDCH_INCL is set to '1', and if FOR_GCH_ASSIGNED is included and set to '1', the	
44	base station shall include NUM_FOR_GCH occurrences of the field	
45	FOR_GCH_WALSH_INDEX:	

1	FOR_GCH_WALSH_INDEX	-	Walsh Code for the Forward Grant Channel.
2			The base station shall set this field to the Walsh code of the
3			Forward Grant Channels (see [2]).
4	NUM_SCH	-	Number of Supplemental Channel records.
5			If SCH_INCL is set to '0', the base station shall omit this field;
6			otherwise, the base station shall include this field and shall
7			set it as follows:
8			The base station shall set this field to the number of the
9			Supplemental Channel records need to be updated.
10	If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH		
11	occurrence of the following five fields:		
12	FOR_SCH_ID	-	Forward Supplemental Channel identifier.
13			The base station shall set this field the identifier of the
14			Forward Supplemental Channel pertaining to this record.
15	SCCL_INDEX	-	Supplemental Channel Code list index.
16			The base station shall set this field to the index of the record
17			in the Supplemental Channel Code list.
18	PILOT_INCL	-	The corresponding pilot included in Supplemental Channel
19			Active Set indicator.
20			The base station shall set this field to '1' if the corresponding
21			pilot is included in the Active Set of Supplemental Channel;
22			otherwise, the base station shall set this field to '0'.
23	CODE_CHAN_SCH	-	Code channel on the Supplemental Channel.
24			If PILOT_INCL is included and set to '1', the base station shall
25			include this field and shall set it as follows; otherwise, the
26			base station shall omit this field.
27			The base station shall set this field to the code channel index
28			(see [2]) that the mobile station is to use on the Supplemental
29			Channel of the Forward Traffic Channel indexed by
30			SCCL_INDEX.
31	QOF_MASK_ID_SCH	-	Quasi-orthogonal function index on the Supplemental
32			Channel.
33			If PILOT_INCL is included and set to '1', the base station shall
34			include this field and shall set it as follows; otherwise, the
35			base station shall omit this field.
36			The base station shall set this field to the index of the Quasi-
37			orthogonal function (see [2]).
38	CCSH_INCLUDED	-	Code Combining Soft Handoff information included indicator.
39			The base station shall set this field to '1' if Code Combining
40			Soft Handoff information is included in this message;
41			otherwise, the base station shall set this field to '0'.
42	USE_CCSH_ENCODER_TIME	-	Use Code Combining Soft Handoff Turbo Encoder
43			swapping action time indicator.

1 If the CESH\_INCLUDED field is set to '0', the base station  
2 shall omit this field; otherwise, the base station shall include  
3 this field and set it as follows.

4 If an explicit action time at which Turbo Encoder types  
5 (CESH\_ENCODER\_TYPE) included in this message takes  
6 effect is specified, the base station shall set this field to '1';  
7 otherwise, the base station shall set this field to '0'.

8 CESH\_ENCODER\_ACTION\_TIME - Code Combining Soft Handoff Turbo Encoder  
9 swapping action time.

10 If the USE\_CESH\_ENCODER\_TIME field is included and set  
11 to '1', the base station shall set this field to the System Time  
12 minus FRAME\_OFFSET<sub>s</sub> × 1.25 ms, in units of 80ms (modulo  
13 64), at which Turbo Encoder types included in this message  
14 are to take effect; otherwise, the base station shall omit this  
15 field.

16 If the CESH\_INCLUDED field is set to '1', the base station shall include one occurrence of  
17 the following one field for each of the Forward Supplemental Channel records (as specified  
18 by NUM\_PILOTS and NUM\_SCH) with PILOT\_INCL field set to '1'. The base station shall  
19 use the same order for the following field as is used for the Forward Supplemental Channel  
20 records.

21 CESH\_ENCODER\_TYPE - Code Combining Soft Handoff Turbo Encoder type.

22 The base station shall set this field to '0' if the Turbo Encoder  
23 type to be used on the Forward Supplemental Channel  
24 identified by FOR\_SCH\_ID and SCCL\_INDEX is the default  
25 encoder type. The base station shall set this field to '1' if the  
26 Turbo Encoder to be used is the complementary type.

27 FUNDICATED\_BCNC\_IND - BCNC on fundicated channel Indicator.

28 If the channel assignment in this message contains a  
29 Forward Fundicated Channel used for BCNC transmission,  
30 the base station shall set this field to '1'; otherwise, the base  
31 station shall set this field to '0'.

32 ADD\_PLCM\_FOR\_FCH\_INCL - Additional PLCM for forward FCH included indicator.

33 If the FUNDICATED\_BCNC\_IND field is set to '0', the base  
34 station shall omit this field; otherwise, the base station shall  
35 include this field and set it as follows:

36 If the additional PLCM for forward FCH is included in this  
37 message, the base station shall set this field to '1'; otherwise,  
38 the base station shall set this field to '0'.

39 ADD\_PLCM\_FOR\_FCH\_TYPE - The Additional Public Long Code Mask for forward FCH  
40 type indicator.

41 If ADD\_PLCM\_FOR\_FCH\_INCL not included or is included  
42 and is set to '0', the base station shall omit this field;  
43 otherwise, the base station shall include this field and set it  
44 as follows.

45 The base station shall set this field to '1' to indicate PLCM  
46 specified by the base station. The field value '0' is reserved.

1	ADD_PLCM_FOR_FCH_39	-	The 39 LSB bits of the additional Public Long Code Mask
2			for forward FCH.
3			If ADD_PLCM_FOR_FCH_TYPE field is included and is set to
4			'1', the base station shall include this field and set it to the 39
5			least significant bits of the public long code mask used by the
6			mobile station; otherwise, the base station shall omit this
7			field.
8	RESERVED	-	Reserved bits.
9			The base station shall add reserved bits as needed in order to
10			make the length of the ACTIVE_SET_REC_FIELDS record
11			equal to an integer number of octets. The base station shall
12			set these bits to '0'.
13			



## 1 3.7.3.3.2.37 Extended Supplemental Channel Assignment Message

2 MSG\_TAG: ESCAM

Field	Length (bits)
START_TIME_UNIT	3
REV_SCH_DTX_DURATION	4
USE_T_ADD_ABORT	1
USE_SCRM_SEQ_NUM	1
SCRM_SEQ_NUM	0 or 4
ADD_INFO_INCL	1
FPC_PRI_CHAN	0 or 1

REV_CFG_INCLUDED	1
If REV_CFG_INCLUDED is set to '1', the base station shall include the following record:	
NUM_REV_CFG_RECS	5

If REV\_CFG\_INCLUDED is set to '1', the base station shall include (NUM\_REV\_CFG\_RECS + 1) occurrences of the following record:

{ (NUM\_REV\_CFG\_RECS+1)

REV_SCH_ID	1
REV_WALSH_ID	1
REV_SCH_NUM_BITS_IDX	4

} (NUM\_REV\_CFG\_RECS+1)

NUM_REV_SCH	2
-------------	---

The base station shall include NUM\_REV\_SCH occurrences of the following record:

{ (NUM\_REV\_SCH)

REV_SCH_ID	1
REV_SCH_DURATION	4
REV_SCH_START_TIME_INCL	1
REV_SCH_START_TIME	0 or 5
REV_SCH_NUM_BITS_IDX	4

3

(continues on next page)

Field	Length (bits)
-------	---------------

*} (NUM\_REV\_SCH)*

FOR_CFG_INCLUDED	1
FOR_SCH_FER_REP	0 or 1

If FOR\_CFG\_INCLUDED is set to '1', the base station shall include the following record:

NUM_FOR_CFG_RECS	5
------------------	---

If FOR\_CFG\_INCLUDED is set to '1', the base station shall include (NUM\_FOR\_CFG\_RECS + 1) occurrences of the following record

*{ (NUM\_FOR\_CFG\_RECS+1)*

FOR_SCH_ID	1
SCCL_INDEX	4
FOR_SCH_NUM_BITS_IDX	4
NUM_SUP_SHO	3

NUM\_SUP\_SHO+1 occurrences of the following record:

*{ (NUM\_SUP\_SHO+1)*

PILOT_PN	9
ADD_PILOT_REC_INCL	1
ACTIVE_PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or $8 \times \text{RECORD\_LEN}$
CODE_CHAN_SCH	11
QOF_MASK_ID_SCH	2

*} (NUM\_SUP\_SHO+1)*

*} (NUM\_FOR\_CFG\_RECS+1)*

NUM_FOR_SCH	2
-------------	---

NUM\_FOR\_SCH occurrences of the following record:

*{ (NUM\_FOR\_SCH)*

FOR_SCH_ID	1
FOR_SCH_DURATION	4
FOR_SCH_START_TIME_INCL	1
FOR_SCH_START_TIME	0 or 5

*(continues on next page)*

Field	Length (bits)
SCCL_INDEX	4

*} (NUM\_FOR\_SCH)*

FPC_INCL	1
FPC_MODE_SCH	0 or 3
FPC_SCH_INIT_SETPT_OP	0 or 1
FPC_SEC_CHAN	0 or 1
NUM_SUP	0 or 2

NUM\_SUP occurrences of the following record:

*{ (NUM\_SUP)*

SCH_ID	1
FPC_SCH_FER	5
FPC_SCH_INIT_SETPT	8
FPC_SCH_MIN_SETPT	8
FPC_SCH_MAX_SETPT	8

*} (NUM\_SUP)*

FPC_THRESH_SCH_INCL	0 or 1
FPC_SETPT_THRESH_SCH	0 or 8
RPC_INCL	1
RPC_NUM_SUP	0 or 1

Include  $RPC\_NUM\_SUP + 1$  occurrences of the following record:

*{ (RPC\_NUM\_SUP + 1)*

SCH_ID	1
RLGAIN_SCH_PILOT	6

*} (RPC\_NUM\_SUP + 1)*

(continues on next page)

1  
2  
3

Field	Length (bits)
3X_SCH_INFO_INCL	1
NUM_3X_CFG	0 or 2

If 3X\_SCH\_INFO\_INCL is set to '1', NUM\_3X\_CFG occurrences of the following record:

{ (NUM\_3X\_CFG)

FOR_SCH_ID	1
NUM_3X_REC	5

(NUM\_3X\_REC + 1) occurrences of the following record:

{ (NUM\_3X\_REC+ 1)

SCCL_INDEX	4
------------	---

(NUM\_SUP\_SHO + 1) occurrences of the following record for each corresponding SCCL\_INDEX field:

{ (NUM\_SUP\_SHO+ 1)

3X_SCH_LOW_INCL	1
QOF_MASK_ID_SCH_LOW	0 or 2
CODE_CHAN_SCH_LOW	0 or 11
3X_SCH_HIGH_INCL	1
QOF_MASK_ID_SCH_HIGH	0 or 2
CODE_CHAN_SCH_HIGH	0 or 11

} (NUM\_SUP\_SHO+ 1)

} (NUM\_3X\_REC+ 1)

} (NUM\_3X\_CFG)

CCSH_INCLUDED	1
---------------	---

(NUM\_FOR\_CFG\_RECS + 1) × (NUM\_SUP\_SHO + 1) occurrences of the following field if CCSH\_INCLUDED is set to '1'.

{ (NUM\_FOR\_CFG\_RECS + 1) × (NUM\_SUP\_SHO + 1)

CCSH_ENCODER_TYPE	0 or 1
{ (NUM_FOR_CFG_RECS + 1) × (NUM_SUP_SHO + 1)	
FOR_SCH_CC_INCL	1

If FOR\_SCH\_CC\_INCL is set to '1', the base station shall include NUM\_FOR\_SCH occurrences of the following record.

{ (NUM\_FOR\_SCH)

(continues on next page)

1

<b>Field</b>	<b>Length (bits)</b>
FOR_SCH_ID	2
FOR_SCH_MUX	16
SCH_CC_Type-specific field	Variable (see 3.7.5.7.1)

} (NUM\_FOR\_SCH)

REV_SCH_CC_INCL	1
-----------------	---

If REV\_SCH\_CC\_INCL is set to '1', the base station shall include NUM\_REV\_SCH occurrences of the following record.

{ (NUM\_REV\_SCH)

REV_SCH_ID	2
REV_SCH_MUX	16
SCH_CC_Type-specific field	Variable (see 3.7.5.7.1)

} (NUM\_REV\_SCH)

SCH_BCMC_IND	0 or 1
ADD_PLCM_FOR_SCH_INCL	0 or 1
ADD_PLCM_FOR_SCH_TYPE	0 or 1
ADD_PLCM_FOR_SCH_35	0 or 35

NUM\_FOR\_SCH occurrence of the following record if SCH\_BCMC\_IND is included and is set to '1':

{ (NUM\_FOR\_SCH)

USE_ADD_PLCM_FOR_SCH	1
FSCH_OUTERCODE_INCL	1
FSCH_OUTERCODE_RATE	0 or 3
FSCH_OUTERCODE_OFFSET	0 or 6

} (NUM\_FOR\_SCH)

FPC_BCMC_CHAN	0 or 1
---------------	--------

1		
2	START_TIME_UNIT	- Unit for start time.
3		The base station shall set this field to indicate the units of
4		start time included in <i>Extended Supplemental Channel</i>
5		<i>Assignment Message</i> , <i>Forward Supplemental Channel</i>
6		<i>Assignment Mini Message</i> , <i>Reverse Supplemental Channel</i>
7		<i>Assignment Mini Message</i> , and <i>Universal Handoff Direction</i>
8		<i>Message</i> . The base station shall set this field to one less than
9		the number of 20 ms frames that determines the
10		START_TIME_UNIT.
11	REV_SCH_DTX_DURATION	- Discontinuous Transmission on Reverse Supplemental
12		Channel.
13		The base station shall set this field to the maximum duration
14		of time in units of 20 ms that the mobile station is allowed to
15		stop transmission on a Reverse Supplemental Channel within
16		the reverse assignment duration. The base station shall set
17		this field to '0000' if the mobile station is to stop using a
18		Reverse Supplemental Channel once it has stopped
19		transmitting on that Reverse Supplemental Channel. The
20		base shall set this field to '1111' if the mobile station is
21		allowed to resume transmission on a Reverse Supplemental
22		Channel at any time within the reverse assignment duration.
23	USE_T_ADD_ABORT	- Reverse use T_ADD abort indicator.
24		The base station shall set this field to '1' to indicate that the
25		mobile station is to utilize the T_ADD Reverse Supplemental
26		Channel abort feature for this reverse assignment; otherwise,
27		the base station shall set this field to '0'.
28	USE_SCRM_SEQ_NUM	- Use Supplemental Channel Request Message sequence
29		number indicator.
30		The base station shall set this field to '1' if the
31		SCRM_SEQ_NUM field is included in this message; otherwise,
32		the base station shall set this field to '0'.
33	SCRM_SEQ_NUM	- Supplemental Channel Request Message sequence number.
34		If USE_SCRM_SEQ_NUM is set to '1', the base station shall
35		set this field to the sequence number corresponding to the
36		SCRM_SEQ_NUM field in a <i>Supplemental Channel Request</i>
37		<i>Message</i> to which the mobile station is to match this
38		message; otherwise, the base station shall omit this field.
39	ADD_INFO_INCL	- Additional information included indicator.
40		If the message is to contain the FPC_PRI_CHAN field, the base
41		station shall set this field to '1'; otherwise, the base station
42		shall set this field to '0'.
43		The base station shall set this field to '0' if any of the
44		following conditions holds:

- |    |   |   |  |
|----|---|---|--|
| 1  |   | - | The message does not contain any Supplemental Channel assignment.  |
| 2  |   |   |  |
| 3  |   | - | The mobile station is currently in the Active mode.  |
| 4  | FPC_PRI_CHAN  | - | Power Control Subchannel Indicator.  |
| 5  |   |   | If the ADD_INFO_INCL field is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:   |
| 6  |   |   |  |
| 7  |   |   |  |
| 8  |   |   | The base station shall set this field to '0' if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to '1' if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel. If the F-CPCCH is assigned, the base station shall multiplex the Power Control Subchannel on the F-CPCCH; otherwise: |
| 9  |   |   |  |
| 10 |   |   | If this field is set to '0', the base station shall multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station shall multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.  |
| 11 |   |   |  |
| 12 |   |   |  |
| 13 |   |   |  |
| 14 |   |   |  |
| 15 |   |   |  |
| 16 |   |   |  |
| 17 |   |   |  |
| 18 |   |   |  |
| 19 |   |   |  |
| 20 |   |   |  |
| 21 | REV_CFG_INCLUDED  | - | Reverse Supplemental Channel configuration included.   |
| 22 |   |   | The base station shall set this field to '1' if this message contains a Reverse Supplemental Channel configuration. Otherwise, the base station shall set this field to '0'.   |
| 23 |   |   |  |
| 24 |   |   |  |
| 25 | NUM_REV_CFG_RECS  | - | Number of the Reverse Supplemental Channel configuration Records.  |
| 26 |   |   | If REV_CFG_INCLUDED is set to '1', the base station shall set this field to one less than the number of reverse supplemental channel configuration records consisting of the following three fields that are included in this message; otherwise, the base station shall omit this field.  |
| 27 |   |   |  |
| 28 |   |   |  |
| 29 |   |   |  |
| 30 |   |   |  |
| 31 |   |   |  |
| 32 | The base station shall include NUM_REV_CFG_RECS+1 occurrences of the following three fields only if the REV_CFG_INCLUDED field is set to '1'. |   |  |
| 33 |   |   |  |
| 34 | REV_SCH_ID  | - | Reverse Supplemental Channel Identifier.   |
| 35 |   |   | The base station shall set this field to the identifier of the Reverse Supplemental Channel.   |
| 36 |   |   |  |
| 37 | REV_WALSH_ID  | - | Reverse Supplemental Channel Walsh cover Identifier.   |
| 38 |   |   | The base station shall set this field according to Table 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile station is to use when transmitting number of bits per frame specified by REV_NUM_BITS_IDX on the Reverse Supplemental Channel specified by REV_SCH_ID. If only one reverse supplemental channel is assigned, the base station should set this field to the default value for the REV WALSH ID as specified in 2.6.4.2.             |
| 39 |   |   |  |
| 40 |   |   |  |
| 41 |   |   |  |
| 42 |   |   |  |
| 43 |   |   |  |
| 44 |   |   |  |
| 45 |   |   |  |

**Table 3.7.3.3.2.37-1. REV\_WALSH\_ID Field**

REV_WALSH_ID (binary)	Walsh Cover	
	SCH_ID = '0'	SCH_ID = '1'
0	+-	++--
1	+++	++++++

REV\_SCH\_NUM\_BITS\_IDX - Reverse Supplemental Channel number of bits per frame index.

If USE\_FLEX\_NUM\_BITS is equal to '0' or if USE\_FLEX\_NUM\_BITS is equal to '1' and RSCH\_NBIT\_TABLE\_ID[REV\_SCH\_ID] is equal to '0000', then the base station shall set this field according to Table 3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel number of information bits per frame and the number of CRC bits per frame, corresponding to REV\_WALSH\_ID field.

If USE\_FLEX\_NUM\_BITS is equal to '1' and RSCH\_NBIT\_TABLE\_ID[REV\_SCH\_ID] is not equal to '0000', then the base station shall set this field to indicate the Reverse Supplemental Channel number of information bits per frame, corresponding to REV\_WALSH\_ID field to be NUM\_BITS[RSCH\_NBIT\_TABLE\_ID[REV\_SCH\_ID]] [REV\_SCH\_NUM\_BITS\_IDX] and the Reverse Supplemental Channel number of CRC bits per frame, corresponding to REV\_WALSH\_ID field to be CRC\_LEN\_IDX[RSCH\_NBIT\_TABLE\_ID[REV\_SCH\_ID]] [REV\_SCH\_NUM\_BITS\_IDX].

**Table 3.7.3.3.2.37-2. R-SCH Number of Information Bits per Frame**

REV_SCH_NUM_BITS_IDX (binary)	Number of information bits per frame		Number of CRC bits per frame
	RC 3, 5	RC 4, 6	
0000	172	267	12
0001	360	552	16
0010	744	1,128	16
0011	1,512	2,280	16
0100	3,048	4,584	16
0101	6,120	Reserved	16
0110	12,264	9,192	16



<b>REV_SCH_NUM_BITS_IDX</b>	<b>Number of information bits per frame</b>		<b>Number of CRC bits</b>
0111	Reserved	Reserved	Reserved
1000	Reserved	20,712	16
RESERVED	All other values are reserved		

**1**

2      NUM\_REV\_SCH      -      Number of Reverse Supplemental Channels assigned.

3 The base station shall set this field to the number of Reverse  
4 Supplemental Channel assigned. The base station shall set  
5 this field to '00' if the assignment of Supplemental Channel is  
6 not included.

7 The base station shall include NUM\_REV\_SCH occurrences of the following five fields  
8 (REV\_SCH\_ID, REV\_SCH\_DURATION, REV\_SCH\_START\_TIME\_INCL,  
9 REV\_SCH\_START\_TIME, and REV\_SCH\_NUM\_BITS IDX).

10           REV\_SCH\_ID     -   Reverse Supplemental Channel Identifier.

11 The base station shall set this field to the identifier of the  
12 Reverse Supplemental Channel.

13    **REV\_SCH\_DURATION**    -    Duration of Reverse Supplemental Channel assignment

14 The base station shall set this field to '0000' to indicate that  
15 the mobile station is to stop transmitting on the Reverse  
16 Supplemental Channel specified by REV\_SCH\_ID at the  
17 explicit start time specified by REV\_SCH\_START\_TIME or at  
18 the implicit start time if REV\_SCH\_START\_TIME\_INCL is set  
19 to '0'. The base station shall set this field to '1111' to indicate  
20 that the mobile station may transmit on the Reverse  
21 Supplemental Channel specified by REV\_SCH\_ID, starting at  
22 the explicit start time specified by REV\_SCH\_START\_TIME in  
23 this message, until the start time specified by a subsequent  
24 Reverse Supplemental Channel assignment corresponding to  
25 the same Supplemental Channel (see 2.6.6.2.5.1.1). The base  
26 station shall set this field to the duration according to Table  
27 3.7.3.3.2.37-3, starting at the start time specified by  
28 REV\_SCH\_START\_TIME, during which the mobile station  
29 may transmit on the Reverse Supplemental Channel specified  
30 by REV\_SCH\_ID.

**Table 3.7.3.3.2.37-3. FOR\_SCH\_DURATION and  
REV\_SCH\_DURATION Fields**

FOR_SCH_DURATION REV_SCH_DURATION (binary)	Duration in 20 ms
0001	1
0010	2
0011	3

<b>FOR_SCH_DURATION REV_SCH_DURATION (binary)</b>	<b>Duration in 20 ms</b>
0100	4
0101	5
0110	6
0111	7
1000	8
1001	16
1010	32
1011	64
1100	96
1101	128
1110	256
1111	Infinity

1 REV\_SCH\_START\_TIME\_INCL - Start time included indicator.

2 If REV\_SCH\_DURATION is not equal to '0000', the base  
3 station shall set this field to '1'. If REV\_SCH\_DURATION is  
4 equal to '0000', the base station shall set this field as follows:

5 The base station shall set this field to '1' if  
6 REV\_SCH\_START\_TIME is included in this message;  
7 otherwise, the base station shall set this field to '0'.

8 REV\_SCH\_START\_TIME - Start time for Reverse Supplemental Channel assignment.

9 If REV\_SCH\_START\_TIME\_INCL is set to '0', the base station  
10 shall omit this field; otherwise, the base station shall set this  
11 field to the System Time, in units of time specified by  
12 START\_TIME\_UNIT, (modulo 32) at which the mobile station  
13 may start transmitting (if REV\_SCH\_DURATION is not equal  
14 to '0000') or stop transmitting (if REV\_SCH\_DURATION is  
15 equal to '0000') on the Reverse Supplemental Channel  
16 specified in this message. The explicit start time to start or  
17 stop transmitting on the Reverse Supplemental Channel is  
18 the time for which

19  $\lfloor t / (\text{START\_TIME\_UNIT}_S + 1) \rfloor - \text{REV\_SCH\_START\_TIME} \pmod{32} = 0,$   
20

21 where t is the System Time in units of 20 ms.

22 REV\_SCH\_NUM\_BITS\_IDX - Reverse Supplemental Channel number of bits per frame  
23 index.

1		If USE_FLEX_NUM_BITS is equal to '0' or if
2		USE_FLEX_NUM_BITS is equal to '1' and
3		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
4		the base station shall set this field according to Table
5		3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
6		number of information bits per frame and the number of CRC
7		bits per frame, corresponding to REV_WALSH_ID field.
8		If USE_FLEX_NUM_BITS is equal to '1' and
9		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
10		then the base station shall set this field to indicate the
11		Reverse Supplemental Channel number of information bits
12		per frame, corresponding to REV_WALSH_ID field to be
13		NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
14		[REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
15		Channel number of CRC bits per frame, corresponding to
16		REV_WALSH_ID field to be
17		CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
18		[REV_SCH_NUM_BITS_IDX].
19	FOR_CFG_INCLUDED	- Forward Supplemental Channel configuration included.
20		The base station shall set this field to '1' if this message
21		contains a Forward Supplemental Channel configuration.
22		Otherwise, the base station shall set this field to '0'.
23	FOR_SCH_FER_REP	- Forward Supplemental Channel FER report indicator.
24		If FOR_CFG_INCLUDED is set to '0', the base station shall
25		omit this field, otherwise, the base station shall include this
26		field and set it as follows:
27		The base station shall set this field to '1' if the mobile station
28		is to report the Supplemental Channel frame counts (see
29		2.6.4.1.1); otherwise, the base station shall set this field to '0'.
30	NUM_FOR_CFG_RECS	- Number of the Forward Supplemental Channel configuration
31		Records.
32		If FOR_CFG_INCLUDED is set to '1', the base station shall set
33		this field to one less than the number of forward
34		supplemental channel configuration records consisting of the
35		following fields that are included in this message; otherwise,
36		the base station shall omit this field.
37	The base station shall include NUM_FOR_CFG_RECS+1 occurrences of the following fields	
38	only if the FOR_CFG_INCLUDED field is set to '1'.	
39	FOR_SCH_ID	- Forward Supplemental Channel identifier
40		The base station shall set this field to the identifier of the
41		Forward Supplemental Channel.
42	SCCL_INDEX	- Supplemental Channel Code list index.
43		The base station shall set this field to the index of the record
44		in the Supplemental Channel Code list.
45	FOR_SCH_NUM_BITS_IDX	- Forward Supplemental Channel number of information
46		bits index.

If USE\_FLEX\_NUM\_BITS is equal to '0' or if USE\_FLEX\_NUM\_BITS is equal to '1' and FSCH\_NBIT\_TABLE\_ID for FOR\_SCH\_ID is equal to '0000', then the base station shall set this field according to Table 3.7.3.3.2.37-4 to indicate the number of information bits per frame and the length of the CRC field for the Forward Supplemental Channel identified by FOR\_SCH\_ID corresponding to SCCL\_INDEX.

**Table 3.7.3.3.2.37-4. F-SCH Number of Information Bits per Frame**

FOR_SCH_NUM _BITS_IDX (binary)	Number of information bits per frame		Number of CRC bits per frame
	RC 3, 4, 6, 7	RC 5, 8, 9	
0000	172	267	12
0001	360	552	16
0010	744	1,128	16
0011	1,512	2,280	16
0100	3,048	4,584	16
0101	6,120	Reserved	16
0110	12,264	9,192	16
0111	Reserved	Reserved	Reserved
1000	Reserved	20,712	16
RESERVED	All other values are reserved		

If USE\_FLEX\_NUM\_BITS<sub>s</sub> is equal to '1' and FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID] is not equal to '0000', then the base station shall set this field to indicate that the number of information bits per frame for the Forward Supplemental channel identified by FOR\_SCH\_ID to be NUM\_BITS[FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID]][FOR\_SCH\_NUM\_BITS\_IDX] that the number of CRC bits per frame for the Forward Supplemental channel identified by FOR\_SCH\_ID to be CRC\_LEN\_IDX[FSCH\_NBIT\_TABLE\_ID[FOR\_SCH\_ID]][FOR\_SCH\_NUM\_BITS\_IDX].

NUM\_SUP\_SHO - Number of Forward Supplemental Channels in Soft Handoff

The base station shall set this field to the size of the Forward Supplemental Channel Active Set minus one.

The base station shall include NUM\_SUP\_SHO+1 occurrences of the following fields for each Forward Supplemental channel corresponding to the FOR\_SCH\_ID and the SCCL\_INDEX whose frames may be soft-combined by the mobile station:

1			
2	PILOT_PN	-	Pilot PN sequence offset index.
3			The base station shall set this field to the pilot PN sequence
4			offset for this pilot in units of 64 PN chips.
5	ADD_PILOT_REC_INCL	-	Additional pilot information included indicator.
6			The base station shall set this field to '1' if additional pilot
7			information listed in PILOT_REC_TYPE and RECORD_LEN
8			fields are included. The base station shall set this field to '0'
9			if the corresponding pilot is the common pilot and there is no
10			additional pilot information included.
11	PILOT_REC_TYPE	-	Pilot record type
12			If ADD_PILOT_REC_INCL is set to '1', the base station shall
13			set this field to the PILOT_REC_TYPE value shown in Table
14			3.7.2.3.2.21-9 corresponding to the type of Pilot Record
15			specified by this record.
16			If ADD_PILOT_REC_INCL is set to '0', the base station shall
17			omit this field.
18	RECORD_LEN	-	Pilot record length.
19			If ADD_PILOT_REC_INCL is set to '1', the base station shall
20			set this field to the number of octets in the type-specific fields
21			of this pilot record.
22			If ADD_PILOT_REC_INCL is set to '0', the base station shall
23			omit this field.
24	Type-specific fields	-	Pilot record type-specific fields.
25			If ADD_PILOT_REC_INCL is set to '1', the base station shall
26			include type-specific fields based on the
27			ACTIVE_PILOT_REC_TYPE of this pilot record as described in
28			3.7.6.1.
29			If ADD_PILOT_REC_INCL is set to '0', the base station shall
30			omit this field.
31	CODE_CHAN_SCH	-	Code channel on the Supplemental Channel.
32			The base station shall set this field to the code channel index
33			(see [2]) that the mobile station is to use on the Supplemental
34			Channel of the Forward Traffic Channel indexed by
35			SCCL_INDEX.
36	QOF_MASK_ID_SCH	-	Quasi-orthogonal function index on the Supplemental
37			Channel.
38			The base station shall set this field to the index of the Quasi-
39			orthogonal function (see [2]).
40	NUM_FOR_SCH	-	Number of Forward Supplemental Channels assigned.
41			The base station shall set this field to the number of forward
42			Supplemental Channel assigned. The base station shall set
43			this field to '00' if the assignment of Supplemental Channel is
44			not included.

1 The base station shall include NUM\_FOR\_SCH occurrences of the following five fields  
2 (FOR\_SCH\_ID, FOR\_SCH\_DURATION, FOR\_SCH\_START\_TIME\_INCL,  
3 FOR\_SCH\_START\_TIME, and SCCL\_INDEX).

4       FOR\_SCH\_ID   - Forward Supplemental Channel identifier.  
5                    The base station shall set this field to the identifier of the  
6                    Forward Supplemental Channel pertaining to this record.

7       FOR\_SCH\_DURATION - Duration of Forward Supplemental Channel assignment.  
8                    The base station shall set this field to the duration (see Table  
9                    3.7.3.3.2.37-3), starting at the start time of the message  
10                   specified by FOR\_SCH\_START\_TIME, during which the  
11                   mobile station is to process the Forward Supplemental  
12                   Channel.  
13                    The base station shall set this field to '0000' to indicate that  
14                   the mobile station should stop processing the Forward  
15                   Supplemental Channel starting at the explicit start time of  
16                   the message specified by FOR\_SCH\_START\_TIME or at the  
17                   implicit start time if FOR\_SCH\_START\_TIME\_INCL is set to  
18                   '0'.  
19                    The base station shall set this field to '1111' to indicate that  
20                   the mobile station should process the Forward Supplemental  
21                   Channel, starting at the start time of the message specified by  
22                   FOR\_SCH\_START\_TIME, until the start time specified by a  
23                   subsequent Forward Supplemental Channel assignment  
24                   corresponding to the same Supplemental Channel (see  
25                   2.6.6.2.5.1.1).

26       FOR\_SCH\_START\_TIME\_INCL - Start time included indicator.  
27                    If FOR\_SCH\_DURATION is not equal to '0000', the base  
28                   station shall set this field to '1'. If FOR\_SCH\_DURATION is  
29                   equal to '0000', the base station shall set this field as follows:  
30                    The base station shall set this field to '1' if  
31                   FOR\_SCH\_START\_TIME is included in this message;  
32                   otherwise, the base station shall set this field to '0'.

33       FOR\_SCH\_START\_TIME - Start time for Forward Supplemental Channel assignment.  
34                    If FOR\_SCH\_START\_TIME\_INCL is set to '0', the base station  
35                   shall omit this field; otherwise, the base station shall set this  
36                   field to the System Time, in units of time specified by  
37                   START\_TIME\_UNIT, (modulo 32) at which the mobile station  
38                   is to start processing (if FOR\_SCH\_DURATION is not equal to  
39                   '0000') or stop processing (if FOR\_SCH\_DURATION is equal to  
40                   '0000') the Forward Supplemental Channel specified in this  
41                   message. The explicit start time to start or stop processing  
42                   the Forward Supplemental Channels is the time for which  
43                   
$$\lfloor t / (\text{START\_TIME\_UNIT} + 1) \rfloor - \text{FOR\_SCH\_START\_TIME} \pmod{32} = 0,$$
  
44                   where t is the System Time in units of 20 ms.  
45                    The base station shall set this field to the System Time, in units of time specified by  
46                   START\_TIME\_UNIT, (modulo 32) at which the mobile station is to start processing (if FOR\_SCH\_DURATION is not equal to '0000') or stop processing (if FOR\_SCH\_DURATION is equal to '0000') the Forward Supplemental Channel specified in this message. The explicit start time to start or stop processing the Forward Supplemental Channels is the time for which

46       SCCL\_INDEX   - Supplemental Channel Code list index.

1			The base station shall set this field to the index of the record
2			in the Forward Supplemental Channel Code list
3			corresponding to the FOR_SCH_ID. The base station shall
4			include an SCCL_INDEX whose SCH Active Set is a subset of
5			the Active Set of the Fundamental Channel, Dedicated
6			Control Channel, or both.
7	FPC_INCL	-	Forward Link Power Control parameter included indicator.
8			If the forward power control related information is included in
9			this message, the base station shall set this field to '1';
10			otherwise, the base station shall set this field to '0'.
11	FPC_MODE_SCH	-	Forward Power Control operational mode indicator used
12			during forward Supplemental Channel assignment interval.
13			If FPC_INCL is set to '1', the base station shall set the value to
14			the forward power control operation mode (see [2]); otherwise,
15			the base station shall omit this field.
16	FPC_SCH_INIT_SETPT_OP	-	Initial Supplemental Channel Outer Loop Eb/Nt setpoint
17			option.
18			If FPC_INCL is set to '0', the base station shall omit this field;
19			otherwise, the base station shall set this field as follows:
20			The base station shall set this field to '0' to indicate that
21			FPC_SCH_INIT_SETPT contains the absolute value of the
22			initial F-SCH Eb/Nt setpoint. The base station shall set this
23			field to '1' to indicate that FPC_SCH_INIT_SETPT contains the
24			offset value of the initial F-SCH Eb/Nt setpoint relative to the
25			current value used in the mobile station for the channel
26			carrying the Forward Power Control Subchannel.
27	FPC_SEC_CHAN	-	Master Supplemental channel index.
28			If FPC_INCL is set to '1' and FPC_MODE_SCH is set to '001',
29			'010', '101', or '110', the base station shall set this field to the
30			master Supplemental Channel index; otherwise, the base
31			station shall omit this field.
32	NUM_SUP	-	Number of Supplemental Channels.
33			If FPC_INCL is set to '0', the base station shall omit this field;
34			otherwise, the base station shall set this field to the total
35			number of the Supplemental Channels.
36	The base station shall include NUM_SUP occurrences of the following record:		
37	SCH_ID	-	Supplemental Channel index.
38			The base station shall set this field to the Supplemental
39			Channel index.
40	FPC_SCH_FER	-	Supplemental Channel target Frame Error Rate.
41			The base station shall set this field to the target Frame Error
42			Rate on the Supplemental Channel, as specified in Table
43			3.7.3.3.2.25-2.
44	FPC_SCH_INIT_SETPT	-	Initial Supplemental Channel Output Loop Eb/Nt setpoint

1		The base station shall set this field to initial Supplemental
2		Channel Outer Loop Eb/Nt setpoint (absolute value or offset
3		value as indicated by FPC_SCH_INIT_SETPT_OP) as follows:
4		• If FPC_SCH_INIT_SETPT_OP is set to '0', the unit is
5		0.125 dB;
6		• If FPC_SCH_INIT_SETPT_OP is set to '1', the unit is 0.125
7		dB and the offset is expressed as two's complement
8		signed number.
9	FPC_SCH_MIN_SETPT	- Minimum Supplemental Channel outer loop Eb/Nt setpoint.
10		The base station shall set this field to minimum
11		Supplemental Channel Outer Loop Eb/Nt setpoint, in units
12		of 0.125 dB.
13	FPC_SCH_MAX_SETPT	- Maximum Supplemental Channel outer loop Eb/Nt setpoint.
14		The base station shall set this field to maximum
15		Supplemental Channel Outer Loop Eb/Nt setpoint, in units
16		of 0.125 dB.
17	FPC_THRESH_SCH_INCL	- Supplemental Channel Setpoint Report Threshold Included
18		Indicator.
19		If FPC_INCL is set to '0', the base station shall omit this field;
20		otherwise, the base station shall set this field as follows:
21		If Supplemental Channel setpoint report threshold is
22		included in this message, the base station shall set this field
23		to '1'; otherwise, the base station shall set this field to '0'.
24	FPC_SETPT_THRESH_SCH	- Supplemental Channel Setpoint Report Threshold.
25		If FPC_THRESH_SCH_INCL is set to '1', the base station shall
26		set this field to the value of the Supplemental Channel
27		setpoint threshold (in units of 0.125 dB) above which the
28		outer loop report message will be sent by the mobile station;
29		otherwise, the base station shall omit this field.
30	RPC_INCL	- Reverse Power Control parameter included indicator.
31		The base station shall set this field to '1' if RPC_NUM_SUP is
32		included in this message; otherwise the base station shall set
33		this field to '0'.
34	RPC_NUM_SUP	- Number of Supplemental Channels.
35		If RPC_INCL is set to '1', the base station shall set this field to
36		the total number of the Supplemental Channels minus one;
37		otherwise, the base station shall omit this field.
38	The base station shall include RPC_NUM_SUP +1 occurrences of the following record:	
39	SCH_ID	- Supplemental Channel index.
40		The base station shall set this field to the Supplemental
41		Channel index.



1	RLGAIN_SCH_PILOT	-	Supplemental Channel power offset adjustment relative to
2			Reverse Pilot Channel power for radio configurations greater
3			than 2.
4			The base station shall set this field to the correction factor to
5			be used by mobile stations setting the power of a
6			Supplemental Channel, expressed as a two's complement
7			value in units of 0.125 dB.
8	3X_SCH_INFO_INCL	-	3X Supplemental Channel information included indicator.
9			If the 3X Supplemental Channel information is included, the
10			base station shall set this field to '1'; otherwise, the base
11			station shall set this field to '0'.
12			If FOR_CFG_INCLUDED is set to '0', the base station shall set
13			this field to '0'.
14	NUM_3X_CFG	-	Number of 3X Supplemental Channels to be configured
15			If 3X_SCH_INFO_INCL is set to '0', the base station shall omit
16			this field; otherwise, the base station shall set this field as
17			follows:
18			The base station shall set this field to the number of 3X
19			Forward Supplemental Channels to be configured. The base
20			station shall set this field to '00' if the configuration of
21			Supplemental Channel is not included.
22	The base station shall include NUM_3X_CFG occurrences of the following record if		
23	3X_SCH_INFO_INCL is included and set to '1'.		
24	FOR_SCH_ID	-	Forward Supplemental Channel identifier.
25			The base station shall set this field the identifier of the
26			Forward Supplemental Channel pertaining to this record.
27	NUM_3X_REC	-	Number of 3X records
28			The base station shall set this field to the number of
29			instances of the following record minus one included in this
30			message.
31	The base station shall include NUM_3X_REC+1 occurrences of the following variable-		
32	length record.		
33	SCCL_INDEX	-	Supplemental Channel Code list index.
34			The base station shall set this field to the index of the record
35			in the Supplemental Channel Code list.
36	The base station shall include NUM_SUP_SHO+1 occurrences of the following fields for		
37	each Forward Supplemental channel corresponding to the FOR_SCH_ID and the		
38	SCCL_INDEX whose frames may be soft-combined by the mobile station:		
39	3X_SCH_LOW_INCL	-	SCH code channel on the lowest SR3 frequency included
40			indicator.
41			If the Supplemental Channel on the lowest SR3 frequencies
42			has a different code channel than the Supplemental Channel
43			on the center SR3 frequency, the base station shall set this
44			field to '1'; otherwise, the base station shall set this field to
45			'0'.

1	QOF_MASK_ID_SCH_LOW	-	QOF index for the Supplemental Channel on the lowest
2			SR3 frequency.
3			If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
4			this field; otherwise, the base station shall set this field as
5			follows:
6			The base station shall set this field to the index of the Quasi-
7			orthogonal function (see [2]) corresponding to the QOF index
8			for the Supplemental Channel on the lowest SR3 frequency.
9	CODE_CHAN_SCH_LOW	-	Code channel for the Supplemental Channel on the lowest
10			SR3 frequency.
11			If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
12			this field; otherwise, the base station shall set this field as
13			follows:
14			The base station shall set this field to the code channel index
15			(see [2]) that the mobile station is to use on the Supplemental
16			Channel on the lowest SR3 frequency. If Radio Configuration
17			6 or 8 is used, the base station shall set this field in the range
18			1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
19			base station shall set this field in the range 1 to 255
20			inclusive.
21	3X_SCH_HIGH_INCL	-	SCH code channel on the highest SR3 frequency included
22			indicator.
23			If the Supplemental Channel on the highest SR3 frequencies
24			has a different code channel than the Supplemental Channel
25			on the center SR3 frequency, the base station shall set this
26			field to '1'; otherwise, the base station shall set this field to
27			'0'.
28	QOF_MASK_ID_SCH_HIGH	-	QOF index for the Supplemental Channel on the highest
29			SR3 frequency.
30			If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
31			this field; otherwise, the base station shall set this field as
32			follows:
33			The base station shall set this field to the index of the Quasi-
34			orthogonal function (see [2]) corresponding to the QOF index
35			for the Supplemental Channel on the highest SR3 frequency.
36	CODE_CHAN_SCH_HIGH	-	Code channel for the Supplemental Channel on the
37			highest SR3 frequency.
38			If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
39			this field; otherwise, the base station shall set this field as
40			follows:
41			The base station shall set this field to the code channel index
42			(see [2]) that the mobile station is to use on the Supplemental
43			Channel on the highest SR3 frequency. If Radio
44			Configuration 6 or 8 is used, the base station shall set this
45			field in the range 1 to 127 inclusive. If Radio Configuration 7
46			or 9 is used, the base station shall set this field in the range 1
47			to 255 inclusive.

- 1       CCSH\_INCLUDED   -   Code Combining Soft Handoff information included indicator.  
2                        The base station shall set this field to '1' if Code Combining  
3                        Soft Handoff information is included in this message;  
4                        otherwise, the base station shall set this field to '0'.
- 5   If the CCSH\_INCLUDED field is set to '1', the base station shall include one occurrence of  
6   the following one field for each of the Forward Supplemental Channel records included in  
7   this message (as specified by NUM\_FOR\_CFG\_RECS and NUM\_SUP\_SHO). The base  
8   station shall use the same order for the following field as is used for the Forward  
9   Supplemental Channel records.
- 10   CCSH\_ENCODER\_TYPE   -   Code Combining Soft Handoff Turbo Encoder type.  
11                        The base station shall set this field to '0' if the Turbo Encoder  
12                        type to be used on the Forward Supplemental Channel  
13                        indexed by FOR\_SCH\_ID and SCCL\_INDEX is the default  
14                        encoder type. The base station shall set this field to '1' if the  
15                        Turbo Encoder to be used is the complementary type.
- 16   FOR\_SCH\_CC\_INCL   -   Channel configuration for the Forward Supplemental  
17   Channel included indicator.  
18                        The base station shall set this field to '1' if the channel  
19                        configuration information for the Forward Supplemental  
20                        Channel is included; otherwise, the base station shall set this  
21                        field to '0'.  
22                        The base station shall set FOR\_SCH\_CC\_INCL to '0' if  
23                        NUM\_FOR\_SCH is set to '00' or if FOR\_SCH\_DURATION is set  
24                        to '0000'.
- 25   If FOR\_SCH\_CC\_INCL is set to '1', the base station shall include NUM\_FOR\_SCH  
26   occurrences of the following three-field record.
- 27       FOR\_SCH\_ID   -   Forward Supplemental Channel Identifier.  
28                        The base station shall set this field to the identifier of the  
29                        Forward Supplemental Channel pertaining to this record.  
30                        The base station shall set this field to the Supplemental  
31                        Channel identifier, shown in Table 3.7.5.7-5.
- 32   FOR\_SCH\_MUX   -   Forward Supplemental Channel Multiplex Option.  
33                        The base station shall set this field to the Multiplex Option  
34                        associated with the maximum data rate for this Forward  
35                        Supplemental Channel (see [3]).
- 36   SCH\_CC\_Type-specific field   -   Supplemental Channel Configuration Information.  
37                        The base station shall set this field as defined in 3.7.5.7.1 for  
38                        this Forward Supplemental Channel.
- 39   REV\_SCH\_CC\_INCL   -   Channel configuration for the Reverse Supplemental Channel  
40   included indicator.  
41                        The base station shall set this field to '1' if the channel  
42                        configuration information for the Reverse Supplemental  
43                        Channel is included; otherwise, the base station shall set this  
44                        field to '0'.

1		The base station shall set REV_SCH_CC_INCL to '0' if
2		NUM_REV_SCH is set to '00' or if REV_SCH_DURATION is set
3		to '0000'.
4	If REV_SCH_CC_INCL is set to '1', the base station shall include NUM_REV_SCH	
5	occurrences of the following three-field record.	
6	REV_SCH_ID	- Reverse Supplemental Channel Identifier.
7		The base station shall set this field to the identifier of the
8		Reverse Supplemental Channel pertaining to this record.
9		The base station shall set this field to the Supplemental
10		Channel identifier, shown in Table 3.7.5.7-5.
11	REV_SCH_MUX	- Reverse Supplemental Channel Multiplex Option.
12		The base station shall set this field to the Multiplex Option
13		associated with the maximum data rate for this Reverse
14		Supplemental Channel (see [3]).
15	SCH_CC_Type-specific field	- Supplemental Channel Configuration Information.
16		The base station shall set this field as defined in 3.7.5.7.1 for
17		this Reverse Supplemental Channel
18	SCH_BCMC_IND	- BCMC on supplemental channel Indicator.
19		If NUM_FOR_SCH field is set to '00', the base station shall
20		omit this field; otherwise, the base station shall include this
21		field and set it as follows:
22		If the channel assignment in this message contains a
23		Forward Supplemental Channel used for BCMC
24		transmission, the base station shall set this field to '1';
25		otherwise, the base station shall set this field to '0'.
26	ADD_PLCM_FOR_SCH_INCL	- Additional PLCM for forward SCH included indicator.
27		If the SCH_BCMC_IND field is not included or is included and
28		is set to '0', the base station shall omit this field; otherwise,
29		the base station shall include this field and set it as follows:
30		If the additional PLCM for forward SCH is included in this
31		message, the base station shall set this field to '1'; otherwise,
32		the base station shall set this field to '0'.
33	ADD_PLCM_FOR_SCH_TYPE	- The Additional Public Long Code Mask for forward SCH
34		type indicator.
35		If ADD_PLCM_FOR_SCH_INCL is not included or is included
36		and is set to '0', the base station shall omit this field;
37		otherwise, the base station shall include this field and set it
38		as follows:
39		The base station shall set this field to '1' to indicate PLCM
40		specified by the base station. The field value '0' is reserved.
41	ADD_PLCM_FOR_SCH_35	- The 35 LSB bits of the additional Public Long Code Mask
42		for forward SCH.

1 If ADD\_PLCM\_FOR\_SCH\_TYPE field is included and is set to  
2 '1', the base station shall include this field and set it to the 35  
3 least significant bits of the public long code mask used by the  
4 mobile station; otherwise, the base station shall omit this  
5 field.

6 If SCH\_BCMC\_IND field is included and is set to '1', the base station shall include  
7 NUM\_FOR\_SCH occurrences of the following record:

8 USE\_ADD\_PLCM\_FOR\_SCH - Use additional PLCM for forward SCH indicator.  
9 The base station shall set this field to '1' if the additional  
10 PLCM for forward SCH included in this message is to be used  
11 for this Forward Supplemental Channel; otherwise, the base  
12 station shall set this field to '0'.

13 FSCH\_OUTERCODE\_INCL - Forward Supplemental Channel Outer Code included  
14 indicator.  
15 The base station shall set this field to '1' if the Forward  
16 Supplemental Channel outer code information is included in  
17 this message; otherwise, the base station shall set this field  
18 to '0'.

19 FSCH\_OUTERCODE\_RATE - Outer Code Rate of the Forward Supplemental Channel.  
20 If the FSCH\_OUTERCODE\_INCL field is not included or is  
21 included and is set to '0', the base station shall omit this  
22 field; otherwise, the base station shall include this field and  
23 set it as follows:  
24 The base station shall set this field to the outer code rate of  
25 the Forward Supplemental Channel as specified in Table  
26 3.7.2.3.2.38-3.

27 FSCH\_OUTERCODE\_OFFSET - Outer Coding Buffer Offset of the Forward  
28 Supplemental Channel.  
29 If the FSCH\_OUTERCODE\_INCL field is not included or is  
30 included and is set to '0', the base station shall omit this  
31 field; otherwise, the base station shall include this field and  
32 set it as follows:  
33 The base station shall set this field to the outer coding buffer  
34 offset of the Forward Supplemental Channel in units of 20ms  
35 as specified in [2].

36 FPC\_BCMC\_CHAN - Channel used for secondary power control subchannel.  
37 If FPC\_INCL is set to '1' and FPC\_MODE\_SCH is set to '001',  
38 '010', '101', or '110', the base station shall include this field  
39 and set it as follows; otherwise, the base station shall omit  
40 this field.  
41 If F-FCH is associated with secondary power control  
42 subchannel, the base station shall set this field to '1';  
43 otherwise, base station shall set this field to '0' to indicate  
44 that FPC\_SEC\_CHAN points to the channel associated with  
45 secondary power control subchannel.  
46

- 1 3.7.3.3.2.38 Forward Supplemental Channel Assignment Mini Message
- 2 MSG\_TAG: FSCAMM
- 3

Field	Length (bits)
FOR_SCH_ID	1
FOR_SCH_DURATION	4
FOR_SCH_START_TIME	5
SCCL_INDEX	4

1	FOR_SCH_ID	- Forward Supplemental Channel identifier.
2		The base station shall set this field to the identifier of the
3		Forward Supplemental Channel.
4	FOR_SCH_DURATION	- Duration of Forward Supplemental Channel assignment.
5		The base station shall set this field to the duration (see Table
6		3.7.3.3.2.37-3), starting at the start time of the message
7		specified by FOR_SCH_START_TIME, during which the mobile
8		station is to process the Forward Supplemental Channel.
9		The base station shall set this field to '0000' to indicate that
10		the mobile station should stop processing the Forward
11		Supplemental Channel starting at the start time of the
12		message specified by FOR_SCH_START_TIME.
13		The base station shall set this field to '1111' to indicate that
14		the mobile station should process the Forward Supplemental
15		Channel, starting at the explicit start time of the message
16		specified by FOR_SCH_START_TIME, until the start time of a
17		subsequent Forward Supplemental Channel assignment
18		corresponding to the same Forward Supplemental Channel
19		(see 2.6.6.2.5.1.1).
20	FOR_SCH_START_TIME	- Start time for Forward Supplemental Channel assignment.
21		The base station shall set this field to the System Time, in
22		units of time specified by START_TIME_UNIT, (modulo 32) at
23		which the mobile station is to start processing the Forward
24		Supplemental Channel specified in this message. The start
25		time for processing Forward Supplemental Channels is the
26		time for which
27		$\lfloor t / (\text{START\_TIME\_UNIT} + 1) \rfloor - \text{FOR\_SCH\_START\_TIME} \bmod 32$
28		= 0,
29		where t is the System Time in units of 20 ms.
30	SCCL_INDEX	- Supplemental Channel Code list index.
31		The base station shall set this field to the index of the record
32		in the Forward Supplemental Channel Code list
33		corresponding to the FOR_SCH_ID. The base station shall
34		include an SCCL_INDEX whose SCH Active Set is a subset of
35		the Active Set of the Fundamental Channel, Dedicated
36		Control Channel, or both.
37		

- 1 3.7.3.3.2.39 Reverse Supplemental Channel Assignment Mini Message
- 2 MSG\_TAG: RSCAMM
- 3

Field	Length (bits)
REV_SCH_ID	1
REV_SCH_DURATION	4
REV_SCH_START_TIME	5
REV_SCH_NUM_BITS_IDX	4



1		
2	REV_SCH_ID	- Reverse Supplemental Channel identifier.
3		The base station shall set this field to the identifier of the
4		Reverse Supplemental Channel.
5	REV_SCH_DURATION	- Duration of Reverse Supplemental Channel assignment.
6		The base station shall set this field to '0000' to indicate that
7		the mobile station is to stop transmitting on the Reverse
8		Supplemental Channel specified by REV_SCH_ID at the start
9		time specified by START_TIME. The base station shall set this
10		field to '1111' to indicate that the mobile station may transmit
11		on the Reverse Supplemental Channel specified by
12		REV_SCH_ID, starting at the start time specified by
13		REV_SCH_START_TIME in this message, until the start time
14		specified by a subsequent Reverse Supplemental Channel
15		assignment corresponding to the same Supplemental Channel
16		(see 2.6.6.2.5.1.1). The base station shall set this field to the
17		duration according to Table 3.7.3.3.2.37-3, starting at the
18		explicit start time specified by REV_SCH_START_TIME, during
19		which the mobile station may transmit on the Reverse
20		Supplemental Channel specified by REV_SCH_ID.
21	REV_SCH_START_TIME	- Start time for <i>Reverse Supplemental Channel Assignment Mini</i>
22		<i>Message</i> .
23		The base station shall set this field to the System Time, in
24		units of time specified by START_TIME_UNIT, (modulo 32) at
25		which the mobile station may start transmitting on the
26		Reverse Supplemental Channel specified in this message. The
27		explicit start time for transmitting on the Reverse
28		Supplemental Channel is the time for which
29		$(\lfloor t / (\text{START\_TIME\_UNIT} + 1) \rfloor - \text{REV\_SCH\_START\_TIME}) \bmod 32$
30		= 0,
31		where t is the System Time in units of 20 ms.
32	REV_SCH_NUM_BITS_IDX	- Reverse Supplemental Channel number of information
33		bits per frame index.
34		If USE_FLEX_NUM_BITS is equal to '0' or if
35		USE_FLEX_NUM_BITS is equal to '1' and
36		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
37		the base station shall set this field according to Table
38		3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
39		number of information bits per frame and the number of CRC
40		bits per frame, that the mobile station may transmit on the
41		reverse Supplemental Channel identified by REV_SCH_ID.
42		If USE_FLEX_NUM_BITS <sub>s</sub> is equal to '1' and
43		RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
44		then the base station shall set the REV_SCH_NUM_BITS_IDX
45		field to indicate the Reverse Supplemental Channel number of

1 information bits per frame that the mobile station may  
2 transmit on the Reverse Supplemental Channel identified by  
3 REV\_SCH\_ID to be  
4 NUM\_BITS[RSCH\_NBIT\_TABLE\_ID[REV\_SCH\_ID]]  
5 [REV\_SCH\_NUM\_BITS\_IDX] and the Reverse Supplemental  
6 Channel number of CRC bits per frame that the mobile station  
7 may transmit on the Reverse Supplemental Channel identified  
8 by REV\_SCH\_ID to be  
9 CRC\_LEN\_IDX[RSCH\_NBIT\_TABLE\_ID[REV\_SCH\_ID]]  
10 [REV\_SCH\_NUM\_BITS\_IDX].  
11  
12

## 1 3.7.3.3.2.40 Mobile Assisted Burst Operation Parameters Message

## 2 MSG\_TAG: MABOPM

Field	Length (bits)
ORDER_FLAG	1

If ORDER\_FLAG is set to '1', the base station shall include following record:

PS_MIN_DELTA	3
ORDER_INTERVAL	3

PERIODIC_FLAG	1
---------------	---

If PERIODIC\_FLAG is set to '1', the base station shall include following record:

NUM_PILOTS	3
PERIODIC_INTERVAL	6

THRESHOLD_FLAG	1
----------------	---

If THRESHOLD\_FLAG is set to '1', the base station shall include following record:

PS_FLOOR_HIGH	6
PS_FLOOR_LOW	6
PS_CEILING_HIGH	6
PS_CEILING_LOW	6
THRESHOLD_INTERVAL	6

3

4 ORDER\_FLAG - Order change reporting flag.

5 The base station shall set this field to '1' to indicate that the  
6 mobile station is to send a *Pilot Strength Measurement Mini*  
7 *Message* to the base station whenever a received pilot  
8 strength measurement changes its relative order with respect  
9 to all other reported pilot strength measurements during  
10 supplemental channel burst operations; otherwise, the base  
11 station shall set this field to '0'.

12 If ORDER\_FLAG is set to '1', the base stations shall include the following two-field record:

13 PS\_MIN\_DELTA - Minimum power strength delta.

1			The base station shall set this field to one less than the
2			minimum pilot strength measurement difference between two
3			pilots (in units of 0.5 dB) that must be measured in order for
4			the mobile station to send a <i>Pilot Strength Measurement Mini</i>
5			<i>Messages</i> when the rank order mode is enabled. A difference
6			in pilot strength of at least (PS_MIN_DELTA + 1), in units of
7			0.5 dB, must be measured for ORDER_INTERVAL successive
8			20 ms intervals before a rank order based <i>Pilot Strength</i>
9			<i>Measurement Mini Message</i> is generated.
10	ORDER_INTERVAL	-	Order interval.
11			The base station shall set this field to the minimum interval
12			(in 20 ms units) during which the indicated pilot strength
13			measurement difference greater than or equal to
14			(PS_MIN_DELTA + 1), in units of 0.5 dB, must be measured
15			by the mobile station in order for the mobile station to send a
16			<i>Pilot Strength Measurement Mini Messages</i> when the rank
17			order mode is enabled.
18	PERIODIC_FLAG	-	Periodic report flag.
19			The base station shall set this field to '1' to indicate that the
20			mobile station is to send <i>Pilot Strength Measurement Mini</i>
21			<i>Messages</i> periodically during supplemental channel burst
22			operations; otherwise the base station shall set this field to
23			'0'.
24	If PERIODIC_FLAG is set to '1', the base station shall include the following two-field		
25	record:		
26	NUM_PILOTS	-	Number of pilots.
27			The base station shall set this field to the number of pilots for
28			which the mobile station is to send <i>Pilot Strength</i>
29			<i>Measurement Mini Messages</i> when the periodic mode is
30			enabled.
31	PERIODIC_INTERVAL	-	Periodic interval.
32			The base station shall set this field to the interval (in 20 ms
33			units) between <i>Pilot Strength Measurement Mini Messages</i>
34			when the periodic mode is enabled.
35	THRESHOLD_FLAG	-	Threshold reporting flag.
36			The base station shall set this field to '1' to indicate that the
37			mobile station is to send <i>Pilot Strength Measurement Mini</i>
38			<i>Messages</i> whenever a measured pilot crosses below a lower
39			bound or exceeds an upper bound during Supplemental
40			channel burst operations; otherwise the base station shall set
41			this field to '0'.
42	If THRESHOLD_FLAG is set to '1', the base station shall include the following five-field		
43	record:		
44	PS_FLOOR_HIGH	-	Lower bound reporting high water mark.

1			The base station shall set this field to the high water mark for
2			the lower bound below which the mobile station is to send
3			<i>Pilot Strength Measurement Mini Messages</i> when the
4			threshold mode is enabled.
5			The base station shall set this field as an unsigned binary
6			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
7	PS_FLOOR_LOW	-	Lower bound reporting low water mark.
8			The base station shall set this field to the low water mark for
9			the lower bound below which the mobile station is to send
10			<i>Pilot Strength Measurement Mini Messages</i> when the
11			threshold mode is enabled.
12			The base station shall set this field as an unsigned binary
13			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
14	PS_CEILING_HIGH	-	Upper bound reporting high water mark.
15			The base station shall set this field to the high water mark for
16			the upper bound above which the mobile station is to send
17			<i>Pilot Strength Measurement Mini Messages</i> when the
18			threshold mode is enabled.
19			The base station shall set this field as an unsigned binary
20			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
21	PS_CEILING_LOW	-	Upper bound reporting low water mark.
22			The base station shall set this field to the low water mark for
23			the upper bound above which the mobile station is to send
24			<i>Pilot Strength Measurement Mini Messages</i> when the
25			threshold mode is enabled.
26			The base station shall set this field as an unsigned binary
27			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$ .
28	THRESHOLD_INTERVAL	-	Threshold reporting interval.
29			The base station shall set this field to the interval (in 20 ms
30			units) between <i>Pilot Strength Measurement Mini Messages</i>
31			when the threshold reporting mode is enabled.
32			

## 1 3.7.3.3.2.41 User Zone Reject Message

2 MSG\_TAG: UZRM

Field	Length (bits)
REJECT_UZID	16
REJECT_ACTION_INDI	3
UZID_ASSIGN_INCL	1
ASSIGN_UZID	0 or 16

3 REJECT\_UZID - Rejected User Zone identifier.

4 The base station shall set this field to the User Zone identifier  
5 of the User Zone rejected by the base station.

6 REJECT\_ACTION\_INDI - Rejection action indicator.

7 The base station shall set this field to the value shown in  
8 Table 3.7.2.3.2.29-1 corresponding to the User Zone  
9 rejection action field to identify the mobile station action.

10 UZID\_ASSIGN\_INCL - User Zone identifier assignment included indicator.

11 If assigned UZID information is included, the base station  
12 shall set this field to '1'; otherwise, the base station shall set  
13 this field to '0'.

14 ASSIGN\_UZID - Assigned User Zone identifiers.

15 The base station shall set this field to the User Zone identifier  
16 of the User Zone assigned to the mobile station.

17

1     3.7.3.3.2.42 User Zone Update Message

2     MSG\_TAG: UZUM

3

Specific Field	Length (bits)
UZID	16

4                 UZID     -     User Zone identifier.

5                                 The base station shall set this field to the User Zone identifier

6                                 supported by the base station.

7

## 1 3.7.3.3.2.43 Call Assignment Message

## 2 MSG\_TAG: CLAM

Field	Length (bits)
RESPONSE_IND	1
TAG	0 or 4
ACCEPT_IND	0 or 1
REJECT_PKTDATA_IND	0 or 1
BYPASS_ALERT_ANSWER	0 or 1
SO_INCL	1
SO	0 or 16
CON_REF_INCL	1
CON_REF	0 or 8
USE_OLD_SERV_CONFIG	0 or 1
SR_ID	0 or 3
SR_ID_RESTORE_BITMAP	0 or 6
ADD_CALL_INFO_INCLUDED	0 or 1
NUM_ADD_CALL_RECORDS	0 or 3

NUM\_ADD\_CALL\_RECORDS + 1 occurrences of the following record:

{ (NUM\_ADD\_CALL\_RECORDS + 1)

ADD_TAG	0 or 4
ADD_ACCEPT_IND	0 or 1
ADD_REJECT_PKTDATA_IND	0 or 1
ADD_SO_INCL	1
ADD_SO	0 or 16
ADD_CON_REF_INCL	1
ADD_CON_REF	0 or 8

} (NUM\_ADD\_CALL\_RECORDS + 1)



1	RESPONSE_IND	-	Response indicator.
2			The base station shall set this field to '1' if this message is a
3			response to an <i>Enhanced Origination Message</i> from the
4			mobile station; otherwise, the base station shall set this field
5			to '0'.
6	TAG	-	Transaction identifier.
7			If the RESPONSE_IND field is set to '0', the base station shall
8			omit this field; otherwise, the base station shall include this
9			field and set it as follows:
10			The base station shall set this field to the value of the TAG or
11			ADD_TAG field of the <i>Enhanced Origination Message</i> to which
12			this message is the response.
13	ACCEPT_IND	-	Accepted indicator.
14			If the RESPONSE_IND field is set to '0', the base station shall
15			omit this field; otherwise, the base station shall include this
16			field and shall set it as follows:
17			If the base station accepts the call request from the mobile
18			station, the base station shall set this field to '1'; otherwise,
19			the base station shall set this field to '0'.
20	REJECT_PKTDATA_IND	-	Packet data service option rejection indicator.
21			If the ACCEPT_IND field is not included or is included and is
22			set to '1', the base station shall omit this field; otherwise, the
23			base station shall include this field and shall set it as follows:
24			The base station shall set this field to '1' to indicate rejection
25			of the packet data service option requested by the mobile
26			station; otherwise, the base station shall set this field to '0'.
27	BYPASS_ALERT_ANSWER	-	Bypass alert indicator.
28			If the RESPONSE_IND field is set to '1', the base station shall
29			omit this field; otherwise, the base station shall include this
30			field and shall set it as follows:
31			If the mobile station is to bypass the <i>Waiting for Order</i>
32			<i>Substate</i> and the <i>Waiting for Mobile Station Answer Substate</i>
33			for this call, the base station shall set this field to '1';
34			otherwise, the base station shall set this field to '0'.
35	SO_INCL	-	Service option included indicator.
36			The base station shall set this field to '1' if the SO field is
37			included in this message; otherwise, it the base station shall
38			set this field to '0'.
39			If the USE_OLD_SERV_CONFIG is included and is set to '1',
40			the base station shall set this field to '0'.
41	SO	-	Service option.
42			If the SO_INCL field is set to '0', the base station shall omit
43			this field; otherwise, the base station shall include this field
44			and shall set it to the value of the service option number (as
45			specified in [30]) that the base station proposes for this call.

1	CON_REF_INCL	-	Connection reference included indicator.
2			If the ACCEPT_IND field is not included or is included but is
3			set to '1', the base station shall set this field to '1'; otherwise,
4			the base station shall set this field to '0'.
5			If the USE_OLD_SERV_CONFIG is included and is set to '1',
6			the base station shall set this field to '0'.
7	CON_REF	-	Connection reference.
8			If the CON_REF_INCL field is set to '0', the base station shall
9			omit this field; otherwise, the base station shall include this
10			field and shall set it to the value of the connection reference
11			that was/will be assigned to the service option connection
12			corresponding to this call.
13	USE_OLD_SERV_CONFIG	-	Use stored service option connection record(s) indicator.
14			This field may be used by the base station to instruct the
15			mobile station to use the stored service option connection
16			record(s).
17			If the ACCEPT_IND field is included and is set to '0', the base
18			station shall omit this field; otherwise, the base station shall
19			include this field and shall set it as follows:
20			If the mobile station is to restore one or more service option
21			connection record(s) from the stored service configuration,
22			the base station shall set this field to '1'; otherwise, the base
23			station shall set this field to '0'.
24	SR_ID	-	Service reference identifier.
25			If the USE_OLD_SERV_CONFIG field is not included or is
26			included and is set to '0', the base station shall omit this
27			field; otherwise, the base station shall include this field and
28			set it as follows.
29			If the mobile station is to restore all remaining service option
30			connections record from the stored service configuration, the
31			base station shall set this field to '111'; if the mobile station is
32			to restore more than one but not all remaining service option
33			connections from the stored service configuration, the base
34			station shall set this field to '000'; otherwise, the base station
35			shall set this field to the service reference identifier
36			corresponding to the service option connection to be
37			restored.

1	SR_ID_RESTORE_BITMAP	-	Bitmap of service reference identifiers to be restored.
2			If the SR_ID field is included and set to '000', the base station
3			shall include this field and set it as follows; otherwise, the
4			base station shall omit this field.
5			This field consists of the subfields defined in Table
6			3.7.2.3.2.21-6. The base station shall set a subfield to '1' to
7			indicate that the mobile station is to restore the service
8			option connection of the corresponding service reference
9			identifier; otherwise, the base station shall set the subfield to
10			'0'.
11	ADD_CALL_INFO_INCLUDED	-	Additional call information included indicator.
12			If USE_OLD_SERV_CONFIG is not included, or is included
13			and is set to '1', the base station shall omit this field;
14			otherwise, the base station shall include this field and set it
15			as follows:
16			If at least one occurrence of the additional call record is
17			included in this message, the base station shall set this field
18			to '1'; otherwise, the base station shall set this field to '0'.
19	NUM_ADD_CALL_RECORDS	-	Number of additional call records included.
20			If ADD_CALL_INFO_INCLUDED is not included or is included
21			and set to '0', the base station shall omit this field; otherwise,
22			the base station shall include this field and set it to one less
23			than the number of occurrences of the call records included
24			in this message.
25	If NUM_ADD_CALL_RECORDS is included, the base station shall include		
26	NUM_ADD_CALL_RECORDS + 1 occurrences of the following variable-field record:		
27	ADD_TAG	-	Additional transaction identifier.
28			If the RESPONSE_IND field is set to '0', the base station shall
29			omit this field; otherwise, the base station shall include this
30			field and set it as follows:
31			The base station shall set this field to the value of the TAG or
32			ADD_TAG field of the <i>Enhanced Origination Message</i> to which
33			this message is the response.
34	ADD_ACCEPT_IND	-	Additional accepted indicator.
35			If the RESPONSE_IND field is set to '0', the base station shall
36			omit this field; otherwise, the base station shall include this
37			field and set it as follows:
38			If the base station accepts the call request from the mobile
39			station, the base station shall set this field to '1'; otherwise,
40			the base station shall set this field to '0'.
41	ADD_REJECT_PKTDATA_IND	-	Additional packet data service option rejection
42			indicator.

1			If the ADD_ACCEPT_IND field is not included or is included
2			and is set to '1', the base station shall omit this field;
3			otherwise, the base station shall include this field and shall
4			set it as follows:
5			The base station shall set this field to '1' to indicate rejection
6			of the packet data service option requested by the mobile
7			station; otherwise, the base station shall set this field to '0'.
8	ADD_SO_INCL	-	Additional service option included indicator.
9			The base station shall set this field to '1' if the ADD_SO field
10			is included in this message; otherwise, it the base station
11			shall set this field to '0'.
12	ADD_SO	-	Additional service option.
13			If the ADD_SO_INCL field is set to '0', the base station shall
14			omit this field; otherwise, the base station shall include this
15			field and shall set it to the value of the service option number
16			(as specified in [30]) that the base station proposes for this
17			call.
18	ADD_CON_REF_INCL	-	Additional connection reference included indicator.
19			If the ACCEPT_IND field is not included or is included but is
20			set to '1', the base station shall set this field to '1'; otherwise,
21			the base station shall set this field to '0'.
22	ADD_CON_REF	-	Connection reference.
23			If the ADD_CON_REF_INCL field is set to '0', the base station
24			shall omit this field; otherwise, the base station shall include
25			this field and shall set it to the value of the connection
26			reference that was/will be assigned to the service option
27			connection corresponding to this call.
28			
29			

1 3.7.3.3.2.44 Extended Alert With Information Message

2 MSG\_TAG: EAWIM

3

Field	Length (bits)
CON_REF_INCL	1
CON_REF	0 or 8
NUM_REC	4

NUM\_REC occurrences of the following record:

{ (NUM\_REC)

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

} (NUM\_REC)

4

5 CON\_REF\_INCL – Connection reference included indicator.

6 The base station shall set this field to ‘1’ if the connection  
7 reference field is included in this message; otherwise, it shall  
8 set this field to ‘0’.

9 CON\_REF – Connection reference.

10 If the CON\_REF\_INCL field is set to ‘0’, the base station shall  
11 omit this field; otherwise, the base station shall include this  
12 field and shall set it to the value of the connection reference  
13 assigned to the service option connection of the call, to which  
14 this message corresponds.

15 NUM\_REC – Number of records.

16 The base station shall set this field to the number of  
17 information records included with this message.

18 The base station shall include NUM\_REC occurrences of the following record as specified  
19 in 3.7.5.

1	RECORD_TYPE	-	Information record type.
2			The base station shall set this field as specified in 3.7.5.
3	RECORD_LEN	-	Information record length.
4			The base station shall set this field to the number of octets in
5			the type-specific fields included in this record.
6	Type-specific fields	-	Type-specific fields.
7			The base station shall include type-specific fields as specified
8			in 3.7.5.
9			

### 3.7.3.3.2.45 Extended Flash With Information Message

MSG\_TAG: EFWIM

3

Field	Length (bits)
CON_REF_INCL	1
CON_REF	0 or 8
NUM_REC	4

NUM\_REC occurrences of the following record:

{ (NUM\_REC)

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

} (NUM\_REC)

4

5 CON\_REF\_INCL – Connection reference included indicator.

6 The base station shall set this field to '1' if the connection  
7 reference field is included in this message; otherwise, it shall  
8 set this field to '0'.

9 CON\_REF – Connection reference.

10 If the CON\_REF\_INCL field is set to '0', the base station shall  
11 omit this field; otherwise, the base station shall include this  
12 field and shall set it to the value of the connection reference  
13 assigned to the service option connection of the call, to which  
14 this message corresponds.

15 NUM\_REC – Number of records.

16 The base station shall set this field to the number of  
17 information records included with this message.

18 The base station shall include NUM\_REC occurrences of the following record as specified  
19 in 3.7.5.

1	RECORD_TYPE	-	Information record type.
2			The base station shall set this field as specified in 3.7.5.
3	RECORD_LEN	-	Information record length.
4			The base station shall set this field to the number of octets in
5			the type-specific fields included in this record.
6	Type-specific fields	-	Type-specific fields.
7			The base station shall include type-specific fields as specified
8			in 3.7.5.
9			



## 1 3.7.3.3.2.46 Security Mode Command Message

## 2 MSG\_TAG: SMCM

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
D_SIG_ENCRYPT_MODE	3
NUM_RECS	3

NUM\_RECS occurrences of the following record

{ (NUM\_RECS)

CON_REF	8
UI_ENCRYPT_MODE	3

} (NUM\_RECS)

ENC_KEY_SIZE	0 or 3
C_SIG_ENCRYPT_MODE_INCL	1
C_SIG_ENCRYPT_MODE	0 or 3
MSG_INT_INFO_INCL	1
CHANGE_KEYS	0 or 1
USE_UAK	0 or 1

3

4 USE\_TIME - Use action time indicator.

5 This field indicates whether an ACTION\_TIME is specified in  
6 this message.

7 If an ACTION\_TIME is specified in this message, the base  
8 station shall set this field to '1'; otherwise, the base station  
9 shall set this field to '0'.

10 ACTION\_TIME - Action time.

11 If the USE\_TIME field is set to '1', the base station shall set  
12 this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$   
13 ms, in units of 80 ms (modulo 64), at which the message is to  
14 take effect. If the USE\_TIME field is set to '0', the base station  
15 shall omit this field.

16 D\_SIG\_ENCRYPT\_MODE - Dedicated channel encryption mode indicator.

17 The base station shall set it to signaling encryption mode, as  
18 shown in Table 3.7.4.5-1.

19 NUM\_REC - Number of user information encryption records.

20 The base station shall set this field to the number of user  
21 information encryption records included in this message.

1	The base station shall include NUM_REC occurrences of the following two-field record		
2	CON_REF	-	Connection reference corresponding to the service option
3			connection requesting for encryption.
4			If this field is included, the base station shall set this field to
5			the connection reference of the service option connection
6			corresponding to this user information encryption.
7	UI_ENCRYPT_MODE	-	Encryption mode indicator for user information privacy.
8			The base station shall set this field to user information
9			encryption mode for the service option connection identified
10			by CON_REF as shown in Table 3.7.5.7-3.
11	ENC_KEY_SIZE	-	Key Size used for user information and signaling encryption
12			If D_SIG_ENCRYPT_MODE is equal to '001' or '010', the base
13			station shall include this field and set this field to the
14			encryption key size as shown in Table 3.7.4.5-2; otherwise,
15			the base station shall omit this field.
16	C_SIG_ENCRYPT_MODE_INCL	-	Common channel signaling encryption mode included
17			indicator.
18			If C_SIG_ENCRYPT_MODE is included in this message, the
19			base station shall set this field to '1'; otherwise, the base
20			station shall set this field to '0'.
21	C_SIG_ENCRYPT_MODE	-	Common channel signaling encryption mode indicator.
22			If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
23			shall include this field and shall set it to the common
24			channel signaling encryption mode, as shown in Table
25			3.7.4.5-1; otherwise, the base station shall omit this field.
26	MSG_INT_INFO_INCL	-	Message integrity information included indicator
27			The base station shall set this field to '1' if the base station
28			supports message integrity; otherwise, the base station shall
29			set this field to '0'.
30	CHANGE_KEYS	-	Change keys indicator
31			If MSG_INT_INFO_INCL is set to '0', the base station shall
32			omit this field; otherwise, the base station shall include this
33			field and set it as follows:
34			The base station shall set this field to '0' to command the
35			mobile station not to update the encryption key and integrity
36			key. The base station shall set this field to '1' to command the
37			mobile station to update the encryption key and integrity key
38			to the latest being generated.
39	USE_UAK	-	Use UAK indicator
40			If MSG_INT_INFO_INCL is set to '0', the base station shall
41			omit this field; otherwise, the base station shall include this
42			field and set it as follows:

1  
2  
3  
4  
5  
6

If the base station receives an authentication vector with a UAK, the base station shall set this field to '1' to indicate that the mobile station is to use UMAC; otherwise, the base station shall set this field to '0' to indicate that the mobile station is to use MAC-I.

## 3.7.3.3.2.47 Base Station Status Response Message

MSG\_TAG: BSSRSPM

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields.	$8 \times \text{QUAL\_INFO\_LEN}$
NUM_RECORDS	4

NUM\_RECORDS occurrences of the following record:

{ (NUM\_RECORDS)

RECORD_TYPE	8
RECORD_LENGTH	8
Record type specific fields	variable
RESERVED	0-7 (as required)

} (NUM\_RECORDS)

QUAL\_INFO\_TYPE - Qualification information type.

The base station shall set this field to the QUAL\_INFO\_TYPE field in the corresponding *Base Station Status Request Message*.

QUAL\_INFO\_LEN - Qualification information length.

The base station shall set this field to the QUAL\_INFO\_LEN field in the corresponding *Base Station Status Request Message*.

Type-specific fields - Type-specific fields.

The base station shall set these fields to the qualification information in the corresponding *Base Station Status Request Message*.

NUM\_RECORDS - Number of records included in this message.

The base station shall set this field to the number of occurrences of RECORD\_TYPE field in this message.

The base station shall include one occurrence of the following variable-length record for each information record that is included:

RECORD\_TYPE - Information record type.

The base station shall set this field to the record type value shown in Table 3.7.3.3.2.47-1 corresponding to the information record included.

**Table 3.7.3.3.2.47-1. Base Station Status Response Information Record Types**

Information Record Requested	Record Type
Pilot Information	00000000
Reserved	00000001- 11111111

- RECORD\_LENGTH** - Information record length.
- The base station shall set this field to the length, in octets, of the record type specific fields included in this record.
- Record type specific fields** - Record type specific fields
- The base station shall set this field to the type specific fields corresponding to this record type.
- If the **RECORD\_TYPE** field is set to '00000000', the base station shall set the record type specific field as follows:

1

Field	Length (bits)
NUM_PILOTS	4
SID_NID_IND	1

NUM\_PILOTS occurrences of the following record:

{ (NUM\_PILOTS)

RECORD_LEN	4
PILOT_PN	9
BASE_ID	16
SID_NID_INCL	0 or 1
SID	0 or 15
NID	0 or 16
BASE_LAT_LONG_INCL	1
BASE_LAT	0 or 22
BASE_LONG	0 or 23
RESERVED_1	0–7 (as required)

} (NUM\_PILOTS)

2

3           NUM\_PILOTS   -   Number of Pilots reported.

4                           The base station shall set this field to the number of pilots  
5                           whose information is reported in this message.

6                           The base station shall set this field to a number equal or  
7                           greater than one.

8           SID\_NID\_IND   -   SID, NID included indicator.

9                           The base station shall set this field to '1' if SID, NID  
10                          information is included in this message; otherwise, it shall  
11                          set this field to '0'.

12   The base station shall include NUM\_PILOTS occurrences of the following variable length  
13   record:

1	RECORD_LEN	-	Record Length.
2			The base station shall set this field to the length in octets of
3			this record.
4	PILOT_PN	-	Pilot PN sequence offset index.
5			The base station shall set this field to the pilot PN sequence
6			offset for this base station, in units of 64 PN chips.
7	BASE_ID	-	Base station identification.
8			The base station shall set this field to the Base Station
9			identification number corresponding to this pilot.
10	SID_NID_INCL	-	SID, NID included indicator.
11			If the SID_NID_IND field is set to '0', the base station shall
12			omit this field; otherwise, the base station shall include this
13			field and set it as follows:
14			If this is the first pilot included in this message, the base
15			station shall set this field to '1'; otherwise, the base station
16			shall set this field as follows:
17			If the SID and NID of this pilot are same as the SID and NID
18			of the previous pilot, the base station shall set this field to '0';
19			otherwise, the base station shall set this field to '1'.
20	SID	-	System identification.
21			If the SID_NID_INCL field is not included or is included and is
22			set to '0', the base station shall omit this field; otherwise, the
23			base station shall include this field and set it as follows:
24			The base station shall set this field to the system
25			identification number of the system corresponding to this
26			pilot (see 2.6.5.2).
27	NID	-	Network identification.
28			If the SID_NID_INCL field is not included or is included and is
29			set to '0', the base station shall omit this field; otherwise, the
30			base station shall include this field and set it as follows:
31			The base station shall set this field to the network
32			identification number of the network corresponding to this
33			pilot (see 2.6.5.2).
34	BASE_LAT_LONG_INCL	-	Base station LAT/LONG included indicator.

1			The base station shall set this field to '1' if the base station
2			LAT/LONG fields are included in this message; otherwise, the
3			base station shall set this field to '0'.
4	BASE_LAT	-	Base station latitude.
5			If the BASE_LAT_LONG_INCL is set to '0', the base station
6			shall omit this field; otherwise, the base station shall include
7			this field and set it as follows:
8			The base station shall set this field to its latitude in units of
9			0.25 second, expressed as a two's complement signed
10			number with positive numbers signifying North latitudes.
11			The base station shall set this field to a value in the range -
12			1296000 to 1296000 inclusive (corresponding to a range of -
13			90° to +90°).
14	BASE_LONG	-	Base station longitude.
15			If the BASE_LAT_LONG_INCL is set to '0', the base station
16			shall omit this field; otherwise, the base station shall include
17			this field and set it as follows:
18			The base station shall set this field to its longitude in units of
19			0.25 second, expressed as a two's complement signed
20			number with positive numbers signifying East longitude. The
21			base station shall set this field to a value in the range -
22			2592000 to 2592000 inclusive (corresponding to a range of -
23			180° to +180°).
24	RESERVED_1	-	Reserved bits.
25			The base station shall add reserved bits as needed in order to
26			make the length of the pilot specific record equal to an integer
27			number of octets. The base station shall set these bits to '0'.
28	RESERVED	-	Reserved bits.
29			The base station shall add reserved bits as needed in order to
30			make the length of the record equal to an integer number of
31			octets. The base station shall set these bits to '0'.
32			



1 3.7.3.3.2.48 Authentication Request Message

2 MSG\_TAG: AUREQM

3

Field	Length (bits)
RANDA	128
CON_SQN	48
AMF	16
MAC_A	64

4

5           RANDA    -   The Random Challenge Number.  
6                    The base station shall set this field to the value of the  
7                    Random Challenge Number in the authentication vector.

8           CON\_SQN -   Concealed Sequence Number.  
9                    The base station shall set this field to the value of the  
10                    Concealed Sequence Number in the authentication vector.

11           AMF     -   Authentication Management Field.  
12                    The base station shall set this field to the value of the  
13                    Authentication Management Field in the authentication  
14                    vector.

15           MAC\_A   -   Message Authentication Code.  
16                    The base station shall set this field to the value of the  
17                    Message Authentication Code in the authentication vector.

18

- 1 3.7.3.3.2.49 Rate Change Message
- 2 MSG\_TAG: RATCHGM

Fields	Length (Bits)
USE_TIME	1
ACTION_TIME	6
REV_CQICH_RATE_CHANGE_INCL	1
FULL_CI_FEEDBACK_IND	0 or 1
REV_CQICH_REPS	0 or 2
SWITCHING_PARMS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES	0 or 4
NUM_SOFTER_SWITCHING_FRAMES	0 or 4
CHM_SWITCHING_PARMS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFTER_SWITCHING_FRAMES_CHM	0 or 4
RL_CQICH_ATT_ADJ_GAIN_INCL	0 or 1
NUM_RECS	0 or 1

If NUM\_RECS is included NUM\_RECS + 1 occurrences of the following variable length record:

*{ (NUM\_RECS + 1)*

RL_CQICH_ATT_ADJ_GAIN_TYPE	1
RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL	1
RL_CQICH_ATT_ADJ_GAIN_HIGH	0 or 8
RL_CQICH_ATT_ADJ_GAIN_LOW_INCL	1
RL_CQICH_ATT_ADJ_GAIN_LOW	0 or 8

*} (NUM\_RECS + 1)*

REV_ACKCH_RATE_CHANGE_INCL	1
REV_ACKCH_REPS	0 or 2
REV_PDCH_MAX_PARMS_INCL	1
REV_PDCH_MAX_AUTO_TPR	0 or 8
REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET	0 or 4
REV_PDCH_PARMS_INCL	1
REV_PDCH_NUM_ARQ_ROUNDS_NORMAL	0 or 2
REV_PDCH_NUM_ARQ_ROUNDS_BOOST	0 or 2

1

2

USE\_TIME - Use action time indicator.

1		This field indicates whether an explicit action time is
2		specified in this order.
3		If an explicit action time is specified in this message, the base
4		station shall set this field to '1'; otherwise, the base station
5		shall set this field to '0'.
6	ACTION_TIME	- Action time.
7		If the USE_TIME field is set to '1', the base station shall set
8		this field to the System Time minus $\text{FRAME\_OFFSET}_S \times 1.25$
9		ms, in units of 80 ms (modulo 64), at which the rate change
10		is to take effect. If the USE_TIME field is set to '0', the base
11		station shall set this field to '000000'.
12	REV_CQICH_RATE_CHANGE_INCL	- Reverse Channel Quality Indicator Channel rate
13		change included indicator.
14		If the base station determines to change the rate of R-CQICH,
15		the base station shall set this field to '1'; otherwise, the base
16		station shall set this field to '0'.
17	FULL_CI_FEEDBACK_IND	- Full C/I feedback rate indicator.
18		If REV_CQICH_RATE_CHANGE_INCL is equal to '0', the base
19		station shall omit this field; otherwise, the base station shall
20		set this field as follows:
21		If the mobile station is to send full C/I feedback every 1.25
22		ms, the base station shall set this field to '1'. If the mobile
23		station is to transmit full C/I feedback every 20 ms, the base
24		station shall set this field to '0'.
25	REV_CQICH_REPS	- Reverse Channel Quality Indicator Channel repetition factor.
26		If REV_CQICH_RATE_CHANGE_INCL is equal to '0', the base
27		station shall omit this field; otherwise, the base station shall
28		set this field according to the Table 3.7.3.3.2.49-1.

**Table 3.7.3.3.2.49-1 R-CQICH Repetition Factor**

REV_CQICH_REPS (Binary)	Value
00	1
01	2
10	4
11	Reserved

30	SWITCHING_PARMS_INCL	- R-CQICH switching parameters included indicator.
31		If the REV_CQICH_RATE_CHANGE_INCL field is set to '0', the
32		base station shall omit this field; otherwise, the base station
33		shall include this field and set it as follows:
34		The base station shall set this field to '1' if the parameters for
35		R-CQICH soft and softer switching are included in this
36		message; otherwise, the base station shall set this field to '0'.

- 1    NUM\_SOFT\_SWITCHING\_FRAMES - Number of frames for R-CQICH soft switching.  
2                                    If SWITCHING\_PARMS\_INCL is not included or included and  
3                                    set to '0', then the base station shall omit this field;  
4                                    otherwise, the base station shall include this field and set it  
5                                    as follows:  
6                                    The base station shall set this field to the duration of the cell  
7                                    switching period, in units of 20 ms, minus one, during which  
8                                    the mobile station is to transmit the cell switch sequence on  
9                                    the R-CQICH channel when it switches between two pilots  
10                                   which are in different groups.
- 11   NUM\_SOFT\_SWITCHING\_FRAMES - Number of frames for R-CQICH softer  
12                                   switching.  
13                                   If SWITCHING\_PARMS\_INCL is not included or included and  
14                                   set to '0', then the base station shall omit this field;  
15                                   otherwise, the base station shall include this field and set it  
16                                   as follows:  
17                                   The base station shall set this field to the duration of the cell  
18                                   switching period, in units of 20 ms, minus one, during which  
19                                   the mobile station is to transmit the cell switch sequence on  
20                                   the R-CQICH channel when it switches between two pilots  
21                                   which are in the same group.
- 22   CHM\_SWITCHING\_PARMS\_INCL- Control Hold Mode fields included indicator.  
23                                   If SWITCHING\_PARMS\_INCL is omitted or equal to '0', the  
24                                   base station shall omit this field; otherwise, the base station  
25                                   shall include this field and set it as follows.  
26                                   The base station shall set this field to '1' if the switching  
27                                   parameters for Control Hold Mode are included; otherwise,  
28                                   the base station shall set this field to '0'.
- 29   NUM\_SOFT\_SWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH soft  
30                                   switching while in Control Hold.  
31                                   If CHM\_SWITCHING\_PARMS\_INCL is not included or  
32                                   included and set to '0', then the base station shall omit this  
33                                   field; otherwise, the base station shall include this field and  
34                                   set it as follows:  
35                                   The base station shall set this field to the duration of the cell  
36                                   switching period, in units of 20 ms, minus one, during which  
37                                   the mobile station, while in Control Hold, is to transmit the  
38                                   cell switch sequence on the R-CQICH when it switches  
39                                   between two pilots which are in different groups.
- 40   NUM\_SOFT\_SWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH softer  
41                                   switching while in Control Hold.  
42                                   If CHM\_SWITCHING\_PARMS\_INCL is not included or  
43                                   included and set to '0', then the base station shall omit this  
44                                   field; otherwise, the base station shall include this field and  
45                                   set it as follows:

1                   The base station shall set this field to the duration of the cell  
2                   switching period, in units of 20 ms, minus one, during which  
3                   the mobile station, while in Control Hold, is to transmit the  
4                   cell switch sequence on the R-CQICH when it switches  
5                   between two pilots which are in the same group.

6   RL\_CQICH\_ATT\_ADJ\_GAIN\_INCL   -   Attribute adjustment gain for Reverse Channel  
7                   Quality Indicator Channel included indicator.

8                   If REV\_CQICH\_RATE\_CHANGE\_INCL is equal to '0', the base  
9                   station shall omit this field; otherwise, the base station shall  
10                  set this field as follows:

11                  If the attribute adjustment gain for Reverse Channel Quality  
12                  Indicator Channel is included in this message, the base  
13                  station shall set this field to '1'; otherwise, the base station  
14                  shall set this field to '0'.

15                  NUM\_RECS       -   Number of the records.

16                  If RL\_CQICH\_ATT\_ADJ\_GAIN\_INCL is omitted, or if it is  
17                  included and set to '0', the base station shall omit this field.

18                  Otherwise, the base station shall set this field to one less  
19                  than the number of occurrences of the records included in  
20                  this message.

21   If NUM\_RECS is included in this message, the base station shall include NUM\_RECS+1  
22   occurrences of the following record:

23   RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE   -   Reverse Channel Quality Indicator Channel  
24                   attribute adjustment gain value type indicator

25                   If the following fields are set to the nominal attribute gain  
26                   adjustment values that the mobile station is to use for the  
27                   transmission attributes (relative to Nominal\_Attribute\_Gain  
28                   specified in [2]), the base station shall set this field to '0'. If  
29                   the following fields are set to the pilot reference level  
30                   adjustment values that the mobile station is to use for the  
31                   transmission attributes (relative to Pilot\_Reference\_Level  
32                   specified in [2]), the base station shall set this field to '1'.

33   RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH\_INCL -   Attribute adjustment gain for the high power  
34                   level of Reverse Channel Quality Indicator Channel  
35                   transmission included indicator.

36                   If the attribute adjustment gain for the high power level of  
37                   Reverse Channel Quality Indicator Channel transmission is  
38                   included in this message, the base station shall set this field  
39                   to '1'; otherwise, the base station shall set this field to '0'.

40   RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH   -   Attribute adjustment gain for the high power level  
41                   of Reverse Channel Quality Indicator Channel transmission  
42                   for the corresponding rate indicated in REV\_CQICH\_REPS.

43                   If RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH\_INCL is not included or  
44                   included but is set to '0', the base station shall omit this field;  
45                   otherwise, the base station shall include this field and set it  
46                   as follows:

1		If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to '0', the base
2		station shall set this field to the value of the nominal
3		attribute gain adjustment that the mobile station is to make
4		for the transmission attributes for the high power level of R-
5		CQICH. The base station shall set the value in the range from
6		-40 to 16 inclusive.
7		If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to '1', the base
8		station shall set this field to the value of the pilot reference
9		level adjustment that the mobile station is to make for the
10		transmission attributes for the high power level of R-CQICH.
11		The base station shall set this field to the correction factor
12		expressed as a two's complement value in units of 0.125 dB.
13	RL_CQICH_ATT_ADJ_GAIN_LOW_INCL -	Attribute adjustment gain for Reverse Channel
14		Quality Indicator Channel transmission Included Indicator.
15		If the attribute adjustment gain for the low power level of
16		Reverse Channel Quality Indicator Channel transmission is
17		included in this message, the base station shall set this field
18		to '1'; otherwise, the base station shall set this field to '0'.
19	RL_CQICH_ATT_ADJ_GAIN_LOW -	Attribute adjustment gain for the low power level
20		of Reverse Channel Quality Indicator Channel transmission
21		for the corresponding rate indicated in REV_CQICH_REPS.
22		If RL_CQICH_ATT_ADJ_GAIN_LOW_INCL is not included or
23		included but is set to '0', the base station shall omit this field;
24		otherwise, the base station shall include this field and set it
25		as follows:
26		If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to '0', the base
27		station shall set this field to the value of the nominal
28		attribute gain adjustment that the mobile station is to make
29		for the transmission attributes for the low power level of R-
30		CQICH. The base station shall set the value in the range from
31		-16 to 16 inclusive.
32		If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to '1', the base
33		station shall set this field to the value of the pilot reference
34		level adjustment that the mobile station is to make for the
35		transmission attributes for the low power level of R-CQICH.
36		The base station shall set this field to the correction factor
37		expressed as a two's complement value in units of 0.125 dB.
38	REV_ACKCH_RATE_CHANGE_INCL -	Reverse Acknowledgment Channel rate change
39		included indicator
40		If the base station determines to change the rate of R-ACKCH,
41		the base station shall set this field to '1'; otherwise, the base
42		station shall set this field to '0'.
43		If REV_CQICH_RATE_CHANGE_INCL is set to '0',
44		REV_ACKCH_RATE_CHANGE_INCL shall be set to '1'.
45	REV_ACKCH_REPS -	Reverse Acknowledgment Channel repetition factor.

If REV\_ACKCH\_RATE\_CHANGE\_INCL is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it according to the Table 3.7.3.3.2.49-2.

**Table 3.7.3.3.2.49-2 R-ACKCH Repetition Factor**

<b>REV_ACKCH_REPS (Binary)</b>	<b>Value</b>
'00'	1
'01'	2
'10'	4
'11'	Reserved

REV\_PDCH\_MAX\_PARMS\_INCL - Reverse Packet Data Channel maximum traffic to pilot ratio included indicator.

The base station shall set this field to '1' if the Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission is included; otherwise, the base station shall set this field to '0'.

REV\_PDCH\_MAX\_AUTO\_TPR - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.

If REV\_PDCH\_MAX\_PARMS\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum traffic to pilot ratio for autonomous transmission on the Reverse Packet Data Channel (see [2] and [3]).

The base station shall set this field to values in the range 0 to 18 dB inclusive in units of 0.125 dB.

REV\_PDCH\_MAX\_SIZE\_ALLOWED\_ENCODER\_PACKET - Maximum Allowed Reverse PDCH encoder packet size.

If REV\_PDCH\_MAX\_PARMS\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum size encoder packet that the mobile station is allowed to use. (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 10 inclusive, corresponding to the encoder packet sizes 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and 18456 bits respectively.

REV\_PDCH\_PARMS\_INCL - Reverse Packet Data Channel related parameters included indicator.



1                   The base station shall set this field to '1' if the R-PDCH  
2                   parameters are included in this message; otherwise, the base  
3                   station shall set this field to '0'.

4   REV\_PDCH\_NUM\_ARQ\_ROUNDS\_NORMAL -   Maximum number of allowed ARQ rounds  
5                   on the Reverse PDCH in the non-boosted mode.

6                   If REV\_PDCH\_PARMS\_INCL is set to '0', the base station shall  
7                   omit this field; otherwise, the base station shall include this  
8                   field and set it as follows:

9                   The base station shall set this field to one less the maximum  
10                  number of allowed ARQ rounds on the Reverse PDCH in the  
11                  non-boosted mode. The base station shall set this field to 0,  
12                  1, or 2 corresponding to 1, 2, or 3 rounds respectively (See  
13                  [3]).

14   REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST -   Maximum   number   of   allowed   HARQ  
15                  retransmissions on the Reverse PDCH in the boosted mode.

16                  If REV\_PDCH\_PARMS\_INCL is set to '0', the base station shall  
17                  omit this field; otherwise, the base station shall include this  
18                  field and set it as follows:

19                  The base station shall set this field to one less the maximum  
20                  number of allowed ARQ rounds on the Reverse PDCH in the  
21                  boosted mode. The base station shall set this field to 0, 1, or  
22                  2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

23

24

## 1 3.7.3.3.2.50 In-Traffic BCMC Service Parameters Message

2 MSG\_TAG: ITBSPM

Field	Length (bits)
AUTO_REQ_TRAF_ALLOWED_IND	1
BCMC_ON_IDLE_SUP_IND	1
BCMC_FLOWS_ON_TRAFFIC_ONLY_IN D	0 or 1
AUTH_SIGNATURE_REQUIRED	1
NON_DEFAULT_VALUE_INCLUDED	0 or 1
ACH_TIME_STAMP_SHORT_LENGTH	0 or 8
TIME_STAMP_LONG_LENGTH	0 or 8
TIME_STAMP_UNIT	0 or 4
NUM_BCMC_PROGRAMS	8

NUM\_BCMC\_PROGRAMS plus one occurrences of the following variable length record:

*{ (NUM\_BCMC\_PROGRAMS+1)*

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	BCMC_PROGRAM_I D_LEN+1
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISC RIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISC RIMINATOR_LEN
AUTH_SIGNATURE_REQ_IND	0 or 1
BCMC_FLOW_ON_TRAFFIC_IDLE_IND	0 or 2

*} (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

*} (NUM\_BCMC\_PROGRAMS+1)*

3

4 AUTO\_REQ\_TRAF\_ALLOWED\_IND - Autonomous BCMC request on traffic channel  
5 allowed indicator.

1                   The base station shall set this field to '1' to indicate that the  
2                   mobile station is allowed to request for a BCMC flow on traffic  
3                   channel that is not included in this message; otherwise, the  
4                   base station shall set this field to '0'.

5    BCMC\_ON\_IDLE\_SUP    -   BCMC on idle state supported indicator.

6                   The base station shall set this field to '1' to indicate that the  
7                   BCMC feature is supported on idle state; otherwise, the base  
8                   station shall set this field to '0'.

9    BCMC\_FLOWS\_ON\_TRAFFIC\_ONLY\_IND   -   BCMC flows on traffic channel only  
10                   indicator.

11                   If the BCMC\_ON\_IDLE\_SUP\_IND field is set to '0', the base  
12                   station shall omit this field; otherwise, the base station shall  
13                   include this field and set it as follows:

14                   The base station shall set this field to '1' if this message  
15                   contains information only about BCMC flows on traffic  
16                   channel; otherwise, the base station shall set this field to '0'.

17   AUTH\_SIGNATURE\_REQUIRED   -   Authorization signature required indication.

18                   The base station shall set this field to '1' to indicate that the  
19                   mobile station is to include the authorization signature in the  
20                   Origination Message, Page Response Message and Enhanced  
21                   Origination Message that include BCMC\_FLOW\_ID (see  
22                   2.6.13.11) for BCMC flows indicated in this message is  
23                   included in that message; otherwise, the base station shall  
24                   set this field to '0'.

25   NON\_DEFAULT\_VALUE\_INCLUDED   -   Non-default values for Authorization signature  
26                   included indicator.

27                   If the AUTH\_SIGNATURE\_REQUIRED field is set to '0', the  
28                   base station shall omit this field; otherwise, the base station  
29                   shall include this field and set it as follows:

30                   The base station shall set this field to '0' if default values are  
31                   to be used to generate the Authorization signature; otherwise,  
32                   the base station shall set this field to '1'.

33   ACH\_TIME\_STAMP\_SHORT\_LENGTH   -   Length of time stamp for use on r-csch.

34                   If the NON\_DEFAULT\_VALUE\_INCLUDED field is not  
35                   included or is included and is set to '0', the base station shall  
36                   omit this field; otherwise, the base station shall include this  
37                   field and set it as follows:

38                   The base station shall set this field to the length of the time  
39                   stamp, in units of bits, included on the Origination Message,  
40                   Page Response Message and Enhanced Origination Message.

41   TIME\_STAMP\_LONG\_LENGTH   -   Length of time stamp.

42                   If the NON\_DEFAULT\_VALUE\_INCLUDED field is not  
43                   included or is included and is set to '0', the base station shall  
44                   omit this field; otherwise, the base station shall include this  
45                   field and set it as follows:

1                   The base station shall set this field to the length of the time  
2                   stamp, in units of bits, used to generate the Authorization  
3                   signature.

4       TIME\_STAMP\_UNIT   -   Unit for time stamp length.

5                   If the NON\_DEFAULT\_VALUE\_INCLUDED field is not  
6                   included or is included and is set to '0', the base station shall  
7                   omit this field; otherwise, the base station shall include this  
8                   field and set it as follows:

9                   The base station shall set this field to the unit of the time  
10                  stamp length field as follows: the unit of the time stamp field  
11                  shall be 2 to the power of the value of this field.

12    NUM\_BCMC\_PROGRAMS   -   Number of BCMC Programs.

13                  The base station shall set this field to the number of BCMC  
14                  programs available in this base station in any one of the  
15                  frequencies minus one.

16    The base station shall include NUM\_BCMC\_PROGRAMS plus one occurrences of the  
17    following variable length record:

18    BCMC\_PROGRAM\_ID\_LEN   -   Length of BCMC\_PROGRAM\_ID field

19                  The base station shall set this field to one less than the  
20                  length in bits of the BCMC\_PROGRAM\_ID of this program.

21    BCMC\_PROGRAM\_ID       -   BCMC program Identifier

22                  The length of this field shall be one more than the value of  
23                  BCMC\_PROGRAM\_ID\_LEN bits.

24                  The base station shall set this field to the BCMC program  
25                  identifier of this program.

26    BCMC\_FLOW\_DISCRIMINATOR\_LEN   -   Length of BCMC\_FLOW\_DISCRIMINATOR field

27                  The base station shall set this field to the length in bits of the  
28                  BCMC\_FLOW\_DISCRIMINATOR of this program.

29    NUM\_FLOW\_DISCRIMINATOR   -   Number of BCMC flow discriminators

30                  The length of this field shall be determined by the value of  
31                  the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
32                  BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
33                  is omitted; otherwise, the length of this field shall be  
34                  BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

35                  The base station shall set this field to the number of flow  
36                  discriminators included for this program minus one.

37    If NUM\_FLOW\_DISCRIMINATOR field is included, the base station shall include  
38    NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;  
39    otherwise, the base station shall include 1 occurrence of the following variable length  
40    record:

41    BCMC\_FLOW\_DISCRIMINATOR   -   BCMC flow discriminator

1 The length of this field shall be determined by the value of  
 2 the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
 3 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
 4 is omitted; otherwise, the length of this field shall be  
 5 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

6 The base station shall set this field to the BCMC flow  
 7 discriminator of this flow.

8 AUTH\_SIGNATURE\_REQ\_IND - Authorization signature required indicator

9 If the AUTH\_SIGNATURE\_REQUIRED field is set to '0', the  
 10 base station shall omit this field; otherwise, the base station  
 11 shall include this field and set it as follows:

12 The base station shall set this field to '1' if the mobile station  
 13 is to include the authorization signature in the Origination  
 14 Message, Page Response Message, and Enhanced Origination  
 15 Message for this BCMC flow; otherwise, the base station shall  
 16 set this field to '0'.

17 BCMC\_FLOW\_ON\_TRAFFIC\_IDLE\_IND - BCMC flow on traffic state or idle state  
 18 supported indicator.

19 If the BCMC\_FLOWS\_ON\_TRAFFIC\_ONLY\_IND field is not  
 20 included or is included and set to '1', the base station shall  
 21 omit this field; otherwise, the base station shall include this  
 22 field and set it as follows:

23 The base station shall set this field as specified in Table  
 24 3.7.3.3.2.50-1 to indicate the availability of this flow in the  
 25 traffic state or idle state.

26 **Table 3.7.3.3.2.50-1. BCMC Flow Availability**

<b>BCMC_FLOW_ON_TRAFFIC_IDLE_IND (Binary)</b>	<b>Availability</b>
00	Available in Idle State only
01	Available in Traffic State only
10	Available in both Idle State and Traffic State
11	Reserved

27

28

## 1 3.7.3.3.2.51 Radio Configuration Parameters Message

2 MSG\_TAG: RCPM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
FOR_FCH_ACK_MASK_RL_BLANKING_INC	1
FOR_FCH_ACK_MASK_RL_BLANKING	0 or 16
FOR_FCH_ACK_MASK_NO_RL_BLANKING_INC	1
FOR_FCH_ACK_MASK_NO_RL_BLANKING	0 or 16
REV_FCH_ACK_MASK_INC	1
REV_FCH_ACK_MASK	0 or 16
FOR_SCH_ACK_MASK_RL_BLANKING_INC	1
FOR_SCH_ACK_MASK_RL_BLANKING	0 or 16
FOR_SCH_ACK_MASK_NO_RL_BLANKING_INC	1
FOR_SCH_ACK_MASK_NO_RL_BLANKING	0 or 16
REV_SCH_ACK_MASK_INC	1
REV_SCH_ACK_MASK	0 or 16
FOR_N2M_IND	3
RPC_MODE	2
PWR_CNTL_STEP_ZERO_RATE	3
FOR_FCH_BLANKING_DUTYCYCLE	3
REV_FCH_BLANKING_DUTYCYCLE	3
REV_ACKCH_GAIN_ADJ_ACS1_INC	1
REV_ACKCH_GAIN_ADJ_ACS1	7
REV_ACKCH_GAIN_ADJ_ACS2PLUS_INC	1
REV_ACKCH_GAIN_ADJ_ACS2PLUS	7
NUM_RC_PARAMS_RECORDS	3

NUM\_RC\_PARAMS\_RECORDS occurrences of the following record:

{ (NUM\_RC\_PARAMS\_RECORDS)

PILOT_PN	9
QOF_SET_IN_USE	3
REV_SCH0_ACK_BIT_INC	1
REV_SCH0_ACK_CH_WALSH	0 or 7

Field	Length (bits)
REV_SCH0_ACK_BIT	0 or 5
REV_SCH1_ACK_BIT_INC	1
REV_SCH1_ACK_CH_WALSH	0 or 7
REV_SCH1_ACK_BIT	0 or 5
FOR_FCH_CCSH_INTERLEAVER_TYPE	1

} (NUM\_RC\_PARAMS\_RECORDS)

- 1
- 2           USE\_TIME    -   Use action time indicator.
- 3                        This field indicates whether an explicit action time is
- 4                        specified in this message.
- 5                        If an explicit action time is specified in this message, the base
- 6                        station shall set this field to '1'; otherwise, the base station
- 7                        shall set this field to '0'.
- 8           ACTION\_TIME   -   Action time.
- 9                        If the USE\_TIME field is set to '1', the base station shall set
- 10                       this field to the System Time minus  $\text{FRAME\_OFFSET}_S \times 1.25$
- 11                       ms, in units of 80 ms (modulo 64), at which the message is to
- 12                       take effect. If the USE\_TIME field is set to '0', the base station
- 13                       shall omit this field.
- 14   FOR\_FCH\_ACK\_MASK\_RL\_BLANKING\_INC -   Ack mask for F-FCH RC11 and RC12 when
- 15                       RL Blanking is enabled is included
- 16                       If the FOR\_FCH\_ACK\_MASK\_RL\_BLANKING field is included
- 17                       in this message, then the base station shall set this field to
- 18                       '1'. Otherwise, the base station shall set this field to '0'.
- 19   FOR\_FCH\_ACK\_MASK\_RL\_BLANKING   -   Ack mask for F-FCH RC11 and RC12 when RL
- 20                       Blanking is enabled.
- 21                       If the FOR\_FCH\_ACK\_MASK\_RL\_BLANKING\_INC field is set to
- 22                       '0', then the base station shall omit this field. Otherwise, the
- 23                       base station shall include this field and set it to ack mask for
- 24                       F-FCH RC11 and RC12 when RL Blanking is enabled as
- 25                       describe below:
- 26                       This field consists of the subfields shown in Table
- 27                       3.7.3.3.2.51-1. The base station shall set the subfields
- 28                       corresponding to the PCGs where Ack can be sent to '1', and
- 29                       shall set the remaining subfields to '0'.

1

**Table 3.7.3.3.2.51-1. Ack Mask**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
ACK_MASK_0	1	Ack allowed in PCG 0
ACK_MASK_1	1	Ack allowed in PCG 1
ACK_MASK_2	1	Ack allowed in PCG 2
ACK_MASK_3	1	Ack allowed in PCG 3
ACK_MASK_4	1	Ack allowed in PCG 4
ACK_MASK_5	1	Ack allowed in PCG 5
ACK_MASK_6	1	Ack allowed in PCG 6
ACK_MASK_7	1	Ack allowed in PCG 7
ACK_MASK_8	1	Ack allowed in PCG 8
ACK_MASK_9	1	Ack allowed in PCG 9
ACK_MASK_10	1	Ack allowed in PCG 10
ACK_MASK_11	1	Ack allowed in PCG 11
ACK_MASK_12	1	Ack allowed in PCG 12
ACK_MASK_13	1	Ack allowed in PCG 13
ACK_MASK_14	1	Ack allowed in PCG 14
ACK_MASK_15	1	Ack allowed in PCG 15

2

3 FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING\_INC - Ack mask for F-FCH RC11 and  
4 RC12 when RL Blanking is disabled is included

5 If the FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING field is  
6 included in this message, then the base station shall set this  
7 field to '1'. Otherwise, the base station shall set this field to  
8 '0'.

9 FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING - Ack mask for F-FCH RC11 and RC12 when  
10 RL Blanking is disabled.

11 If the FOR\_FCH\_ACK\_MASK\_NO\_RL\_BLANKING\_INC field is  
12 set to '0'; then the base station shall omit this field.  
13 Otherwise, the base station shall include this field and set it  
14 to ack mask for F-FCH RC11 and RC12 when RL Blanking is  
15 disabled as describe below:

16 This field consists of the subfields shown in Table  
17 3.7.3.3.2.51-1. The base station shall set the subfields  
18 corresponding to the PCGs where Ack can be sent to '1', and  
19 shall set the remaining subfields to '0'.

20 REV\_FCH\_ACK\_MASK\_INC - Ack mask for R-FCH RC08 included



1 If the REV\_FCH\_ACK\_MASK field is included in this message,  
2 then the base station shall set this field to '1'. Otherwise, the  
3 base station shall set this field to '0'.

4 REV\_FCH\_ACK\_MASK - Ack mask for R-FCH RC08

5 If the REV\_FCH\_ACK\_MASK\_INC field is set to '0', then the  
6 base station shall omit this field. Otherwise, the base station  
7 shall include this field and set it to ack mask for R-FCH RC08  
8 as describe below:

9 This field consists of the subfields shown in Table  
10 3.7.3.3.2.51-1. The base station shall set the subfields  
11 corresponding to the PCGs where Ack can be sent to '1', and  
12 shall set the remaining subfields to '0'.

13 FOR\_SCH\_ACK\_MASK\_RL\_BLANKING\_INC - Ack mask for F-SCH RC11 and RC12 when  
14 RL Blanking is enabled is included

15 If the FOR\_SCH\_ACK\_MASK\_RL\_BLANKING field is included  
16 in this message, then the base station shall set this field to  
17 '1'. Otherwise, the base station shall set this field to '0'.

18 FOR\_SCH\_ACK\_MASK\_RL\_BLANKING - Ack mask for F-SCH RC11 and RC12 when RL  
19 Blanking is enabled.

20 If the FOR\_SCH\_ACK\_MASK\_RL\_BLANKING\_INC field is set to  
21 '0', then the base station shall omit this field. Otherwise, the  
22 base station shall include this field and set it to ack mask for  
23 F-SCH RC11 and RC12 when RL Blanking is enabled as  
24 describe below:

25 This field consists of the subfields shown in Table  
26 3.7.3.3.2.51-1. The base station shall set the subfields  
27 corresponding to the PCGs where Ack can be sent to '1', and  
28 shall set the remaining subfields to '0'.

29 FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING\_INC - Ack mask for F-SCH RC11 and  
30 RC12 when RL Blanking is disabled is included

31 If the FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING field is  
32 included in this message, then the base station shall set this  
33 field to '1'. Otherwise, the base station shall set this field to  
34 '0'.

35 FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING - Ack mask for F-SCH RC11 and RC12 when  
36 RL Blanking is disabled.

37 If the FOR\_SCH\_ACK\_MASK\_NO\_RL\_BLANKING\_INC field is  
38 set to '0'; then the base station shall omit this field.  
39 Otherwise, the base station shall include this field and set it  
40 to ack mask for F-SCH RC11 and RC12 when RL Blanking is  
41 disabled as describe below:

42 This field consists of the subfields shown in Table  
43 3.7.3.3.2.51-1. The base station shall set the subfields  
44 corresponding to the PCGs where Ack can be sent to '1', and  
45 shall set the remaining subfields to '0'.

46 REV\_SCH\_ACK\_MASK\_INC - Ack mask for R-SCH RC08 included

If the REV\_SCH\_ACK\_MASK field is included in this message, then the base station shall set this field to '1'. Otherwise, the base station shall set this field to '0'.

REV\_SCH\_ACK\_MASK - Ack mask for R-SCH RC08

If the REV\_SCH\_ACK\_MASK\_INC field is set to '0', then the base station shall omit this field. Otherwise, the base station shall include this field and set it to ack mask for R-SCH RC08 as describe below:

This field consists of the subfields shown in Table 3.7.3.3.2.51-1. The base station shall set the subfields corresponding to the PCGs where Ack can be sent to '1', and shall set the remaining subfields to '0'.

FOR\_N2M\_IND - N<sub>2m</sub> for Forward Link RC11 and RC12 Indicator

The base station shall set this field to the value shown in Table 3.7.3.3.2.51-3 corresponding to the number of guaranteed transmission frames received with insufficient signal quality that will cause the mobile station to disable its transmitter when RC11 and RC12 is used on F-FCH.

**Table 3.7.3.3.2.51-3. N<sub>2m</sub> value for Forward Link RC11 and RC12**

Value (binary)	Number of bad frames
000	2
001	4
010	6
011	8
All other values are reserved.	

RPC\_MODE - Power control mode

The base station shall set this field as follows:

- Set to '00' if power control rate is 200 to 400 bps.
- Set to '01' if power control rate is 200 bps.

The base station shall not set this field to '10' or '11'.

PWR\_CNTL\_STEP\_ZERO\_RATE - Power control step size during RL Blanking

The base station shall set this field to the closed loop power control step size parameter shown in Table 3.7.3.3.2.51-4 corresponding to the power control step size that the mobile station is to use for closed loop power control during RL Blanking.

**Table 3.7.3.3.2.51-4. Closed Loop Power Control  
Step Size**

<b>PWR_CNTL_STEP_ ZERO_RATE (binary)</b>	<b>Power Control Step Size (dB nominal)</b>
000	1
001	0.5
010	0.25
011	1.5
100	2.0
All other values are reserved.	

**FOR\_FCH\_BLANKING\_DUTYCYCLE** - N (duty cycle) value for Forward Link RC11 and RC12.

The base station shall set this field to the value shown in Table 3.7.3.3.2.51-5 corresponding to the duty cycle value to be used on Forward Link RC11 and RC12.

**Table 3.7.3.3.2.51-5. N (duty cycle) value for FL RC11,  
RC12 and RL RC08**

<b>Value (binary)</b>	<b>N</b>	<b>Description</b>
000	1	Blanking Disabled
001	4	At least 1 out of 4 frames transmitted
010	8	At least 1 out of 8 frames transmitted
All other values are reserved.		

**REV\_FCH\_BLANKING\_DUTYCYCLE** - N (duty cycle) value for Reverse Link RC08.

The base station shall set this field to the value shown in Table 3.7.3.3.2.51-5 corresponding to the duty cycle value to be used on Reverse Link RC08.

**REV\_ACKCH\_GAIN\_ADJ\_ACS1\_INC** - Channel adjustment gain for Reverse Acknowledgment Channel 1, Reverse Acknowledgment Channel 2, and Reverse Acknowledgment Channel 3 for RC11 and RC12 when number of cells in the active set equals 1 is included.

If the REV\_ACKCH\_GAIN\_ADJ\_ACS1 field is included in this message, then the base station shall set this field to '1'. Otherwise, the base station shall set this field to '0'.

1 REV\_ACKCH\_GAIN\_ADJ\_ACS1 - Channel adjustment gain for Reverse Acknowledgment  
2 Channel 1, Reverse Acknowledgment Channel 2, and Reverse  
3 Acknowledgment Channel 3 for RC11 and RC12 when number of  
4 cells in the active set equals 1.

5 If REV\_ACKCH\_GAIN\_ADJ\_ACS1\_INC is set to '0', the base  
6 station shall omit this field; otherwise, the base station shall  
7 set this field to the value of the gain adjustment that the  
8 mobile station is to make for the Reverse Acknowledgment  
9 Channel 1, Reverse Acknowledgment Channel 2, and Reverse  
10 Acknowledgment Channel 3. The base station shall set this  
11 field to the correction factor expressed as a two's complement  
12 value in units of 0.125 dB. The base station shall set the  
13 value in the range from -8 to 8 inclusive.

14 REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS\_INC - Channel adjustment gain for Reverse  
15 Acknowledgment Channel 1, Reverse Acknowledgment Channel  
16 2, and Reverse Acknowledgment Channel 3 for RC11 and RC12  
17 when number of cells in the active set exceeds 1 is included.

18 If the REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS field is included in  
19 this message, then the base station shall set this field to '1'.  
20 Otherwise, the base station shall set this field to '0'.

21 REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS - Channel adjustment gain for Reverse  
22 Acknowledgment Channel 1, Reverse Acknowledgment Channel  
23 2, and Reverse Acknowledgment Channel 3 for RC11 and RC12  
24 when number of cells in the active set exceeds 1.

25 If REV\_ACKCH\_GAIN\_ADJ\_ACS2PLUS\_INC is set to '0', the  
26 base station shall omit this field; otherwise, the base station  
27 shall set this field to the value of the gain adjustment that the  
28 mobile station is to make for the Reverse Acknowledgment  
29 Channel 1, Reverse Acknowledgment Channel 2, and Reverse  
30 Acknowledgment Channel 3. The base station shall set this  
31 field to the correction factor expressed as a two's complement  
32 value in units of 0.125 dB. The base station shall set the  
33 value in the range from -8 to 8 inclusive.

34 NUM\_RC\_PARAMS\_RECORDS - Number of RC Parameters Records

35 The base station shall set this field to number of RC  
36 Parameters records included in this message.

37 PILOT\_PN - Pilot PN sequence offset index.

38 The base station shall set this field to the pilot PN sequence  
39 offset for this base station, in units of 64 PN chips.

40 QOF\_SET\_IN\_USE - QOF Set in use

41 This field consists of the subfields shown in Table  
42 3.7.3.3.2.51-2. The base station shall set the subfields  
43 corresponding to the QOF Sets that are in use for this  
44 PILOT\_PN to '1', and shall set the remaining subfields to '0'.

1

**Table 3.7.3.3.2.51-2. QOF Set in use**

<b>Subfield</b>	<b>Length (bits)</b>	<b>Subfield Description</b>
QOF_SET_1	1	QOF SET 1
QOF_SET_2	1	QOF SET 2
QOF_SET_3	1	QOF SET 3

- 2    **REV\_SCH0\_ACK\_BIT\_INC**    -    Reverse SCH0 Ack bit assignment included
- 3       If the REV\_SCH0\_ACK\_CH\_WALSH and REV\_SCH0\_ACK\_BIT
- 4       fields are included, then the base station shall set this field to
- 5       '1'. Otherwise, the base station shall set this field to '0'.
- 6    **REV\_SCH0\_ACK\_CH\_WALSH**    -    Reverse SCH0 Ack Channel Walsh Code Assignment
- 7       for RC08
- 8       If the REV\_SCH0\_ACK\_BIT\_INC field is set to '0', then the
- 9       base station shall omit this field. Otherwise, the base station
- 10       shall include this field and set it as follows:
- 11       The base station shall set this field to the Walsh code
- 12       assignment for the Ack Channel used for RC08.
- 13    **REV\_SCH0\_ACK\_BIT**    -    Reverse SCH0 Ack Bit for RC08
- 14       If the REV\_SCH0\_ACK\_BIT\_INC field is set to '0', then the
- 15       base station shall omit this field. Otherwise, the base station
- 16       shall include this field and set it as follows:
- 17       The base station shall set this field to Ack Bit (on Ack
- 18       Channel in the REV\_SCH0\_ACK\_CH\_WALSH field) used for
- 19       RC08.
- 20    **REV\_SCH1\_ACK\_BIT\_INC**    -    Reverse SCH1 Ack bit assignment included
- 21       If the REV\_SCH1\_ACK\_CH\_WALSH and REV\_SCH1\_ACK\_BIT
- 22       fields are included, then the base station shall set this field to
- 23       '1'. Otherwise, the base station shall set this field to '0'.
- 24    **REV\_SCH1\_ACK\_CH\_WALSH**    -    Reverse SCH1 Ack Channel for RC08
- 25       If the REV\_SCH1\_ACK\_BIT\_INC field is set to '0', then the
- 26       base station shall omit this field. Otherwise, the base station
- 27       shall include this field and set it as follows:
- 28       The base station shall set this field to the Walsh code
- 29       assignment for the Ack Channel used for RC08.
- 30    **REV\_SCH1\_ACK\_BIT**    -    Reverse SCH1 Ack Bit for RC08
- 31       If the REV\_SCH1\_ACK\_BIT\_INC field is set to '0', then the
- 32       base station shall omit this field. Otherwise, the base station
- 33       shall include this field and set it as follows:
- 34       The base station shall set this field to Ack Bit (on Ack
- 35       Channel in the REV\_SCH1\_ACK\_CH\_WALSH field) used for
- 36       RC08.

1     FOR\_FCH\_CCSH\_INTERLEAVER\_TYPE -     Interleaver type used for Forward FCH RC12  
2  
3             The base station shall set this field to '0' for all RCs other  
4             than RC12, and may set this bit to '1' for RC12. The base  
5             station shall set this bit to '1' to indicate that alternate  
6             interleaver type is being used.

1 3.7.3.3.2.52 Handoff Supplementary Information Solicit Message

2 MSG\_TAG: HOSISM

3

Field	Length (bits)
NUM_PILOT_PN	8

NUM\_PILOT\_PN occurrences of the following field:

PILOT_PN	9 x NUM_PILOT_PN
----------	------------------

- 4 NUM\_PILOT\_PN - Number of Pilot PN being solicited.
- 5 The base station shall set this field based on the number of
- 6 Pilot PN included in this message following this field.
- 7 PILOT\_PN - Pilot PN sequence offset index.
- 8 The base station shall set this field to the pilot PN sequence
- 9 offset, in units of 64 PN chips, that the base station is
- 10 soliciting supplementary handoff information.
- 11

- 1 3.7.3.3.2.53 General Extension Message
- 2 Please see section 3.7.2.3.2.44.
- 3



#### 1 3.7.4 Orders

2 *Order Messages* are sent by the base station on the f-csch and the f-dsch. The general  
3 PDU format used on the f-csch is defined in 3.7.2.3.2.7, and the general PDU format used  
4 on the f-dsch is defined in 3.7.3.3.2.1. There are many specific types of *Order Messages*,  
5 as shown in Table 3.7.4-1.

6 The base station may send on the f-csch any type of order shown in Table 3.7.4-1 with a 'Y'  
7 in the first column, but shall not send on the f-csch any type of order with an 'N' in the  
8 first column. The base station may send on the f-dsch any type of order shown in  
9 Table 3.7.4-1 with a 'Y' in the second column, but shall not send on the f-dsch any type of  
10 order with an 'N' in the second column.

11 An order consists of a 6-bit order code and zero or more order-specific fields. The base  
12 station shall set the ORDER field in the *Order Message* to the order code shown in Table  
13 3.7.4-1 corresponding to the type of order being sent.

14 If the order qualification code in the fourth column of Table 3.7.4-1 is '00000000' and  
15 there are no other additional fields as shown by an 'N' in the sixth column, the base  
16 station shall include no order qualification code or other order-specific fields in the *Order*  
17 *Message*. The order qualification code of such a message is implicitly '00000000'.

18 If the order qualification code is not '00000000' and there are no other additional fields as  
19 shown in Table 3.7.4-1 by an 'N' in the sixth column, the base station shall include the  
20 order qualification code as the only order specific field in the *Order Message*.

21 If there are other additional fields as shown in Table 3.7.4-1 by a 'Y' in the sixth column,  
22 the base station shall include order-specific fields as specified in the corresponding  
23 subsection of this section.

24

1 **Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch**  
2 **(Part 1 of 5)**

<b>f-csch Order</b>	<b>f-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qual- ification Code, ORDQ (binary)</b>	<b>ACTION_ TIME can be specified</b>	<b>Addi- tional Fields other than ORDQ</b>	<b>P_REV_I N_USE<sup>18</sup></b>	<b>Name/Function</b>
Y	N	000001	00000000	N	N	All	<i>Abbreviated Alert Order</i>
Y	Y	000010	00000000	N	Y	All	<i>Base Station Challenge Confirmation Order</i> (see 3.7.4.1)
N	Y	000011	000000nn	Y	N	All	<i>Message Encryption Mode Order</i> (where nn is the mode per Table 3.7.2.3.2.8-2)
Y	N	000100	00000000	N	N	All	<i>Reorder Order</i>
N	Y	000101	0000nnnn	N	N	All	<i>Parameter Update Order</i> (where 'nnnn' is the Request Number)
Y	Y	000110	00000000	N	N	All	<i>Audit Order</i>
Y	N	001001	00000000	N	N	All	<i>Intercept Order</i>
N	Y	001010	00000000	N	N	All	<i>Maintenance Order</i>
Y	Y	010000	00000000	N	N	All	<i>Base Station Acknowledgment Order</i> (see [4])
N	Y	010001	00000000	N	N	All	<i>Pilot Measurement Request Order</i>
N	Y	010001	Nnnnnnnn (in the range of 00000001 to 11111111)	N	Y	≥ 4	<i>Periodic Pilot Measurement Request Order</i> (see 3.7.4.6)
Y	Y	010010	0001nnnn	N	N	All	<i>Lock Until Power-Cycled Order</i> (where nnnn is the lock reason)
Y	Y	010010	0010nnnn	N	N	All	<i>Maintenance Required Order</i> (where nnnn is the maintenance reason)
Y	N	010010	11111111	N	N	All	<i>Unlock Order</i>

<sup>18</sup> P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.

1 **Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch**  
 2 **(Part 2 of 5)**

<b>f-csch Order</b>	<b>f-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qual- ification Code, ORDQ (binary)</b>	<b>ACTION_ TIME can be specified</b>	<b>Addi- tional Fields other than ORDQ</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
N	Y	010011	00000000	Y	Y	< 7	<i>Service Option Request Order (Band Class 0 only) (see 3.7.4.2)</i>
N	Y	010100	00000000	Y	Y	< 7	<i>Service Option Response Order (Band Class 0 only; see 3.7.4.3)</i>
Y	Y	010101	00000000	N	N	All	<i>Release Order (no reason given)</i>
Y	Y	010101	00000010	N	N	All	<i>Release Order (indicates that requested service option is rejected)</i>
N	Y	010110	00000000	N	N	≥ 6	<i>Outer Loop Report Request Order</i>
N	Y	010111	00000000	Y	N	All	<i>Long Code Transition Request Order (request public)</i>
N	Y	010111	00000001	Y	N	All	<i>Long Code Transition Request Order (request private)</i>
N	Y	011001	0000nnnn	N	N	All	<i>Continuous DTMF Tone Order (where the tone is designated by 'nnnn' as defined in Table 2.7.1.3.2.4- 4)</i>
N	Y	011001	11111111	N	N	All	<i>Continuous DTMF Tone Order (stop continuous DTMF tone)</i>
N	Y	011010	nnnnnnnn	N	N	< 8	<i>Status Request Order (Band Class 0 only; see 3.7.4.4)</i>

3

**1 Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch**  
**2 (Part 3 of 5)**

<b>f-csch Order</b>	<b>f-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qual- ification Code, ORDQ (binary)</b>	<b>ACTION_ TIME can be specified</b>	<b>Addi- tional Fields other than ORDQ</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
Y	N	011011	00000000	N	N	All	<i>Registration Accepted Order</i> (ROAM_INDI not included; see 3.7.4.5)
Y	N	011011	00000001	N	N	All	<i>Registration Request Order</i>
Y	N	011011	00000010	N	N	All	<i>Registration Rejected Order</i>
Y	N	011011	00000100	N	N	1, $\geq 4$	<i>Registration Rejected Order</i> (delete TMSI)
Y	N	011011	00000101	N	Y	$\geq 4$	<i>Registration Accepted Order</i> (ROAM_INDI included but the signaling encryption related fields are not included; see 3.7.4.5)
Y	N	011011	00000111	N	Y	$\geq 7$	<i>Registration Accepted Order</i> (ROAM_INDI and the signaling encryption related fields are included; see 3.7.4.5)
N	Y	011101	nnnnnnnn	Y	N	$< 7$	<i>Service Option Control Order</i> (Band Class 0 only) (the specific control is designated by 'nnnnnnnn' as determined by each service option)
Y	Y	011110	nnnnnnnn	N	N	All	<i>Local Control Order</i> (the specific order is designated by 'nnnnnnnn' as determined by each system)
Y	N	011111	00000000	N	N	$\geq 6$	<i>Slotted Mode Order</i> (transition to the slotted mode operation.)

1 **Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch**  
2 **(Part 4 of 5)**

<b>f-csch Order</b>	<b>f-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qual- ification Code, ORDQ (binary)</b>	<b>ACTION_ TIME can be specified</b>	<b>Addi- tional Fields other than ORDQ</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
Y	Y	100000	00000000	N	Y	≥ 6	<i>Retry Order</i> (indicates that the requested operation is rejected and retry delay is included, see 3.7.4.7)
Y	Y	100001	00000000	Y	N	≥ 7	<i>Base Station Reject Order</i> (indicates that the base station can not decrypt an <i>Origination Message</i> or <i>Reconnect Message</i> with ORIG_IND set to '1' from the mobile station)
Y	Y	100001	00000001	Y	N	≥ 7	<i>Base Station Reject Order</i> (indicates that the base station can not decrypt any message (other than an <i>Origination Message</i> or <i>Reconnect Message</i> with ORIG_IND set to '1') from the mobile station)
Y	Y	100001	00000010	Y	Y	≥ 10	<i>Base Station Reject Order</i> (indicates that the base station does not accept the message from the mobile station due to either encryption error, message integrity error, or both, see 3.7.4.9)
Y	N	100010	00000000	N	N	≥ 10	<i>Transit to Idle Order</i> (indicates that the mobile station is going to transit to the Idle State from the <i>System Access Substate</i> upon reception of this order)
Y	Y	100011	00000000	N	Y	≥ 11	<i>BCMC Order</i> (see 3.7.4.10)
Y	N	100100	00000000	N	Y	≥ 11	<i>Fast Call Setup Order</i> (indicates base station request for mobile station to operate in fast call setup mode, see 3.7.4.11)

**1 Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch**  
**2 (Part 5 of 5)**

<b>f-csch Order</b>	<b>f-dsch Order</b>	<b>Order Code, ORDER (binary)</b>	<b>Order Qual- ification Code, ORDQ (binary)</b>	<b>ACTION_ TIME can be specified</b>	<b>Addi- tional Fields other than ORDQ</b>	<b>P_REV_ IN_USE</b>	<b>Name/Function</b>
Y	N	100100	00000001	N	Y	≥ 11	<i>Fast Call Setup Order</i> (indicates base station response to mobile station's request to operate in fast call setup mode, see 3.7.4.11)
Y	Y	100101	00000000	N	Y	≥ 11	<i>Service Status Order</i> (indicates status of requested services; see 3.7.4.12)
Y	Y	100110	00000001	N	Y	≥ 11	<i>Location Services Order</i> (indicates mobile station is to release current location services session(s), see 3.7.4.13)
N	Y	100111	00000000	N	N	≥ 11	<i>Shared Channel Configuration Order</i> (indicates R-FCH assignment)
N	Y	100111	00000001	N	N	≥ 11	<i>Shared Channel Configuration Order</i> (indicates R-FCH release)
All other codes are reserved.							

1    3.7.4.1 Base Station Challenge Confirmation Order

2    The *Base Station Challenge Confirmation Order* can be sent on either the f-csch or on the f-  
3    dsch.

4

Order Specific Field	Length (bits)
ORDQ	8
AUTHBS	18
RESERVED	6

5

6            ORDQ    -    Order qualification code.  
7                            The base station shall set this field to '00000000'.

8            AUTHBS    -    Challenge response.  
9                            The base station shall set this field as specified in 2.3.12.1.5.

10          RESERVED    -    Reserved bits.  
11                            The base station shall set this field to '000000'.

12

## 3.7.4.2 Service Option Request Order

The *Service Option Request Order* can be sent only on the f-dsch.

Order Specific Field	Length (bits)
ORDQ	8
SERVICE_OPTION	16

ORDQ - Order qualification code.

The base station shall set this field to '00000000'.

SERVICE\_OPTION - Service option.

The base station shall set this field to the service option code shown in [30], corresponding to the requested or alternative service option.



## 1 3.7.4.3 Service Option Response Order

2 The *Service Option Response Order* can be sent only on the f-dsch.

3

Order Specific Field	Length (bits)
ORDQ	8
SERVICE_OPTION	16

4

5           ORDQ    -   Order qualification code.

6                           The base station shall set this field to '00000000'.

7           SERVICE\_OPTION   -   Service option.

8                           The base station shall set this field to the service option code  
9                           shown in [30], corresponding to the accepted service option,  
10                          or to '0000000000000000' to reject the last service option  
11                          requested by the mobile station.

12

## 3.7.4.4 Status Request Order

The *Status Request Order* can be sent only on the f-dsch. The ORDQ field of the *Status Request Order* specifies the information record to be returned by the mobile station in the *Status Message*.

Order Specific Field	Length (bits)
ORDQ	8

ORDQ - Order qualification code.

The base station shall set this field to the order qualification code corresponding to the information record type to be returned by the mobile station in the *Status Message*, as shown in Table 3.7.4.4-1.

If MOB\_P\_REV is equal to or greater than seven, the base station shall not request the Call Mode information record (record type '00000111' in Table 3.7.2.3.2.15-2).

**Table 3.7.4.4-1. Status Request ORDQ Values**

Information Record Requested	ORDQ (binary)
Reserved	00000110
Call Mode	00000111
Terminal Information	00001000
Roaming Information	00001001
Security Status	00001010
IMSI	00001100
ESN	00001101
IMSI_M	00001110
IMSI_T	00001111
All other ORDQ values are reserved.	

### 3.7.4.5 Registration Accepted Order

The *Registration Accepted Order* can be sent only on the f-csch.

Order Specific Field	Length (bits)
ORDQ	8
ROAM_INDI	0 or 8
C_SIG_ENCRYPT_MODE	0 or 3
ENC_KEY_SIZE	0 or 3
MSG_INT_INFO_INCL	0 or 1
CHANGE_KEYS	0 or 1
USE_UAK	0 or 1
RESERVED	0 – 7 (as needed)

4

5           ORDQ    -   Order qualification code.

6                    If only ORDQ is included in the order, the base station shall set  
7                    this field to '00000000'. If only ORDQ and ROAM\_INDI are  
8                    included in the order, the base station shall set this field to  
9                    '00000101'. If ORDQ, ROAM\_INDI, and the signaling encryption  
10                   related fields are included in the order, the base station shall set  
11                   this field to '00000111'.

12           ROAM\_INDI   -   Roaming display indication.

13                    If ORDQ is set to '00000000', the base station shall omit this  
14                    field.

15                    If ORDQ is set to '00000101' or '00000111', the base station shall  
16                    include this field and set it as follows; otherwise, the base station  
17                    shall omit this field.

18                    The base station shall set it to the appropriate ROAM\_INDI code  
19                    corresponding to the MS roaming condition. These values are  
20                    defined in [30].

21   C\_SIG\_ENCRYPT\_MODE -   Common channel signaling encryption mode indicator.

22                    If ORDQ is set to '00000111', the base station shall include this  
23                    field and shall set it as follows; otherwise, the base station shall  
24                    omit this field.

25                    The base station shall set it to the common channel signaling  
26                    encryption mode, as shown in Table 3.7.4.5-1; otherwise the  
27                    base station shall omit this field.

1                                    **Table 3.7.4.5-1. (Part 1 of 2) Signaling Message Encryption Modes**

<b>C_SIG_ENCRYPT_MOD E Field (binary)</b>	<b>Encryption Mode Used</b>
000	Common Channel Signaling encryption disabled
001	Enhanced Cellular Message Encryption Algorithm enabled
010	Rijndael Encryption Algorithm enabled
011 - 111	Reserved

2

3

**Table 3.7.4.5-1 (Part 2 of 2). Signaling Message Encryption Modes**

<b>D_SIG_ENCRYPT_MODE Field (binary)</b>	<b>Encryption Mode Used</b>
000	<p>If D_SIG_ENCRYPT_MODE<sub>r</sub> is included and is set to '000' in a <i>Channel Assignment Message</i> or <i>Extended Channel Assignment Message</i>, the mobile station is to continue to use the current common channel encryption mode and algorithm for the dedicated channel.</p> <p>If D_SIG_ENCRYPT_MODE<sub>r</sub> is included and is set to '000' in a <i>Security Mode Command Message</i>, <i>General Handoff Direction Message</i> or <i>Universal Handoff Direction Message</i>, the mobile station is to disable dedicated channel Signaling encryption.</p>
001	Enhanced Cellular Message Encryption Algorithm enabled
010	Rijndael Encryption Algorithm enabled
011 - 111	Reserved

ENC\_KEY\_SIZE – Key size used for encryption

If C\_SIG\_ENCRYPT\_MODE is included and set to '001', or '010', the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

The base station shall set this field to the encryption key\_size as shown in Table 3.7.4.5-2;

**Table 3.7.4.5-2. ENC\_KEY\_SIZE Values**

<b>ENC_KEY_SIZE (binary)</b>	<b>Descriptions</b>
000	Reserved
001	64 bits
010	128 bits
011-111	Reserved

MSG\_INT\_INFO\_INCL – Message integrity information included indicator

1		If ORDQ is set to '00000111', the base station shall include this
2		field and shall set it as follows; otherwise, the base station shall
3		omit this field.
4		The base station shall set this field to '1' if the base station
5		supports message integrity; otherwise, the base station shall
6		set this field to '0'.
7	CHANGE_KEYS	- Change keys indicator
8		If MSG_INT_INFO_INCL is included and set to '0', the base
9		station shall omit this field; otherwise, the base station shall
10		include this field and set it as follows:
11		The base station shall set this field to '0' to command the
12		mobile station not to update the encryption key and integrity
13		key. The base station shall set this field to '1' to command the
14		mobile station to update the encryption key and integrity key
15		to the latest being generated.
16	USE_UAK	- Use UAK indicator
17		If MSG_INT_INFO_INCL is included and set to '0', the base
18		station shall omit this field; otherwise, the base station shall
19		include this field and set it as follows:
20		If the base station receives an authentication vector with a
21		UAK, the base station shall set this field to '1' to indicate that
22		the mobile station is to use UMAC; otherwise, the base
23		station shall set this field to '0' to indicate that the mobile
24		station is to use MAC-I.
25	RESERVED	- Reserved bits.
26		The base station shall add reserved bits as needed in order to
27		make the total length of the fields included in this order equal
28		to an integer number of octets. The base station shall set
29		these bits to '0'.
30		
31		

### 1 3.7.4.6 Periodic Pilot Measurement Request Order

2 The *Periodic Pilot Measurement Request Order* can be sent only on the f-dsch.

3

Order Specific Field	Length (bits)
ORDQ	8
MIN_PILOT_PWR_THRESH	5
MIN_PILOT_EC_I0_THRESH	5
INCL_SETPT	1
RESERVED	5

4

5 ORDQ - Order qualification code.

6 If INCL\_SETPT equals '0', the base station shall set this field  
 7 to a report period, in units of 0.08 seconds, in the range of  
 8 '00001010' to '1111110' inclusive; otherwise, the base station  
 9 shall set this field to a report period, in units of 0.08 seconds,  
 10 in the range of '00000001' to '11111110' inclusive. The base  
 11 station shall set this field to '11111111' to request a one time  
 12 *Periodic Pilot Strength Measurement Message*.

13 MIN\_PILOT\_PWR\_THRESH - The threshold of the total received  $E_c$  of the pilots in the  
 14 Active Set.

15 If the mobile station is to report pilot strength measurements  
 16 periodically to the base station irrespective of the pilot power  
 17 of the Active Set, the base station shall set this field to  
 18 '11111'; otherwise, the base station shall set this field to the  
 19 total  $E_c$  threshold, expressed as an unsigned binary number  
 20 equal to:

$$21 \quad \lceil (10 \times \log_{10}(\text{pilot\_ec\_thresh}) + 120) / 2 \rceil$$

22 where *pilot\_ec\_thresh* is the threshold of the mobile station  
 23 received total  $E_c$  (in mW) of the pilots in the Active Set below  
 24 which the mobile station is to send the pilot strength  
 25 measurements periodically to the base station.

26 MIN\_PILOT\_EC\_I0\_THRESH - Pilot Strength Threshold of Serving Frequency.

27 If the mobile station is to ignore this threshold, the base  
 28 station shall set this field to '11111'; otherwise, the base  
 29 station shall set this field to the total  $E_c/I_0$  threshold,  
 30 expressed as an unsigned binary number equal to:

$$31 \quad \lceil -20 \times \log_{10} \text{pilot\_streng\_thresh} \rceil,$$

1		where <i>pilot_streng_thresh</i> is the threshold of the total received
2		$E_c/I_0$ of the pilots in Active Set (see 2.6.6.2.2) below which
3		the mobile station is to send the pilot strength measurements
4		periodically to the base station.
5	INCL_SETPT	- Include Setpoint information indicator.
6		The base station shall set this field to '1' to indicate that the
7		mobile station shall include outer loop $E_b/N_t$ setpoint
8		information in the <i>Periodic Pilot Strength Measurement</i>
9		<i>Message</i> ; otherwise, the base station shall set this field to '0'.
10	RESERVED	- Reserved bits.
11		The base station shall set this field to '00000'.
12		



1     3.7.4.7 Retry Order

2     The *Retry Order* can be sent on either the f-csch or on the f-dsch to indicate the requested  
3     service is rejected and specify the retry delay.

4

Order Specific Field	Length (bits)
ORDQ	8
RETRY_TYPE	3
RETRY_DELAY	0 or 8
RESERVED	5

5             ORDQ     -   Order qualification code.  
6                        The base station shall set this field to '00000000'.  
7             RETRY\_TYPE -   Retry delay type.  
8                        The base station shall set this field specified as in Table  
9                        3.7.4.7-1.

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

1

**Table 3.7.4.7-1 Retry Delay Type**

<b>Value (binary)</b>	<b>Retry Type</b>	<b>Usage</b>
000	Clear all	The <i>Retry Order</i> is used to clear any existent retry delay
001	Origination	The <i>Retry Order</i> specifies the RETRY_DELAY for a <i>Packet Data Origination Message</i> , <i>Reconnect Message</i> , or <i>Enhanced Origination Message</i>
010	Resource Request	The <i>Retry Order</i> specifies the RETRY_DELAY for a <i>Resource Request Message</i> or <i>Resource Request Mini Message</i>
011	Supplemental Channel Request	The <i>Retry Order</i> specifies the RETRY_DELAY for a <i>Supplemental Channel Request Message</i> or <i>Supplemental Channel Request Mini Message</i>
100	Short Data Burst	The <i>Retry Order</i> specifies the RETRY_DELAY for Short Data Burst <sup>19</sup> (see [30], [42])
101	Origination and Short Data Burst	The <i>Retry Order</i> specifies the RETRY_DELAY for both Short Data Burst (see [30], [42]) and <i>Packet Data Origination Message</i> , <i>Reconnect Message</i> , or <i>Enhanced Origination Message</i>
100-111	Reserved	

2

3

RETRY\_DELAY - Retry delay.

4

5

6

If RETRY\_TYPE is set to '000', the base station shall omit this field. Otherwise the base station shall include this field and set it as follows:

---

<sup>19</sup> Short Data Burst can be included in *Data Burst Message* or *Reconnect Message*

If RETRY\_TYPE is set to '001', the base station shall set this field to the duration of the delay interval, as shown in Table 3.7.4.7-2, during which the mobile station is not permitted to send an *Origination Message*, *Reconnect Message*, or an *Enhanced Origination Message* with a Packet Data Service Option<sup>20</sup>. The base station shall set this field to '00000000' to indicate that there is no retry delay or to clear a previously set retry delay.

**Table 3.7.4.7-2 Retry Delay for RETRY\_TYPE '001'**

Bits	Description
7 (MSB)	Unit for the Retry Delay '0' – unit is 1s '1' – unit is 1 min
6 to 0	Retry Delay interval

If RETRY\_TYPE is set to '010' or '011', the base station shall set this field to the duration of the delay interval in units of 320 ms during which the mobile station is not permitted to send another *Supplemental Channel Request (Mini) Message* or *Resource Request (Mini) Message*. The base station shall set RETRY\_DELAY to '00000000' to indicate that there is no retry delay or to clear a previously set retry delay. The base station shall set RETRY\_DELAY to '11111111' to indicate that the mobile station is to refrain from sending the request indefinitely.

If RETRY\_TYPE is set to '100', the base station shall set this field to the duration of the delay interval, as shown in Table 3.7.4.7-2, during which the mobile station is not permitted to send a Short Data Burst (see [30], [42]). The base station shall set this field to '00000000' to indicate that there is no retry delay or to clear a previously set retry delay.

If RETRY\_TYPE is set to '101', the base station shall set this field to the duration of the delay interval, as shown in Table 3.7.4.7-2, during which the mobile station is not permitted to send a Short Data Burst (see [30], [42]) and the mobile station is not permitted to send an *Origination Message*, *Reconnect Message*, or an *Enhanced Origination Message* with a Packet Data Service Option. The base station shall set this field to '00000000' to indicate that there is no retry delay or to clear a previously set retry delay.

RESERVED - Reserved bits.

<sup>20</sup> Packet data service option refers to SO 60, SO 61 or any service option in Service Option Group 4 and 5 in [30]

- 1 The base station shall set this field to '00000'.
- 2
- 3
- 4
- 5

1 3.7.4.8 Reserved.  
2

## 3.7.4.9 Base Station Reject Order

The *Base Station Reject Order* can be sent on either the f-csch or on the f-dsch to indicate the base station does not accept a message from a mobile station due to encryption error, message integrity error, or both.

Order Specific Field	Length (bits)
ORDQ	8
REJECT_REASON	4
REJECTED_MSG_TYPE	8
REJECTED_MSG_SEQ	3

ORDQ - Order qualification code.

The base station shall set this field to '00000010'.

REJECT\_REASON - Reason of rejection.

The base station shall set this field as specified in Table 3.7.4.9-1.

**Table 3.7.4.9-1 Reject Reason Type**

Value (binary)	Reject Reason	Usage
0000	The MACI field is missing	The <i>Base Station Reject Order</i> is used to indicate that the MACI field required in the message is missing.
0001	The MACI field is present but invalid	The <i>Base Station Reject Order</i> is used to indicate that the MACI field is present but is invalid.
0010	The security sequence number is invalid	The <i>Base Station Reject Order</i> is used to indicate that the security sequence number is invalid.
0011	The base station has failed to decrypt an encrypted message	The <i>Base Station Reject Order</i> is used to indicate that the base station has failed to decrypt an encrypted message from the mobile station.
0100-1111	Reserved	Reserved

1	REJECTED_MSG_TYPE	-	Message type of the rejected message.
2			The base station shall set this field to the value of the
3			MSG_TYPE or the MSG_ID (see [4]) field of the message being
4			rejected.
5			If the MSG_TYPE or the MSG_ID (see [4]) field is not 8 bits,
6			the base station shall set the least significant bits of this field
7			to the value of the MSG_TYPE field and set all the remaining
8			bits to '0'.
9	REJECTED_MSG_SEQ	-	The Layer 2 message sequence number (see [4]) of the
10			rejected message.
11			The base station shall set this field to the Layer 2 message
12			sequence number (see [4]) of the rejected message.
13			

## 3.7.4.10 BCMC Order

The *BCMC Order* is sent on f-csch or f-dsch to provide information on the requested BCMC flows.

Order Specific Field	Length (bits)
ORDQ	8
ALL_BCMC_FLOWS_IND	1
CLEAR_ALL_RETRY_DELAY	0 or 1
ALL_BCMC_REASON	0 or 4
ALL_BCMC_RETRY_DELAY	0 or 8
NUM_BCMC_PROGRAMS	0 or 6

If NUM\_BCMC\_PROGRAMS field is included,  
NUM\_BCMC\_PROGRAMS plus one occurrences of the  
following record

{ (NUM\_BCMC\_PROGRAMS+1)

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	BCMC_PROGRAM_ID_LEN+1
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the  
following variable length record:

{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
SAME_AS_PREVIOUS_BCMC_FLOW	1
CLEAR_RETRY_DELAY	0 or 1
BCMC_REASON	0 or 4
BCMC_RETRY_DELAY	0 or 8

} (NUM\_FLOW\_DISCRIMINATOR+1) or 1

} (NUM\_BCMC\_PROGRAMS+1)

ORDQ - Order qualification code.

The base station shall set this field to '00000000'.



1 ALL\_BCMC\_FLOWS\_IND - All BCMC flows indicator.

2 The base station shall set this field to '1' to indicate the  
3 ALL\_BCMC\_REASON applies to all flows for which mobile  
4 station is expecting a response; otherwise the base station  
5 shall set this field to '0'.

6 CLEAR\_ALL\_RETRY\_DELAY - Clear all retry delay indicator

7 If ALL\_BCMC\_FLOWS\_IND is set to '0', the base station shall  
8 omit this field; otherwise, the base station shall include this  
9 field and set it as follows:

10 The base station shall set this field to '1' to indicate that the  
11 mobile station should clear all retry delays associated with  
12 each BCMC Flow; otherwise the base station shall set this  
13 field to '0'.

14 ALL\_BCMC\_REASON - All BCMC reason.

15 If ALL\_BCMC\_FLOWS\_IND is set to '0' or if  
16 CLEAR\_ALL\_RETRY\_DELAY is set to '1', the base station shall  
17 omit this field; otherwise, the base station shall include this  
18 field and set it as follows:

19 The base station shall set this field as specified in Table  
20 3.7.4.10-1 to indicate the purpose of this order.

21 **Table 3.7.4.10-1 BCMC Reason**

<b>Value (binary)</b>	BCMC_REASON/ALL_BCMC_REASON
0000	BCMC_FLOW_ID not available
0001	BCMC_FLOW_ID not transmitted
0010	BCMC_FLOW_ID available in idle state
0011	BCMC Registration Accepted; requested BCMC flow will be transmitted at a later time
0100	Authorization failure
0101	Retry later
0110-1111	Reserved

22 ALL\_BCMC\_RETRY\_DELAY - All BCMC retry delay.

If the ALL\_BCMC\_REASON field is not included or is included and is not set to '0101', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the delay interval, as shown in Table 3.7.4.10-2, during which the mobile station is not permitted to request any BCMC flows. The base station shall not set this field to '00000000'.

**Table 3.7.4.10-2 BCMC Retry Delay**

Bits	Description
7 (MSB)	Unit for the Retry Delay '0' – unit is 1s '1' – unit is 1 min
6 to 0	BCMC Retry Delay interval

NUM\_BCMC\_PROGRAMS – Number of BCMC programs included.

If ALL\_BCMC\_FLOWS\_IND is set to '1', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the number of BCMC programs included in this message minus one.

If the NUM\_BCMC\_PROGRAMS field is included, the base station shall include NUM\_BCMC\_PROGRAMS plus one occurrences of the following record:

BCMC\_PROGRAM\_ID\_LEN - Length of BCMC\_PROGRAM\_ID field

The base station shall set this field to one less than the length in bits of the BCMC\_PROGRAM\_ID of this program.

BCMC\_PROGRAM\_ID - BCMC program Identifier

The length of this field shall be one more than the value of BCMC\_PROGRAM\_ID\_LEN bits.

The base station shall set this field to the BCMC program identifier of this program.

BCMC\_FLOW\_DISCRIMINATOR\_LEN - Length of BCMC\_FLOW\_DISCRIMINATOR field

The base station shall set this field to the length in bits of the BCMC\_FLOW\_DISCRIMINATOR of this program.

1 NUM\_FLOW\_DISCRIMINATOR - Number of BCMC flow discriminators.

2 The length of this field shall be determined by the value of  
3 the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
4 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
5 is omitted; otherwise, the length of this field shall be  
6 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

7 The base station shall set this field to the number of flow  
8 discriminators included for this program minus one.

9 If NUM\_FLOW\_DISCRIMINATOR field is included, the base station shall include  
10 NUM\_FLOW\_DISCRIMINATOR+1 occurrences of the following variable length record;  
11 otherwise, the base station shall include 1 occurrence of the following variable length  
12 record:

13 BCMC\_FLOW\_DISCRIMINATOR – BCMC Flow discriminator.

14 The length of this field shall be determined by the value of  
15 the BCMC\_FLOW\_DISCRIMINATOR\_LEN as follows: if  
16 BCMC\_FLOW\_DISCRIMINATOR\_LEN is set to '000', this field  
17 is omitted; otherwise, the length of this field shall be  
18 BCMC\_FLOW\_DISCRIMINATOR\_LEN bits.

19 The base station shall set this field to the discriminator of the  
20 BCMC flow.

21 SAME\_AS\_PREVIOUS\_BCMC\_FLOW – Same As Previous BCMC Flow Identifier.

22 If CLEAR\_RETRY\_DELAY, BCMC\_REASON and  
23 BCMC\_RETRY\_DELAY are the same for this BCMC\_FLOW\_ID  
24 (see 2.6.13.11) as for the previous BCMC\_FLOW\_ID, the base  
25 station shall set this field to '1'; otherwise, the base station  
26 shall set this field to '0'.

27 CLEAR\_RETRY\_DELAY - Clear retry delay indicator

28 If SAME\_AS\_PREVIOUS\_BCMC\_FLOW is set to '1', the base  
29 station shall omit this field; otherwise, the base station shall  
30 set this field as follows:

31 The base station shall set this field to '1' to indicate that the  
32 mobile station should clear retry delay associated with this  
33 BCMC Flow; otherwise the base station shall set this field to  
34 '0'.

35 BCMC\_REASON - BCMC reason.

36 If SAME\_AS\_PREVIOUS\_BCMC\_FLOW is set to '1' or if  
37 CLEAR\_RETRY\_DELAY is set to '1', the base station shall  
38 omit this field; otherwise, the base station shall set this field  
39 as follows:

40 The base station shall set this field as specified in Table  
41 3.7.4.10-1 to indicate the purpose for this order.

1    BCMC\_RETRY\_DELAY    -    BCMC retry delay.  
2  
3                            If the BCMC\_REASON field is not included or is included and  
4                            is not set to '0101', the base station shall omit this field;  
5                            otherwise, the base station shall include this field and set it  
6                            as follows:  
7                            The base station shall set this field to the duration of the  
8                            delay interval, as shown in Table 3.7.4.10-2, during which  
9                            the mobile station is not permitted to request this  
10                            BCMC\_FLOW\_ID. The base station shall not set this field to  
11                            '00000000'.

### 3.7.4.11 Fast Call Setup Order

Order Specific Field	Length (bits)
ORDQ	8
RSC_MODE_SUPPORTED	1
MAX_RSC_END_TIME_UNIT	0 or 2
MAX_RSC_END_TIME_VALUE	0 or 4
REQ_RSCI	0 or 4
IGNORE_QPCH	0 or 1
RER_MODE_INCL	1
RER_MODE_ENABLED	0 or 1
RER_MAX_NUM_MSG_IDX	0 or 3
RER_TIME	0 or 3
RER_TIME_UNIT	0 or 2
MAX_RER_PILOT_LIST_SIZE	0 or 3
TKZ_MODE_INCL	1
TKZ_MODE_ENABLED	0 or 1
TKZ_MAX_NUM_MSG_IDX	0 or 3
TKZ_UPDATE_PRD	0 or 4
TKZ_LIST_LEN	0 or 4
TKZ_TIMER	0 or 8

**ORDQ** - Order qualification code.

The base station shall set this field to the ORDQ value shown in Table 3.7.4-1.

**RSC\_MODE\_SUPPORTED** - Reduced slot cycle mode supported indicator.

The base station shall set this field to '1' if it supports the reduced slot cycle mode; otherwise, the base station shall set this field to '0'.

1	MAX_RSC_END_TIME_UNIT	-	Maximum reduced slot cycle mode end time unit.
2			If RSC_MODE_SUPPORTED is equal to '0', the base station
3			shall omit this field; otherwise, the base station shall set this
4			field according to Table 2.7.3.5-1 to indicate the units of the
5			MAX_RSC_END_TIME_VALUE field.
6	MAX_RSC_END_TIME_VALUE	-	Maximum reduced slot cycle mode end time value.
7			If RSC_MODE_SUPPORTED is equal to '0', the base station
8			shall omit this field; otherwise, the base station shall include
9			this field and set it as follows:
10			The base station shall set this field to the maximum system
11			time, in units of time specified by
12			MAX_RSC_END_TIME_UNIT (modulo 16), at which the mobile
13			station is to exit the reduced slot cycle mode.
14	REQ_RSCI	-	Requested reduced slot cycle index.
15			If ORDQ is equal to '00000000' and
16			RSC_MODE_SUPPORTED is equal to '1', the base station
17			shall set this field as specified in Table 2.7.1.3.2.1-8 to the
18			reduced slot cycle index value that it is requesting the mobile
19			station to operate with; otherwise, the base station shall omit
20			this field.
21	IGNORE_QPCH	-	Ignore QPCH indicators.
22			If RSC_MODE_SUPPORTED is equal to '0', the base station
23			shall omit this field; otherwise, the base station shall include
24			this field and set it as follows:
25			The base station shall set this field to '1' to indicate to the
26			mobile station that it is not to check its assigned paging
27			indicators on the QPCH while operating in the reduced slot
28			cycle mode if the reduced slot cycle index is -3 or -4;
29			otherwise, the base station shall set this field to '0'.
30	RER_MODE_INCL	-	Radio environment reporting mode information included
31			indicator.
32			If radio environment reporting mode related fields are
33			included in this message, the base station shall set this field
34			to '1'; otherwise, the base station shall set this field to '0'.
35	RER_MODE_ENABLED	-	Radio environment reporting mode enabled indicator.
36			If RER_MODE_INCL is set to '0', the base station shall omit
37			this field; otherwise, the base station shall include this field
38			and set it as follows:
39			If the radio environment reporting mode is enabled in this
40			message, the base station shall set this field to '1'; otherwise,
41			the base station shall set this field to '0'.
42	RER_MAX_NUM_MSG_IDX	-	Maximum number of <i>Radio Environment Messages</i>
43			permitted while in radio environment reporting mode index.

1			If RER_MODE_ENABLED is not included, or is included and
2			set to '0', the base station shall omit this field; otherwise, the
3			base station shall include this field and set it as follows:
4			The base station shall set this field to the maximum number
5			of <i>Radio Environment Messages</i> that the mobile station is
6			allowed to transmit while in radio environment reporting
7			mode, expressed as $2^{\text{RER\_MAX\_NUM\_MSG\_IDX}}$ where $0 \leq$
8			$\text{RER\_MAX\_NUM\_MSG\_IDX} \leq 6$ . If the mobile station is
9			allowed to transmit an unlimited number of <i>Radio</i>
10			<i>Environment Messages</i> , then the base station shall set this
11			field to '111'.
12	RER_TIME	-	Radio environment report timer value.
13			If RER_MODE_ENABLED is not included, or is included and
14			set to '0', the base station shall omit this field; otherwise, the
15			base station shall include this field and set it as follows:
16			The base station shall set this field to the value of the radio-
17			environment report timer, expressed as $2^{\text{RER\_TIME}}$ where $0 \leq$
18			$\text{RER\_TIME} \leq 6$ and in units of RER_TIME_UNIT. If the value
19			of the radio-environment report timer is infinite, then the
20			base station shall set this field to '111'.
21	RER_TIME_UNIT	-	Radio environment report timer value units.
22			If RER_MODE_ENABLED is included and set to '1', and
23			RER_TIME is not set to '111', the base station shall include
24			this field and shall set it according to Table 3.7.3.3.2.34-5;
25			otherwise, the base station shall omit this field.
26	MAX_RER_PILOT_LIST_SIZE	-	Maximum number of pilots to maintain in
27			RER_PILOT_LIST.
28			If RER_MODE_ENABLED is not included, or is included and
29			set to '0', the base station shall omit this field; otherwise, the
30			base station shall include this field and set it as follows:
31			The base station shall set this field to the maximum number
32			of pilots that the mobile station is to maintain in
33			RER_PILOT_LIST (see [4]). The base station shall set this
34			field to a value in the range 1 to 6 inclusive.
35	TKZ_MODE_INCL	-	Tracking zone mode information included indicator.
36			If tracking zone mode related fields are included in this
37			message, the base station shall set this field to '1'; otherwise,
38			the base station shall set this field to '0'.
39	TKZ_MODE_ENABLED	-	Tracking zone mode enabled indicator.
40			If TKZ_MODE_INCL is set to '0', the base station shall omit
41			this field; otherwise, the base station shall include this field
42			and set it as follows:
43			If the tracking zone mode is enabled in this message, the base
44			station shall set this field to '1'; otherwise, the base station
45			shall set this field to '0'.

1	TKZ_MAX_NUM_MSG_IDX	-	Maximum number of <i>Radio Environment Messages</i>
2			permitted while in tracking zone mode index.
3			If TKZ_MODE_ENABLED is not included, or is included and
4			set to '0', the base station shall omit this field; otherwise, the
5			base station shall include this field and set it as follows:
6			The base station shall set this field to the maximum number
7			of <i>Radio Environment Messages</i> that the mobile station is
8			allowed to transmit while in tracking zone mode, expressed
9			as $2^{\text{TKZ\_MAX\_NUM\_MSG\_IDX}}$ where 0 •
10			TKZ_MAX_NUM_MSG_IDX • 6. If the mobile station is
11			allowed to transmit an unlimited number of <i>Radio</i>
12			<i>Environment Messages</i> , then the base station shall set this
13			field to '111'.
14	TKZ_UPDATE_PRD	-	Tracking zone update period.
15			If TKZ_MODE_ENABLED is not included, or is included and
16			set to '0', the base station shall omit this field; otherwise, the
17			base station shall include this field and set it as follows:
18			The base station shall set this field such that the desired
19			tracking zone update timer value is $2^{\text{TKZ\_UPDATE\_PRD}+6}$
20			seconds. If the value of the timer is infinite, then the base
21			station shall set this field to '1111'.
22	TKZ_LIST_LEN	-	Tracking zone list length.
23			If TKZ_MODE_ENABLED is not included, or is included and
24			set to '0', the base station shall omit this field; otherwise, the
25			base station shall include this field and set it as follows:
26			The base station shall set this field to the length of the
27			tracking zone list minus one.
28	TKZ_TIMER	-	Tracking zone timer.
29			If TKZ_MODE_ENABLED is not included, or is included and
30			set to '0', the base station shall omit this field; otherwise, the
31			base station shall include this field and set it as follows:
32			The base station shall set this field to the value of the
33			tracking zone timer (in units of seconds) minus one.
34			



### 3.7.4.12 Service Status Order

The *Service Status Order* can be sent on f-csch or f-dsch to indicate the status of the services requested by the mobile station.

Order Specific Field	Length (bits)
ORDQ	8
SR_ID_BITMAP	6
{ ( weight of SR_ID_BITMAP)	
SERVICE_STATUS	3
} ( weight of SR_ID_BITMAP)	
RESERVED	0 – 7 (as needed)

ORDQ – Order qualification code.

The base station shall set this field to '00000000'.

SR\_ID\_BITMAP – Service Reference Identifier Bitmap.

This field consists of the subfields defined in Table 3.7.4.12-1. The base station shall set a subfield to '1' to indicate that the service status information corresponding to the service reference identifier is included in this message; otherwise, the base station shall set the subfield to '0'.

**Table 3.7.4.12-1. SR\_ID\_BITMAP Subfields.**

Subfield	Length (bits)	Subfield Description
SR_ID_1	1	SR_ID 1 service status included indicator
SR_ID_2	1	SR_ID 2 service status included indicator
SR_ID_3	1	SR_ID 3 service status included indicator
SR_ID_4	1	SR_ID 4 service status included indicator
SR_ID_5	1	SR_ID 5 service status included indicator
SR_ID_6	1	SR_ID 6 service status included indicator

The base station shall include the following subrecord for each bit set to '1' in SR\_ID\_BITMAP:

SERVICE\_STATUS – Service Status.

The base station shall set this field to the SERVICE\_STATUS value shown in Table 3.7.4.12-2 indicating the service status corresponding to this service reference identifier.

1  
  
  
2  
3  
4  
5  
6  
7

**Table 3.7.4.12-2. Service Status Values**

<b>SERVICE_STATUS Value (binary)</b>	<b>Service Status</b>
000	Service request accepted
001	Service request rejected
All other values are reserved.	

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the total length of the fields included in this order equal to an integer number of octets. The base station shall set these bits to '0'.

1 3.7.4.13 Location Services Order

2

Order Specific Field	Length (bits)
ORDQ	8
REGULATORY_IND_INCL	1
REGULATORY_IND	0 or 2

3

ORDQ - Order qualification code.

4

The base station shall set this field to the ORDQ value shown in Table 3.7.4-1.

5

6

REGULATORY\_IND\_INCL - Regulatory indicator included.

7

The base station shall set this field to '0' to indicate that the mobile station is to release all current location sessions associated with *Data Burst Message* transport; the base station shall set this field to '1' to indicate that the mobile station is to release the current location session that is associated with *Data Burst Message* transport corresponding to the regulatory type specified by this message.

8

9

10

11

12

13

14

REGULATORY\_IND - Regulatory indication.

15

If the REGULATORY\_IND\_INCL field is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

16

17

18

The base station shall set this field to indicate the regulatory type, as specified in [43], of the position location session that the mobile station is to release.

19

20

21

1    3.7.5 Information Records

2    On the f-csch, information records may be included in the *Feature Notification Message*.  
3    On the f-dsch, information records may be included in the *Alert with Information Message*,  
4    the *Flash with Information Message*, the *Extended Alert with Information Message*, the  
5    *Extended Flash with Information Message*, the *Service Request Message*, the *Service*  
6    *Response Message*, the *Service Connect Message*, the *General Handoff Direction Message*,  
7    and the *Universal Handoff Direction Message*. Table 3.7.5-1 lists the information record  
8    type values that may be used with each message type. The following sections describe the  
9    contents of each of the record types in detail.

1

**Table 3.7.5-1. Information Record Types (Part 1 of 3)**

<b>Information Record</b>	<b>Record Type (binary)</b>	<b>Message Type</b>	<b>f-csch</b>	<b>f-dsch</b>	<b>P_REV_IN_USE<sup>21</sup></b>
Display	00000001	FNM	Y	N	All
		AWI	N	Y	
		FWI	N	Y	
Called Party Number	00000010	FNM	Y	N	All
		AWI	N	Y	
		FWI	N	Y	
Calling Party Number	00000011	FNM	Y	N	All
		AWI	N	Y	
		FWI	N	Y	
Connected Number	00000100	FWI	N	Y	All
Signal	00000101	FNM	Y	N	All
		AWI	N	Y	
		FWI	N	Y	
Message Waiting	00000110	FNM	Y	N	All
		AWI	N	Y	
		FWI	N	Y	
Service Configuration	00000111	SRQM	N	Y	1, ≥ 3
		SRPM	N	Y	
		SCM	N	Y	
		GHDM	N	Y	
		UHDM	N	Y	
Called Party Subaddress	00001000	FNM	Y	N	≥ 4
		AWI	N	Y	
		FWI	N	Y	

2

3

---

<sup>21</sup> P\_REV\_IN\_USE equal to "All" implies all values applicable to the Band Class.

1

**Table 3.7.5-1. Information Record Types (Part 2 of 3)**

<b>Information Record</b>	<b>Record Type (binary)</b>	<b>Message Type</b>	<b>f-csch</b>	<b>f-dsch</b>	<b>P_REV_IN_USE</b>
Calling Party Subaddress	00001001	FNM	Y	N	≥ 4
		AWI	N	Y	
		FWI	N	Y	
Connected Subaddress	00001010	FWI	N	Y	≥ 4
Redirecting Number	00001011	FNM	Y	N	≥ 4
		AWI	N	Y	
		FWI	N	Y	
Redirecting Subaddress	00001100	FNM	Y	N	≥ 4
		AWI	N	Y	
		FWI	N	Y	
Meter Pulses	00001101	AWI	N	Y	≥ 4
		FWI	N	Y	
Parametric Alerting	00001110	FNM	Y	N	≥ 4
		AWI	N	Y	
		FWI	N	Y	
Line Control	00001111	AWI	N	Y	≥ 4
		FWI	N	Y	
Extended Display	00010000	FNM	Y	N	≥ 4
		AWI	N	Y	
		FWI	N	Y	

2

3

1

**Table 3.7.5-1. Information Record Types (Part 3 of 3)**

Information Record	Record Type (binary)	Message Type	f-csch	f-dsch	P_REV_IN_USE
Non-Negotiable Service Configuration	00010011	SCM	N	Y	≥ 6
		GHDM	N	Y	
		UHDM	N	Y	
Multiple Character Extended Display	00010100	FNM	Y	N	≥ 7 but < 9
		AWI	N	Y	
		FWI	N	Y	
Call Waiting Indicator	00010101	AWI	N	Y	≥ 7
		FWI	N	Y	
Enhanced Multiple Character Extended Display	00010110	FNM	Y	N	≥ 9
		AWI	N	Y	
		FWI	N	Y	
Extended Record Type – International	11111110	Country-Specific			≥ 4
All other record type values are reserved.					
“AWI” refers to either the <i>Alert With Information Message</i> or the <i>Extended Alert With Information Message</i> .					
“FWI” refers to either the <i>Flash With Information Message</i> or the <i>Extended Flash With Information Message</i> .					

2

## 1 3.7.5.1 Display

2 This information record allows the network to supply display information that may be  
3 displayed by the mobile station.

4

Type-Specific Field	Length (bits)
---------------------	---------------

One or more occurrences of the following field:

{

CHARi	8
-------	---

}

5

6 CHARi - Character.

7 The base station shall include one occurrence of this field for  
8 each character to be displayed. The base station shall set  
9 each occurrence of this field to the ASCII representation  
10 corresponding to the character entered, as specified in [9],  
11 with the most significant bit set to '0'.  
12



### 3.7.5.2 Called Party Number

This information record identifies the called party's number.

3

Type-Specific Field	Length (bits)
NUMBER_TYPE	3
NUMBER_PLAN	4

Zero or more occurrences of the following field:

{

CHARi	8
-------	---

}

RESERVED	1
----------	---

4

5        NUMBER\_TYPE    -    Type of number.

6                            The base station shall set this field to the NUMBER\_TYPE  
7                            value shown in Table 2.7.1.3.2.4-2 corresponding to the type  
8                            of the called number, as defined in [7], Section 4.5.9.

9        NUMBER\_PLAN    -    Numbering plan.

10                           The base station shall set this field to the NUMBER\_PLAN  
11                           value shown in Table 2.7.1.3.2.4-3 corresponding to the  
12                           numbering plan used for the called number, as defined in [7],  
13                           Section 4.5.9.

14                        CHARi    -    Character.

15                           The base station shall include one occurrence of this field for  
16                           each character in the called number. The base station shall  
17                           set each occurrence of this field to the ASCII representation  
18                           corresponding to the character, as specified in [9], with the  
19                           most significant bit set to '0'.

20                        RESERVED    -    Reserved bits.

21                           The base station shall set this field to '0'.

22

## 3.7.5.3 Calling Party Number

This information record identifies the calling party's number.

Type-Specific Field	Length (bits)
NUMBER_TYPE	3
NUMBER_PLAN	4
PI	2
SI	2

Zero or more occurrences of the following field:

{

CHARi	8
-------	---

}

RESERVED	5
----------	---

NUMBER\_TYPE - Type of number.

The base station shall set this field to the NUMBER\_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the calling number, as defined in [7], Section 4.5.9.

NUMBER\_PLAN - Numbering plan.

The base station shall set this field to the NUMBER\_PLAN value shown in Table 2.7.1.3.2.4-3 corresponding to the numbering plan used for the calling number, as defined in [7], Section 4.5.9.

PI - Presentation indicator.

This field indicates whether or not the calling number should be displayed.

The base station shall set this field to the PI value shown in Table 2.7.4.4-1 corresponding to the presentation indicator, as defined in [7], Section 4.5.9.

SI - Screening indicator.

This field indicates how the calling number was screened.

The base station shall set this field to the SI value shown in Table 2.7.4.4-2 corresponding to the screening indicator value, as defined in [7], Section 4.5.9.

1	CHARi	-	Character.
2			The base stations shall include one occurrence of this field
3			for each character in the calling number. The base station
4			shall set each occurrence of this field to the ASCII
5			representation corresponding to the character, as specified in
6			[9], with the most significant bit set to '0'.
7	RESERVED	-	Reserved bits.
8			The base station shall set this field to '00000'.
9			

## 3.7.5.4 Connected Number

This information record identifies the responding party to a call.

Type-Specific Field	Length (bits)
NUMBER_TYPE	3
NUMBER_PLAN	4
PI	2
SI	2

Zero or more occurrences of the following field:

{

CHARi	8
-------	---

}

RESERVED	5
----------	---

NUMBER\_TYPE - Type of number.

The base station shall set this field to the NUMBER\_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the connected number, as defined in [7], Section 4.5.9.

NUMBER\_PLAN - Numbering plan.

The base station shall set this field to the NUMBER\_PLAN value shown in Table 2.7.1.3.2.4-3 corresponding to the numbering plan used for the connected number, as defined in [7], Section 4.5.9.

PI - Presentation indicator.

This field indicates whether or not the connected number should be displayed.

The base station shall set this field to the PI value shown in Table 2.7.4.4-1 corresponding to the presentation indicator, as defined in [7], Section 4.5.9.

SI - Screening indicator.

This field indicates how the connected number was screened.

The base station shall set this field to the SI value shown in Table 2.7.4.4-2 corresponding to the screening indicator value, as defined in [7], Section 4.5.9.

1	CHARi	-	Character.
2			The base station shall include one occurrence of this field for
3			each character in the connected number. The base station
4			shall set each occurrence of this field to the ASCII
5			representation corresponding to the character, as specified in
6			[9], with the most significant bit set to '0'.
7	RESERVED	-	Reserved bits.
8			The base station shall set this field to '00000'.
9			

## 3.7.5.5 Signal

This information record allows the network to convey information to a user by means of tones and other alerting signals.

The Standard Alert is defined as SIGNAL\_TYPE = '10', ALERT\_PITCH = '00' and SIGNAL = '000001'.

Type-Specific Field	Length (bits)
SIGNAL_TYPE	2
ALERT_PITCH	2
SIGNAL	6
RESERVED	6

SIGNAL\_TYPE - Signal type.

The base station shall set this field to the signal type value shown in Table 3.7.5.5-1.

**Table 3.7.5.5-1. Signal Type**

Description	SIGNAL_TYPE (binary)
Tone signal	00
ISDN Alerting	01
IS-54B Alerting	10
Reserved	11

ALERT\_PITCH - Pitch of the alerting signal.

This field is ignored by the mobile station unless SIGNAL\_TYPE is '10', IS-54B Alerting.

If SIGNAL\_TYPE is '10', the base station shall set this field to the alert pitch shown in Table 3.7.5.5-2; otherwise, the base station shall set this field to '00'.

1

**Table 3.7.5.5-2. Alert Pitch**

<b>Description</b>	<b>ALERT_PITCH (binary)</b>
Medium pitch (standard alert)	00
High pitch	01
Low pitch	10
Reserved	11

2

3

**SIGNAL** - Signal code.

4

5

6

7

8

9

The base station shall set this field to the specific signal desired. If SIGNAL\_TYPE is '00', the base station shall set this field as described in Table 3.7.5.5-3. If SIGNAL\_TYPE is '01', the base station shall set this field as described in Table 3.7.5.5-4. If SIGNAL\_TYPE is '10', the base station shall set this field as described in Table 3.7.5.5-5.

10

1

**Table 3.7.5.5-3. Tone Signals (SIGNAL\_TYPE = '00')**

<b>Description</b>	<b>SIGNAL (binary)</b>
Dial tone on: a continuous 350 Hz tone added to a 440 Hz tone.	000000
Ring back tone on: a 440 Hz tone added to a 480 Hz tone repeated in a 2 s on, 4 s off pattern.	000001
Intercept tone on: alternating 440 Hz and 620 Hz tones, each on for 250 ms.	000010
Abbreviated intercept: alternating 440 Hz and 620 Hz tones, each on for 250 ms, repeated for four seconds.	000011
Network congestion (reorder) tone on: a 480 Hz tone added to a 620 Hz tone repeated in a 250 ms on, 250 ms off cycle.	000100
Abbreviated network congestion (reorder): a 480 Hz tone added to a 620 Hz tone repeated in a 250 ms on, 250 ms off cycle for four seconds.	000101
Busy tone on: a 480 Hz tone added to a 620 Hz tone repeated in a 500 ms on, 500 ms off cycle.	000110
Confirm tone on: a 350 Hz tone added to a 440 Hz tone repeated 3 times in a 100 ms on, 100 ms off cycle.	000111
Answer tone on: answer tone is not presently used in North American networks.	001000
Call waiting tone on: a 300 ms burst of 440 Hz tone.	001001
Pip tone on: four bursts of 480 Hz tone (0.1 s on, 0.1 s off).	001010
Tones off	111111
All other SIGNAL values are reserved	

2

3



1

**Table 3.7.5.5-4. ISDN Alerting (SIGNAL\_TYPE = '01')**

<b>Description</b>	<b>SIGNAL (binary)</b>
Normal Alerting: 2.0 s on, 4.0 s off, repeating	000000
Intergroup Alerting: 0.8 s on, 0.4 s off, 0.8 s on, 4.0 s off, repeating	000001
Special/Priority Alerting: 0.4 s on, 0.2 s off, 0.4 s on, 0.2 s off, 0.8 s on, 4.0 s off, repeating	000010
Reserved (ISDN Alerting pattern 3)	000011
"Ping ring": single burst of 500 ms	000100
Reserved (ISDN Alerting pattern 5)	000101
Reserved (ISDN Alerting pattern 6)	000110
Reserved (ISDN Alerting pattern 7)	000111
Alerting off	001111
All other SIGNAL values are reserved	

2

1

**Table 3.7.5.5-5. IS-54B Alerting (SIGNAL\_TYPE = '10')**

<b>Description</b>	<b>SIGNAL (binary)</b>
<i>No Tone:</i> Off	000000
<i>Long:</i> 2.0 s on, 4.0 s off, repeating (standard alert)	000001
<i>Short-Short:</i> 0.8 s on, 0.4 s off, 0.8 s on, 4.0 s off, repeating	000010
<i>Short-Short-Long:</i> 0.4 s on, 0.2 s off, 0.4 s on, 0.2 s off, 0.8 s on, 4.0 s off, repeating	000011
<i>Short-Short-2:</i> 1.0 s on, 1.0 s off, 1.0 s on, 3.0 s off, repeating.	000100
<i>Short-Long-Short:</i> 0.5 s on, 0.5 s off, 1.0 s on, 0.5 s off, 0.5 s on, 3.0 s off, repeating.	000101
<i>Short-Short-Short-Short:</i> 0.5 s on, 0.5 s off, 0.5 s on, 0.5 s off, 0.5 s on, 0.5 s off, 0.5 s on, 2.5 s off, repeating.	000110
<i>PBX Long:</i> 1.0 s on, 2.0 s off, repeating.	000111
<i>PBX Short-Short:</i> 0.4 s on, 0.2 s off, 0.4 s on, 2.0 off, repeating.	001000
<i>PBX Short-Short-Long:</i> 0.4 s on, 0.2 s off, 0.4 s on, 0.2 s off, 0.8 s on, 1.0 s off, repeating.	001001
<i>PBX Short-Long-Short:</i> 0.4 s on, 0.2 s off, 0.8 s on, 0.2 s off, 0.4 s on, 1.0 s off, repeating.	001010
<i>PBX Short-Short-Short-Short:</i> 0.4 s on, 0.2 s off, 0.4 s on, 0.2 s off, 0.4 s on, 0.2 s off, 0.4 s on, 0.8 s off, repeating.	001011
<i>Pip-Pip-Pip-Pip:</i> 0.1 s on, 0.1 s off, 0.1 s on, 0.1 s off, 0.1 s on, 0.1 s off, 0.1 s on.	001100
All other SIGNAL values are reserved	

2

3

RESERVED - Reserved bits.

4

The base station shall set this field to '000000'.

5

1    3.7.5.6 Message Waiting

2    This information record conveys to the user the number of messages waiting.

3

Type-Specific Field	Length (bits)
MSG_COUNT	8

4

5            MSG\_COUNT    -    Number of waiting messages.

6                            The base station shall set this field to the number of

7                            messages waiting.

8

### 1 3.7.5.7 Service Configuration

2 For the mobile station, this record is included in a *Status Response Message* to return the  
 3 current service configuration, and in a *Service Request Message* and a *Service Response*  
 4 *Message* to propose a service configuration.

5 For a base station, this record is included in a *Service Request Message* and a *Service*  
 6 *Response Message* to propose a service configuration. It is included in a *Service Connect*  
 7 *Message* to specify an actual service configuration to be used. It can be included in a  
 8 *General Handoff Direction Message* and *Universal Handoff Direction Message* to specify an  
 9 actual service configuration to be used.

10

Type-Specific Field	Length (bits)
FOR_MUX_OPTION	16
REV_MUX_OPTION	16
FOR_NUM_BITS	8
REV_NUM_BITS	8
NUM_CON_REC	8

NUM\_CON\_REC occurrences of the following variable-length record:

{ (NUM\_CON\_REC)

RECORD_LEN	8
CON_REF	8
SERVICE_OPTION	16
FOR_TRAFFIC	4
REV_TRAFFIC	4
UI_ENCRYPT_MODE	3
SR_ID	3
RLP_INFO_INCL	1
RLP_BLOB_LEN	0 or 4
RLP_BLOB	0 or (8 × RLP_BLOB_LEN)
QOS_PARMS_INCL	1
QOS_PARMS_LEN	0 or 5
QOS_PARMS	0 or variable
QOS_RESERVED	0-7
RESERVED	0-7 (as needed)

} (NUM\_CON\_REC)

FCH_CC_INCL	1
FCH_FRAME_SIZE	0 or 1
FOR_FCH_RC	0 or 5
REV_FCH_RC	0 or 5
DCCH_CC_INCL	1
DCCH_FRAME_SIZE	0 or 2
FOR_DCCH_RC	0 or 5
REV_DCCH_RC	0 or 5

(continues on next page)

1

Type-Specific Field	Length (bits)
FOR_SCH_CC_INCL	1
NUM_FOR_SCH	0 or 2

NUM\_FOR\_SCH occurrences of the following record

{ (NUM\_FOR\_SCH)

FOR_SCH_ID	2
FOR_SCH_MUX	16
SCH_CC_Type-specific field	Variable (see 3.7.5.7.1)

} (NUM\_FOR\_SCH)

REV_SCH_CC_INCL	1
NUM_REV_SCH	0 or 2

NUM\_REV\_SCH occurrences of the following record

{ (NUM\_REV\_SCH)

REV_SCH_ID	2
REV_SCH_MUX	16
SCH_CC_Type-specific field	Variable (see 3.7.5.7.1)

} (NUM\_REV\_SCH)

FCH_DCCH_MUX_OPTION_IND	2
FOR_DCCH_MUX_OPTION	0 or 16
REV_DCCH_MUX_OPTION	0 or 16
FOR_PDCH_CC_INCL	1
FOR_PDCH_MUX_OPTION	0 or 16
FOR_PDCH_RC	0 or 5
REV_PDCH_CC_INCL	1
REV_PDCH_MUX_OPTION_HIGH_RATE	0 or 16
REV_PDCH_MUX_OPTION_LOW_RATE	0 or 16
REV_PDCH_RC	0 or 5
RESERVED	0-7 (as needed)

2

3 FOR\_MUX\_OPTION - Forward multiplex option.

4 If P\_REV\_IN\_USE<sub>S</sub> is less than eight, the mobile station shall  
5 set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present (e.g., 1 corresponds to Multiplex Option 1).

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present.

If  $P\_REV\_IN\_USE_s$  is greater than or equal to eight, the mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both (e.g., 1 corresponds to Multiplex Option 1), according to the value as specified by  $FCH\_DCCH\_MUX\_OPTION\_IND$ .

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, according to the value as specified by  $FCH\_DCCH\_MUX\_OPTION\_IND$ .

If neither the Forward Fundamental Channel nor Forward Dedicated Control Channel configuration is assigned, then the mobile station shall set this field to 0.

If  $MOB\_P\_REV$  is less than eight, the base station shall set this field as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present.

If  $MOB\_P\_REV$  is greater than or equal to eight, the base station shall set this field as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, according to the value as specified by FCH\_DCCH\_MUX\_OPTION\_IND.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, according to the value as specified by FCH\_DCCH\_MUX\_OPTION\_IND.

If neither the Forward Fundamental Channel nor Forward Dedicated Control Channel configuration is assigned, the base station shall set this field to 0.

REV\_MUX\_OPTION - Reverse multiplex option.

If P\_REV\_IN\_USE<sub>s</sub> is less than eight, the mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present (e.g., 1 corresponds to Multiplex Option 1).

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present.

If P\_REV\_IN\_USE<sub>s</sub> is greater than or equal to eight, the mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both [e.g., 1 corresponds to Multiplex Option 1), according to the value as specified by FCH\_DCCH\_MUX\_OPTION\_IND.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, according to the value as specified by FCH\_DCCH\_MUX\_OPTION\_IND.

If neither the Reverse Fundamental Channel nor Reverse Dedicated Control Channel configuration is assigned, the mobile station shall set this field to 0.



If MOB\_P\_REV is less than eight, the base station shall set this field as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present.

If MOB\_P\_REV is greater than or equal to eight, the base station shall set this field as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, according to the value as specified by FCH\_DCCH\_MUX\_OPTION\_IND.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, according to the value as specified by FCH\_DCCH\_MUX\_OPTION\_IND.

FOR\_NUM\_BITS - Set of number of bits per frame of the Forward Fundamental Channel.

The mobile station shall set this field as follows:

The mobile station shall use the Forward Fundamental Channel transmission set of number of bits per frame specified in 2.7.4.28 for the specified Forward Traffic Channel multiplex option.

For a *Status Response Message*, the mobile station shall set the subfields corresponding to the Forward Traffic Channel transmission set of number of bits per frame of the current service configuration to '1', and shall set the remaining subfields to '0'. If FOR\_MUX\_OPTION is equal to 1 or 2, the mobile station shall set RESERVED to '0000'. If the Forward Fundamental Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

1 For a *Service Request Message* and a *Service Response*  
 2 *Message*, the mobile station shall set the subfields  
 3 corresponding to the Forward Traffic Channel  
 4 transmission set of number of bits per frame of the  
 5 proposed service configuration to '1', and shall set the  
 6 remaining subfields to '0'. If FOR\_MUX\_OPTION is equal  
 7 to 1 or 2, the mobile station shall set RESERVED to  
 8 '0000'. If the Forward Fundamental Channel  
 9 configuration is not specified in this record, then the  
 10 mobile station shall set this field to 0.

11 The base station shall set this field as follows:

12 The base station shall set this field to the Forward  
 13 Fundamental Channel transmission set of number of bits  
 14 per frame specified in 2.7.4.28 for the specified Forward  
 15 Traffic Channel multiplex option.

16 For a *Service Request Message* or a *Service Response*  
 17 *Message*, the base station shall set the subfields  
 18 corresponding to the Forward Fundamental Channel  
 19 transmission set of number of bits per frame of the  
 20 proposed service configuration to '1', and shall set the  
 21 remaining subfields to '0'. If FOR\_MUX\_OPTION is equal  
 22 to 1 or 2, the base station shall set RESERVED to '0000'.  
 23 If the Forward Fundamental Channel configuration is not  
 24 specified in this record, then the base station shall set  
 25 this field to 0.

26 For a *Service Connect Message*, *General Handoff Direction*  
 27 *Message*, and a *Universal Handoff Direction Message*, the  
 28 base station shall set the subfields corresponding to the  
 29 Forward Fundamental Channel transmission set of  
 30 number of bits per frame of the actual service  
 31 configuration to be used to '1', and shall set the  
 32 remaining subfields to '0'. If FOR\_MUX\_OPTION is equal  
 33 to 1 or 2, the base station shall set RESERVED to '0000'.  
 34 If the Forward Fundamental Channel configuration is not  
 35 specified in this record, then the base station shall set  
 36 this field to 0.

37 REV\_NUM\_BITS - Set of number of bits per frame of the Reverse Fundamental  
 38 Channel.

39 The mobile station shall set this field as follows:

40 The mobile station shall use the Reverse Fundamental  
 41 Channel transmission set of number of bits per frame  
 42 specified in 2.7.4.28 for the specified Reverse Traffic  
 43 Channel multiplex option.

1 For a *Status Response Message*, the mobile station shall  
 2 set the subfields corresponding to the Reverse Traffic  
 3 Channel transmission set of number of bits per frame of  
 4 the current service configuration to '1', and shall set the  
 5 remaining subfields to '0'. If REV\_MUX\_OPTION is equal  
 6 to 1 or 2, the mobile station shall set RESERVED to  
 7 '0000'.

8 For a *Service Request Message* and a *Service Response*  
 9 *Message*, the mobile station shall set the subfields  
 10 corresponding to the Reverse Traffic Channel  
 11 transmission set of number of bits per frame of the  
 12 proposed service configuration to '1', and shall set the  
 13 remaining subfields to '0'. If REV\_MUX\_OPTION is equal  
 14 to 1 or 2, the mobile station shall set RESERVED to  
 15 '0000'.

16 The base station shall set this field as follows:

17 The base station shall set this field to the Reverse  
 18 Fundamental Channel transmission set of number of bits  
 19 per frame specified in 2.7.4.28 for the specified Reverse  
 20 Traffic Channel multiplex option.

21 For a *Service Request Message* or a *Service Response*  
 22 *Message*, the base station shall set the subfields  
 23 corresponding to the Reverse Fundamental Channel  
 24 transmission set of number of bits per frame of the  
 25 proposed service configuration to '1', and shall set the  
 26 remaining subfields to '0'. If REV\_MUX\_OPTION is equal  
 27 to 1 or 2, the base station shall set RESERVED to '0000'.

28 For a *Service Connect Message*, *General Handoff Direction*  
 29 *Message*, and a *Universal Handoff Direction Message*, the  
 30 base station shall set the subfields corresponding to the  
 31 Reverse Fundamental Channel transmission set of  
 32 number of bits per frame of the actual service  
 33 configuration to be used to '1', and shall set the  
 34 remaining subfields to '0'. If REV\_MUX\_OPTION is equal  
 35 to 1 or 2, the base station shall set RESERVED to '0000'.

36 NUM\_CON\_REC - Number of service option connection records.

37 The mobile station shall set this field as follows:

38 The mobile station shall set this field to the number of  
 39 service option connection records included in the  
 40 message.

41 The base station shall set this field as follows:

42 The base station shall set this field to the number of  
 43 service option connection records included in the  
 44 message.

For a *Status Response Message*, the mobile station shall include one occurrence of the following variable-length record for each service option connection of the current service configuration. For a *Service Request Message* and a *Service Response Message*, the mobile station shall include one occurrence of the following variable-length record for each service option connection of the proposed service configuration.

For a *Service Request Message* or a *Service Response Message*, the base station shall include one occurrence of the following variable-length record for each service option connection of the proposed service configuration.

For a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*, the base station shall include one occurrence of the following variable-length record for each service option connection of the actual service configuration to be used.

RECORD\_LEN - Service option connection record length.

The mobile station shall set this field as follows:

The mobile station shall set this field to the number of octets included in this service option connection record including this field.

The base station shall set this field as follows:

The base station shall set this field to the number of octets included in this service option connection record including this field.

CON\_REF - Service option connection reference.

The mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the service option connection reference.

For a *Service Request Message* and a *Service Response Message*, if the service option connection is part of the current service configuration, the mobile station shall set this field to the service option connection reference; otherwise, the mobile station shall set this field to '00000000'.

The base station shall set this field as follows:

For a *Service Request Message* or a *Service Response Message*: if the service option connection is part of the current service configuration, the base station shall set this field to the service option connection reference; otherwise, the base station shall set this field to '00000000'.

1 For a *Service Connect Message*, *General Handoff Direction*  
2 *Message*, and a *Universal Handoff Direction Message*, the  
3 base station shall set this field to the service option  
4 connection reference assigned to the service option  
5 connection.

6 SERVICE\_OPTION - Service option.

7 The mobile station shall set this field as follows:

8 For a *Status Response Message*, the mobile station shall  
9 set this field to the service option in use with the service  
10 option connection.

11 For a *Service Request Message* and a *Service Response*  
12 *Message*, the mobile station shall set this field to the  
13 service option to be used with the service option  
14 connection.

15 The base station shall set this field as follows:

16 The base station shall set this field to the service option to  
17 be used with the service option connection.

18       FOR\_TRAFFIC     -   Forward Traffic Channel traffic type.

19 The mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the FOR\_TRAFFIC code shown in Table 3.7.5.7-1 corresponding to the Forward Traffic Channel traffic type in use with the service option connection.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the FOR\_TRAFFIC code shown in Table 3.7.5.7-1 corresponding to the Forward Traffic Channel traffic type to be used with the service option connection.

30 The base station shall set this field as follows:

31 The base station shall set this field to the FOR\_TRAFFIC  
32 code shown in Table 3.7.5.7-1 corresponding to the  
33 Forward Traffic Channel traffic type to be used with the  
34 service option connection.

1

**Table 3.7.5.7-1. FOR\_TRAFFIC Codes**

<b>FOR_TRAFFIC (binary)</b>	<b>Description</b>
0000	The service option connection does not use Forward Traffic Channel traffic.
0001	The service option connection uses primary traffic on the Forward Traffic Channel.
0010	The service option connection uses secondary traffic on the Forward Traffic Channel.
0011	The service option connection uses signaling traffic on the Forward Traffic Channel.
0100	The service option connection uses the Forward Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.
All other FOR_TRAFFIC codes are reserved.	

2

3

REV\_TRAFFIC - Reverse Traffic Channel traffic type.

4

The mobile station shall set this field as follows:

5

6

7

8

9

For a *Status Response Message*, the mobile station shall set this field to the REV\_TRAFFIC code shown in Table 3.7.5.7-2 corresponding to the Reverse Traffic Channel traffic type in use with the service option connection.

10

11

12

13

14

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the REV\_TRAFFIC code shown in Table 3.7.5.7-2 corresponding to the Reverse Traffic Channel traffic type to be used with the service option connection.

15

The base station shall set this field as follows:

16

17

18

19

20

The base station shall set this field to the REV\_TRAFFIC code shown in Table 3.7.5.7-2 corresponding to the Reverse Traffic Channel traffic type to be used with the service option connection.

1

**Table 3.7.5.7-2. REV\_TRAFFIC Codes**

<b>REV_TRAFFIC (binary)</b>	<b>Description</b>
0000	The service option connection does not use Reverse Traffic Channel traffic.
0001	The service option connection uses primary traffic on the Reverse Traffic Channel.
0010	The service option connection uses secondary traffic on the Reverse Traffic Channel.
0011	The service option connection uses signaling traffic on the Reverse Traffic Channel.
0100	The service option connection uses the Reverse Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.
All other REV_TRAFFIC codes are reserved.	

2

3 UI\_ENCRYPT\_MODE - Encryption mode indicator for user information privacy.

4

The mobile station shall set this field as follows:

5

For a *Status Response Message*, the mobile station shall set this field to indicate the current user information encryption mode as shown in Table 3.7.5.7-3.

6

7

8

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to indicate the proposed user information encryption mode as shown in Table 3.7.5.7-3.

9

10

11

12

The base station shall set this field as follows:

13

For a *Service Request Message* or a *Service Response Message*: the base station shall set this field to the proposed user information encryption mode, as shown in Table 3.7.5.7-3.

14

15

16

17

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the assigned user information encryption mode, as shown in Table 3.7.5.7-3.

18

19

20

21

1

**Table 3.7.5.7-3. User information Encryption Modes**

<b>UI_ENCRYPT_MODE Field (binary)</b>	<b>Encryption Mode Used</b>
000	User information Encryption disabled
001	User information Encryption with ORYX encryption algorithm enabled (not applicable to voice service option). Encryption procedures specified in the service option standard shall be performed.
010	<p>If P_REV_IN_USE is less than nine, this value indicates that User information Encryption uses the Rijndael encryption algorithm. Encryption procedures defined in 2.3.12.4.2.1 shall be performed.</p> <p>If P_REV_IN_USE is greater than or equal to nine, this value indicates that User information Encryption uses the Rijndael encryption algorithm. Encryption procedures defined in the corresponding service option specification shall be performed. (Encryption of voice service option is defined in this document).</p>
011- 111	Reserved

2                   SR\_ID    –   Service reference identifier.

3                                   The mobile station shall set this field as follows:

4                                   For a *Status Response Message*, the mobile station shall  
5                                   set this field to the service reference identifier in use.

6                                   For a *Service Request Message* and a *Service Response*  
7                                   *Message*, the mobile station shall set this field as follows:



If the service option connection is a part of the current service configuration, the mobile station shall set this field to the service reference identifier in use.

If the service option connection is not a part of the current service configuration, the mobile station shall perform the following:

- If this service option connection request is initiated by the base station, the mobile station shall set this field to the value sent by the base station.
- If this service option connection request is initiated by the mobile station, the mobile station shall perform the following: if the service instance provides a service reference identifier, the mobile station shall set this field to the service reference identifier specified by the service instance; otherwise, the mobile station shall set this field to the smallest unused service reference identifier value between 1 and 6 inclusive.

The base station shall set this field as follows:

For a *Service Request Message*, a *Service Response Message*, a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*, the base station shall set this field as follows:

If the service option connection is a part of the current service configuration, the base station shall set this field to the service reference identifier in use.

If the service option connection is not a part of the current service configuration, the base station shall perform the following:

- If this service option connection request is initiated by the mobile station, the base station shall set this field to the value sent by the mobile station.
- If this service option connection request is initiated by the base station, the base station shall perform the following: if the service instance provides a service reference identifier, the base station shall set this field to the service reference identifier specified by the service instance; otherwise, the base station shall set this field to the highest unused service reference identifier value between 1 and 6 inclusive.

RLP\_INFO\_INCL - RLP information included indicator.

The mobile station shall set this field as follows:

The mobile station shall set this field to '1' if the RLP\_BLOB field is included in this record; otherwise, it shall set this field to '0'.

1                               The base station shall set this field as follows:

2                               The base station shall set this field to '1' if the RLP\_BLOB

3                               field is included in this record; otherwise, it shall set this

4                               field to '0'.

5               RLP\_BLOB\_LEN   -   RLP information block of bits length.

6                               The mobile station shall set this field as follows:

7                               If the RLP\_INFO\_INCL field is set to '0', the mobile station

8                               shall omit this field; otherwise, it shall include this field

9                               and set it as follows:

10                              The mobile station shall set this field to the size of the

11                              RLP\_BLOB field in integer number of octets.

12                              The base station shall set this field as follows:

13                              If the RLP\_INFO\_INCL field is set to '0', the base station

14                              shall omit this field; otherwise, it shall include this field

15                              and set it as follows:

16                              The base station shall set this field to the size of the

17                              RLP\_BLOB field in integer number of octets.

18               RLP\_BLOB       -   Radio Link Protocol block of bits.

19                              The mobile station shall set this field as follows:

20                              If the RLP\_INFO\_INCL field is set to '0', the mobile station

21                              shall omit this field; otherwise, the mobile station shall

22                              include this field and set it as follows:

23                              For a *Status Response Message*, the mobile station shall

24                              set this field to the Radio Link Protocol block of bits for

25                              this service option connection.

26                              For a *Service Request Message* or *Service Response*

27                              *Message*, the mobile station shall set this field to the

28                              proposed Radio Link Protocol block of bits for this service

29                              option connection, and shall add '0' bits to the end of the

30                              field as needed in order to make the length of this field

31                              equal to an integer number of octets.

32                              The base station shall set this field as follows:

1 If the RLP\_INFO\_INCL field is set to '0', the base station  
2 shall omit this field; otherwise, the base station shall  
3 include this field and set it as follows:

4                   The base station shall set this field to the Radio Link  
5                   Protocol block of bits for this service option connection,  
6                   and shall add '0' bits to the end of the field as needed in  
7                   order to make the length of this field equal to an integer  
8                   number of octets.

9 QOS\_PARMS\_INCL - Presence indicator for the QoS parameters.

10 The mobile station shall set this field as follows:

11           The mobile station shall set this field to '1', if  
12           QOS\_PARMS field is included in the record; otherwise the  
13           base station shall set this field to '0'.

14 The base station shall set this field as follows:

15                   The base station shall set this field to '1', if QOS\_PARMS  
16                   field is included in the record; otherwise, the base station  
17                   shall set this field to '0'.

18      QOS\_PARMS\_LEN      -      Length of the block of QoS parameters.

19 The mobile station shall set this field as follows:

20 If QOS\_PARMS\_INCL is set to '1', the mobile station shall  
21 set this field to the combined length in octets, of the  
22 QOS\_PARMS field and the immediately following  
23 QOS\_RESERVED field; otherwise, the mobile station shall  
24 omit this field.

25 The base station shall set this field as follows:

26 If QOS\_PARMS\_INCL is set to '1', the base station shall  
27 set this field to the combined length in octets, of the  
28 QOS\_PARMS field and the immediately following  
29 QOS\_RESERVED field; otherwise, the base station shall  
30 omit this field.

31            QOS\_PARMS     -    QoS parameters block.

32 The mobile station shall set this field as follows:

33 If QOS\_PARMS\_INCL is set to '1', the mobile station shall  
34 include this field in the record as follows:

35 For a *Status Response Message*, the mobile station shall  
36 set this field to the set of QoS parameters configured for  
37 this service option connection.

1			For a <i>Service Request Message</i> or <i>Service Response Message</i> , the mobile station shall set this field to the set
2			of QoS parameters requested for the respective
3			connection.
4			
5			The base station shall set this field as follows:
6			If QOS_PARMS_INCL is set to '1', the base station shall
7			include this field in the record and set it to the set of QoS
8			parameters requested or required for the respective
9			connection.
10	QOS_RESERVED	-	Padding bits.
11			The mobile station shall set this field as follows:
12			If QOS_PARMS_INCL is set to '1', the mobile station shall
13			include the minimum number of '0' bits necessary to
14			ensure that the combined length of the QOS_PARMS field
15			and of this field is an integer number of octets; otherwise,
16			the mobile station shall omit this field.
17			The base station shall set this field as follows:
18			If QOS_PARMS_INCL is set to '1', the base station shall
19			include the minimum number of '0' bits necessary to
20			ensure that the combined length of the QOS_PARMS field
21			and of this field is an integer number of octets; otherwise,
22			the base station shall omit this field.
23	RESERVED	-	Reserved bits.
24			The mobile station shall set this field as follows:
25			The mobile station shall add reserved bits as needed in
26			order to make the length of the entire record equal to an
27			integer number of octets. The mobile station shall set
28			these bits to '0'.
29			The base station shall set this field as follows:
30			The base station shall add reserved bits as needed in
31			order to make the length of this record equal to an integer
32			number of octets. The base station shall set these bits to
33			'0'.
34	FCH_CC_INCL	-	Channel configuration for the Fundamental Channel
35			included indicator.
36			The mobile station shall set this field as follows:

1                   The mobile station shall set this field to '1', if  
 2                   Fundamental Channel Configuration information is  
 3                   included in the record; otherwise, the mobile station shall  
 4                   set this field to '0' to indicate the current values of  
 5                   Channel configuration for the Fundamental Channel are  
 6                   to be used.

7                   The base station shall set this field as follows:

8                   The base station shall set this field to '1', if the channel  
 9                   configuration information for the Fundamental Channel is  
 10                  included in this Service Configuration Record; otherwise,  
 11                  the base station shall set this field to '0' to indicate the  
 12                  current values of Channel configuration for the  
 13                  Fundamental Channel are to be used.

14       FCH\_FRAME\_SIZE   -   Fundamental Channel frame size supported indicator.

15                  The mobile station shall set this field as follows:

16                  If FCH\_CC\_INCL field is set to '1', the mobile station shall  
 17                  include this field and set it as described below; otherwise,  
 18                  the mobile station shall omit this field.

19                  For a *Status Response Message*, the mobile station shall  
 20                  set this field to '1', if the 5ms frame size is used in the  
 21                  Forward Fundamental Channel (if specified in this record)  
 22                  and Reverse Fundamental Channel, in addition to the  
 23                  20ms frame size, for the current service configuration;  
 24                  otherwise, the mobile station shall set this field to '0'.

25                  For a *Service Request Message* or a *Service Response*  
 26                  *Message*, the mobile station shall set this field to '1' if the  
 27                  5 ms frame size is used in the Forward Fundamental  
 28                  Channel (if specified in this record) and Reverse  
 29                  Fundamental Channel, in addition to the 20 ms frame  
 30                  size, for the proposed service configuration; otherwise the  
 31                  mobile station shall set this field to '0'

32                  The base station shall set this field as follows:

33                  If the FCH\_CC\_INCL field is set to '0', the base station  
 34                  shall omit this field; otherwise, the base station shall  
 35                  include this field and set it as follows:

36                  The base station shall set this field to '1' if the service  
 37                  configuration includes the use of 5 ms frame size in  
 38                  addition to 20ms frame size for the Forward Fundamental  
 39                  Channel (if specified in this record) and Reverse  
 40                  Fundamental Channel; otherwise, the base station shall  
 41                  set this field to '0'.

42       FOR\_FCH\_RC       -   Forward Fundamental Channel Radio Configuration.

43                  The mobile station shall set this field as follows:

If FCH\_CC\_INCL field is set to '1', the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

For a *Status Response Message*, the mobile station shall set this field to the Forward Fundamental Channel Radio Configuration (see [2]) for the current service configuration. If the Forward Fundamental Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

For a *Service Request Message* or *Service Response Message*, the mobile station shall set this field to the Forward Fundamental Channel Radio Configuration for the proposed service configuration. If the Forward Fundamental Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

The base station shall set this field as follows:

If the FCH\_CC\_INCL field is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

For a *Service Request Message* or a *Service Response Message*, the base station shall set this field to the Forward Fundamental Channel Radio Configuration (see [2]) in the proposed service configuration. If the Forward Fundamental Channel configuration is not specified in this record, then the base station shall set this field to 0.

For a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*, the base station shall set this field to the actual Forward Fundamental Channel Radio Configuration to be used. If the Forward Fundamental Channel configuration is not specified in this record, then the base station shall set this field to 0.

REV\_FCH\_RC - Reverse Fundamental Channel Radio Configuration.

The mobile station shall set this field as follows:

If FCH\_CC\_INCL field is set to '1', the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

For a *Status Response Message*, the mobile station shall set field to the Reverse Fundamental Channel Radio Configuration (see [2]) for the current service configuration.

For a *Service Request Message* or a *Service Response Message*, the mobile station shall set this field to the Reverse Fundamental Channel Radio Configuration for the proposed service configuration.

1 The base station shall set this field as follows:

2 If the FCH\_CC\_INCL field is set to '0', the base station  
3 shall omit this field; otherwise, the base station shall  
4 include this field and set it as follows:

5 For a *Service Request Message* or a *Service Response*  
6 *Message*, the base station shall set this field to the  
7 Reverse Fundamental Channel Radio Configuration (see  
8 [2]) in the proposed service configuration.

9 For a *Service Connect Message*, a *General Handoff*  
10 *Direction Message*, or a *Universal Handoff Direction*  
11 *Message*, the base station shall set this field to the actual  
12 Reverse Fundamental Channel Radio Configuration to be  
13 used.

14 DCCH\_CC\_INCL - Channel configuration for the Dedicated Control Channel  
15 included indicator.

16 The mobile station shall set this field as follows:

17 The mobile station shall set this field to '1', if DCCH  
18 channel configuration information is included in this  
19 record; otherwise, the mobile station shall set this field to  
20 '0' to indicate the current values of Channel configuration  
21 for the Dedicated Control Channel are to be used.

22 The base station shall set this field as follows:

23 The base station shall set this field to '1', if channel  
24 configuration information for the Dedicated Control  
25 Channel is included in this Service Configuration Record;  
26 otherwise, the base station shall set this field to '0' to  
27 indicate the current values of Channel configuration for  
28 the Dedicated Control Channel are to be used.

29 DCCH\_FRAME\_SIZE - Dedicated Control Channel frame size.

30 The mobile station shall set this field as follows:

31 If DCCH\_CC\_INCL field is set to '1', the mobile station  
32 shall include this field and set it as described below;  
33 otherwise, the mobile station shall omit this field.

34 For a *Status Response Message*, the mobile station shall  
35 set this field to the frame size, as defined in Table 3.7.5.7-  
36 4, for the current service configuration.

37 For a *Service Request Message* or a *Service Response*  
38 *Message*, the mobile station shall set this field to the  
39 frame size, as defined in Table 3.7.5.7-4, for the proposed  
40 service configuration.

41 The base station shall set this field as follows:

If the DCCH\_CC\_INCL field is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it according to the Table 3.7.5.7-4 as follows:

For a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*, the base station shall set this field to the Dedicated Control Channel frame size(s) for the actual service configuration.

For a *Service Request Message* or a *Service Response Message*, the base station shall set this field to the Dedicated Control Channel frame size(s) for the proposed service configuration.

**Table 3.7.5.7-4. DCCH Frame Size**

<b>DCCH_FRAME_SIZE (binary)</b>	<b>Description</b>
00	Reserved
01	20 ms frame size only
10	5 ms frame size only
11	Both 5 ms and 20 ms frame sizes

FOR\_DCCH\_RC - Forward Dedicated Control Channel Radio Configuration.

The mobile station shall set this field as follows:

If DCCH\_CC\_INCL field is set to '1', the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

For a *Status Response Message*, the mobile station shall set this field to the Forward Dedicated Control Channel Radio Configuration (see [2]) for the current service configuration. If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

For a *Service Request Message* or a *Service Response Message*, the mobile station shall set this field to the Forward Dedicated Control Channel Radio Configuration for the proposed service configuration. If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

The base station shall set this field as follows:



1			If the DCCH_CC_INCL field is set to '0', the base station
2			shall omit this field; otherwise, the base station shall
3			include this field and set it as follows:
4			For a <i>Service Connect Message</i> , a <i>General Handoff</i>
5			<i>Direction Message</i> , or a <i>Universal Handoff Direction</i>
6			<i>Message</i> , the base station shall set this field to the actual
7			Forward Dedicated Control Channel Radio Configuration
8			to be used (see [2]). If the Forward Dedicated Control
9			Channel configuration is not specified in this record, then
10			the mobile station shall set this field to 0.
11			For a <i>Service Request Message</i> or a <i>Service Response</i>
12			<i>Message</i> , the base station shall set this field to the
13			Forward Dedicated Control Channel Radio Configuration
14			in the proposed service configuration. If the Forward
15			Dedicated Control Channel configuration is not specified
16			in this record, then the base station shall set this field to
17			0.
18	REV_DCCH_RC	-	Reverse Dedicated Control Channel Radio Configuration.
19			The mobile station shall set this field as follows:
20			If DCCH_CC_INCL field is set to '1', the mobile station
21			shall include this field and set it as described below;
22			otherwise, the mobile station shall omit this field.
23			For a <i>Status Response Message</i> , the mobile station shall
24			set this field to the Reverse Dedicated Control Channel
25			Radio Configuration (see [2]) for the current service
26			configuration.
27			For a <i>Service Request Message</i> or a <i>Service Response</i>
28			<i>Message</i> , the mobile station shall set this field to the
29			Reverse Dedicated Control Channel Radio Configuration
30			for the proposed service configuration.
31			The base station shall set this field as follows:
32			If the DCCH_CC_INCL field is set to '0', the base station
33			shall omit this field; otherwise, the base station shall
34			include this field and set it as follows:
35			For a <i>Service Connect Message</i> , a <i>General Handoff</i>
36			<i>Direction Message</i> , or a <i>Universal Handoff Direction</i>
37			<i>Message</i> , the base station shall set this field to the actual
38			Reverse Dedicated Control Channel Radio Configuration
39			to be used (see [2]).
40			For a <i>Service Request Message</i> or a <i>Service Response</i>
41			<i>Message</i> , the base station shall set this field to the
42			Reverse Dedicated Control Channel Radio Configuration
43			for the proposed service configuration.
44	FOR_SCH_CC_INCL	-	Channel configuration for the Forward Supplemental
45			Channel included indicator.

1 The mobile station shall set this field as follows:

2 The mobile station shall set this field to '1', if the Forward  
3 Supplemental Channel Configuration information is  
4 included; otherwise, the mobile station shall set this field  
5 to '0' to indicate the current values of Channel  
6 configuration for the Forward Supplemental Channel are  
7 to be used.

8 The base station shall set this field as follows:

9 The base station shall set this field to '1', if the channel  
10 configuration information for the Forward Supplemental  
11 Channel is included in this Service Configuration Record;  
12 otherwise, the base station shall set this field to '0' to  
13 indicate the current values of Channel configuration for  
14 the Forward Supplemental Channel are to be used.

15 NUM\_FOR\_SCH - Number of Forward Supplemental Channels.

16 The mobile station shall set this field as follows:

17 If FOR\_SCH\_CC\_INCL field is set to '1', the mobile station  
18 shall include this field and set it as describe below;  
19 otherwise, the mobile station shall omit this field.

20 For a *Status Response Message*, the mobile station shall  
21 set this field to the number of Forward Supplemental  
22 Channels for the current service configuration and  
23 include one occurrence of the following three-field SCH  
24 record for each Supplemental Channel Configuration.

25 For a *Service Request Message* or a *Service Response*  
26 *Message*, the mobile station shall set this field to the  
27 number of Forward Supplemental Channels for the  
28 proposed service configuration and include one  
29 occurrence of the following three-field SCH record for  
30 each Supplemental Channel Configuration.

31 The base station shall set this field as follows:

32 If the FOR\_SCH\_CC\_INCL field is set to '0', the base  
33 station shall omit this field; otherwise, the base station  
34 shall set this field to the number of Forward  
35 Supplemental Channels associated with this service  
36 configuration.

37 If the FOR\_SCH\_CC\_INCL field is set to '1', the base  
38 station shall not set this field to '00'.

39 If the NUM\_FOR\_SCH field is present, the base station shall include one occurrence of the  
40 following three-field record for each Forward Supplemental Channel included in this  
41 record:

42 FOR\_SCH\_ID - Forward Supplemental Channel Identification

1 The mobile station shall set this field as follows:

2 The mobile station shall set this field to the identification  
3 of the Supplemental Channel included in this Forward  
4 Supplemental Channel Configuration record.

5 The mobile station shall set this field to the Supplemental  
6 Channel identifier, shown in Table 3.7.5.7-5.

7 **Table 3.7.5.7-5. SCH Identifier**

<b>FOR_SCH_ID REV_SCH_ID (binary)</b>	<b>Description</b>
00	Supplemental Channel 0
01	Supplemental Channel 1
10-11	Reserved

8 The base station shall set this field as follows:

9 The base station shall set this field to the identifier of the  
10 Forward Supplemental Channel pertaining to this record.

11 The base station shall set this field to the Supplemental  
12 Channel identifier, shown in Table 3.7.5.7-5.

13

14 **FOR\_SCH\_MUX** - Forward Supplemental Channel Multiplex Option.

15 The mobile station shall set this field as follows:

16 The mobile station shall set this field to the Multiplex  
17 Option associated with the maximum data rate for this  
18 Forward Supplemental Channel (see [3]).

19 The base station shall set this field as follows:

20 The base station shall set this field to the Multiplex  
21 Option associated with the maximum data rate for this  
22 Forward Supplemental Channel (see [3]).

23 **SCH\_CC\_Type-specific field** - Supplemental Channel Configuration Information.

24 The mobile station shall set this field as follows:

25 The mobile station shall set this field to the subfields of  
26 the Channel Configuration record defined in 3.7.5.7.1, for  
27 this Forward Supplemental Channel included in the  
28 service configuration.

29 The base station shall set this field as follows:

1			The base station shall set this field as defined in 3.7.5.7.1
2			for this Forward Supplemental Channel.
3	REV_SCH_CC_INCL	-	Channel configuration for the Reverse Supplemental Channel
4			included indicator.
5			The mobile station shall set this field as follows:
6			The mobile station shall set this field to '1', if the Reverse
7			Supplemental Channel Configuration information is
8			included; otherwise, the mobile station shall set this field
9			to '0' to indicate the current values of Channel
10			configuration for the Reverse Supplemental Channel are
11			to be used.
12			The base station shall set this field as follows:
13			The base station shall set this field to '1' if the channel
14			configuration information for the Reverse Supplemental
15			Channel is included in this service configuration record;
16			otherwise, the base station shall set this field to '0' to
17			indicate the current values of Channel configuration for
18			the Reverse Supplemental Channel are to be used.
19	NUM_REV_SCH	-	Number of Reverse Supplemental Channels.
20			The mobile station shall set this field as follows:
21			If REV_SCH_CC_INCL field is set to '1', the mobile station
22			shall include this field and set it as described below;
23			otherwise, the mobile station shall omit this field.
24			For a <i>Status Response Message</i> , the mobile station shall
25			set this field to the number of Reverse Supplemental
26			Channels for the current service configuration and
27			include one occurrence of the following three-field record
28			for each reverse Supplemental Channel Configuration.
29			For a <i>Service Request Message</i> or a <i>Service Response</i>
30			<i>Message</i> , the mobile station shall set this field to the
31			number of Reverse Supplemental Channels for the
32			proposed service configuration and include one
33			occurrence of the following three-field record for each
34			reverse Supplemental Channel Configuration.
35			The base station shall set this field as follows:
36			If the REV_SCH_CC_INCL field is set to '0', the base
37			station shall omit this field; otherwise, the base station
38			shall set this field to the number of Reverse Supplemental
39			Channels associated with this service configuration.
40			If the REV_SCH_CC_INCL field is set to '1', the base
41			station shall not set this field to '00'.

If the NUM\_REV\_SCH field is present, the base station shall include one occurrence of the following three-field record for each Reverse Supplemental Channel included in this record:

REV\_SCH\_ID - Reverse Supplemental Channel Identification

The mobile station shall set this field as follows:

The mobile station shall set this field to the identifier of the Supplemental Channel included in this Reverse Supplemental Channel Configuration record.

The mobile station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

The base station shall set this field as follows:

The base station shall set this field to the identifier of the Reverse Supplemental Channel pertaining to this record.

The base station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

REV\_SCH\_MUX - Reverse Supplemental Channel Multiplex Option

The mobile station shall set this field as follows:

The mobile station shall set this field to the Multiplex Option associated with the maximum data rate for this Reverse Supplemental Channel (see [3]).

The base station shall set this field as follows:

The base station shall set this field to the Multiplex Option associated with the maximum data rate for this Reverse Supplemental Channel (see [3]).

SCH\_CC\_Type-specific field - Supplemental Channel Configuration Information.

The mobile station shall set this field as follows:

The mobile station shall set this field to the subfields of the Channel Configuration record defined in 3.7.5.7.1, for this Reverse Supplemental Channel included in the service configuration.

The base station shall set this field as follows:

The base station shall set this field as defined in 3.7.5.7.1 for this Reverse Supplemental Channel.

FCH\_DCCH\_MUX\_OPTION\_IND - FCH and DCCH Multiplex Option Indicator

The mobile station shall set this field according to Table 3.7.5.7-6.

The base station shall set this field according to Table 3.7.5.7-6.

**Table 3.7.5.7-6. FCH\_DCCH\_MUX\_OPTION\_IND USAGE**

<b>FCH_DCCH_MUX_OPTION_IND</b>	<b>Description</b>
00	FOR_MUX_OPTION applies to both the Forward Fundamental Channel and the Forward Dedicated Control Channel (if specified in this record), and REV_MUX_OPTION applies to both the Reverse Fundamental Channel and the Reverse Dedicated Control Channel
01	FOR_MUX_OPTION applies only to the Forward Fundamental Channel (if specified in this record), and REV_MUX_OPTION applies only to the Reverse Fundamental Channel.
10	FOR_MUX_OPTION applies only to the Forward Dedicated Control Channel (if specified in this record), and REV_MUX_OPTION applies only to the Reverse Dedicated Control Channel.
11	FOR_MUX_OPTION applies only to the Forward Fundamental Channel, and REV_MUX_OPTION applies only to the Reverse Fundamental Channel.  FOR_DCCH_MUX_OPTION is included for the Forward Dedicated Control Channel (if specified in this record), and REV_DCCH_MUX_OPTION is included for the Reverse Dedicated Control Channel.

**FOR\_DCCH\_MUX\_OPTION** – Forward DCCH Multiplex Option.

If FCH\_DCCH\_MUX\_OPTION\_IND is set to a value other than '11', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Dedicated Control Channel (e.g., 1 corresponds to Multiplex Option 1). If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Dedicated Control Channel. If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

If FCH\_DCCH\_MUX\_OPTION\_IND is set to a value other than '11', the base station shall omit this field; otherwise, the base station shall include this field and set as follows:

1 For a *Service Request Message* and a *Service Response*  
2 *Message*, the base station shall set this field to the  
3 number of the multiplex option for the Forward Dedicated  
4 Control Channel. If the Forward Dedicated Control  
5 Channel configuration is not specified in this record, then  
6 the mobile station shall set this field to 0.

7 For a *Service Connect Message*, *General Handoff Direction*  
8 *Message*, and a *Universal Handoff Direction Message*, the  
9 base station shall set this field to the number of the  
10 multiplex option for the Forward Dedicated Control  
11 Channel. If the Forward Dedicated Control Channel  
12 configuration is not specified in this record, then the base  
13 station shall set this field to 0.

14 REV\_DCCH\_MUX\_OPTION - Reverse DCCH Multiplex Option.

15 If FCH\_DCCH\_MUX\_OPTION\_IND is set to a value other than  
16 '11', the mobile station shall omit this field; otherwise, the  
17 mobile station shall include this field and set as follows:

18 For a *Status Response Message*, the mobile station shall  
19 set this field to the number of the multiplex option for the  
20 Reverse Dedicated Control Channel (e.g., 1 corresponds to  
21 Multiplex Option 1).

22 For a *Service Request Message* and a *Service Response*  
23 *Message*, the mobile station shall set this field to the  
24 number of the multiplex option for the Reverse Dedicated  
25 Control Channel.

26 If DCCH\_MUX\_OPTION\_INCL is set to a value other than '11',  
27 the base station shall omit this field; otherwise, the base  
28 station shall include this field and set as follows:

29 For a *Service Request Message* and a *Service Response*  
30 *Message*, the base station shall set this field to the  
31 number of the multiplex option for the Reverse Dedicated  
32 Control Channel.

33 For a *Service Connect Message*, *General Handoff Direction*  
34 *Message*, and a *Universal Handoff Direction Message*, the  
35 base station shall set this field to the number of the  
36 multiplex option for the Reverse Dedicated Control  
37 Channel.

38 FOR\_PDCH\_CC\_INCL - Channel configuration for the Forward Packet Data Channel  
39 included indicator.

40 The mobile station shall set this field as follows:

41 The mobile station shall set this field to '1', if channel  
42 configuration information for the Forward Packet Data  
43 Channel is included in this Service Configuration Record;  
44 otherwise, the mobile station shall set this field to '0' to  
45 indicate the current values of Channel configuration for  
46 the Forward Packet Data Channel are to be used.

1 The base station shall set this field as follows:

2 The base station shall set this field to '1', if channel

3 configuration information for the Forward Packet Data

4 Channel is included in this Service Configuration Record;

5 otherwise, the base station shall set this field to '0' to

6 indicate the current values of Channel configuration for

7 the Forward Packet Data Channel are to be used.

8 FOR\_PDCH\_MUX\_OPTION - Forward Packet Data Channel Multiplex Option.

9 The mobile station shall set this field as follows:

10 If FOR\_PDCH\_CC\_INCL is set to '0', then the mobile

11 station shall omit this field; otherwise, the mobile station

12 shall set this field to the Multiplex Option associated with

13 the Forward Packet Data Channel (see [3]).

14 The base station shall set this field as follows:

15 If FOR\_PDCH\_CC\_INCL is set to '0', then the base station

16 shall omit this field; otherwise, the base station shall set

17 this field to the Multiplex Option associated with the

18 Forward Packet Data Channel (see [3]).

19 FOR\_PDCH\_RC - Forward Packet Data Channel Radio Configuration.

20 The mobile station shall set this field as follows:

21 If FOR\_PDCH\_CC\_INCL is set to '0', then the mobile

22 station shall omit this field; otherwise, the mobile station

23 shall include this field and set it as follows:

24 For a *Status Response Message*, the mobile station shall

25 set this field to the Forward Packet Data Channel Radio

26 Configuration (see [2]) for the current service

27 configuration.

28 For a *Service Request Message* or a *Service Response*

29 *Message*, the mobile station shall set this field to the

30 Forward Packet Data Channel Radio Configuration (see

31 [2]) for the proposed service configuration.

32 The base station shall set this field as follows:

33 If FOR\_PDCH\_CC\_INCL field is set to '0', then the base

34 station shall omit this field; otherwise, the base station

35 shall include this field and set it as follows:

36 For a *Service Connect Message*, a *General Handoff*

37 *Direction Message*, or a *Universal Handoff Direction*

38 *Message*, the base station shall set this field to the actual

39 Forward Packet Data Channel Radio Configuration to be

40 used (see [2]).



1 For a *Service Request Message* or a *Service Response*  
 2 *Message*, the base station shall set this field to the Forward  
 3 Packet Data Channel Radio Configuration (see [2]) for the  
 4 proposed service configuration.

5 REV\_PDCH\_CC\_INCL - Channel configuration for the Reverse Packet Data Channel  
 6 included indicator.

7 The mobile station shall set this field as follows:

8 The mobile station shall set this field to '1', if channel  
 9 configuration information for the Reverse Packet Data  
 10 Channel is included in this Service Configuration Record;  
 11 otherwise, the mobile station shall set this field to '0' to  
 12 indicate the current values of Channel configuration for  
 13 the Reverse Packet Data Channel are to be used.

14 The base station shall set this field as follows:

15 The base station shall set this field to '1', if channel  
 16 configuration information for the Reverse Packet Data  
 17 Channel is included in this Service Configuration Record;  
 18 otherwise, the base station shall set this field to '0' to  
 19 indicate the current values of Channel configuration for  
 20 the Reverse Packet Data Channel are to be used.

21 REV\_PDCH\_MUX\_OPTION\_HIGH\_RATE - Reverse Packet Data Channel Multiplex Option  
 22 for Higher Data Rates.

23 The mobile station shall set this field as follows:

24 If REV\_PDCH\_CC\_INCL is set to '0', then the mobile  
 25 station shall omit this field; otherwise, the mobile station  
 26 shall include this field and set it as follows:

27 For a *Status Response Message*, the mobile station shall  
 28 set this field to the Multiplex Option for Higher Data  
 29 Rates associated with the Reverse Packet Data Channel  
 30 (see [3]) for the current service configuration.

31 For a *Service Request Message* or a *Service Response*  
 32 *Message*, the mobile station shall set this field to the  
 33 Multiplex Option for Higher Data Rates associated with  
 34 the Reverse Packet Data Channel (see [3]) for the  
 35 proposed service configuration.

36 The base station shall set this field as follows:

37 If REV\_PDCH\_CC\_INCL field is set to '0', then the base  
 38 station shall omit this field; otherwise, the base station  
 39 shall include this field and set it as follows:

40 For a *Service Connect Message*, a *General Handoff*  
 41 *Direction Message*, or a *Universal Handoff Direction*  
 42 *Message*, the base station shall set this field to the actual  
 43 Multiplex Option for Higher Data Rates associated with  
 44 the Reverse Packet Data Channel to be used (see [3]).

1 For a *Service Request Message* or a *Service Response*  
2 *Message*, the base station shall set this field to the  
3 Multiplex Option for Higher Data Rates associated with  
4 the Reverse Packet Data Channel (see [3]) for the  
5 proposed service configuration.

6 REV\_PDCH\_MUX\_OPTION\_LOW\_RATE - Reverse PDCH Mux Option for Lower Data Rates

7 The mobile station shall set this field as follows:

8 If REV\_PDCH\_CC\_INCL is set to '0', then the mobile  
9 station shall omit this field; otherwise, the mobile station  
10 shall include this field and set it as follows:

11 This field shall be set to 0x1, 0x1301, or 0x1305.

12 For a *Status Response Message*, the mobile station shall  
13 set this field to the Multiplex Option for Lower Data Rates  
14 associated with the Reverse Packet Data Channel (see [3])  
15 for the current service configuration.

16 For a *Service Request Message* or a *Service Response*  
17 *Message*, the mobile station shall set this field to the  
18 Multiplex Option for Lower Data Rates associated with the  
19 Reverse Packet Data Channel (see [3]) for the proposed  
20 service configuration

21 The base station shall set this field as follows:

22 If REV\_PDCH\_CC\_INCL field is set to '0', then the base  
23 station shall omit this field; otherwise, the base station  
24 shall include this field and set it as follows:

25 For a *Service Connect Message*, a *General Handoff*  
26 *Direction Message*, or a *Universal Handoff Direction*  
27 *Message*, the base station shall set this field to the actual  
28 Multiplex Option for Lower Data Rates associated with the  
29 Reverse Packet Data Channel to be used (see [3])

30 For a *Service Request Message* or a *Service Response*  
31 *Message*, the base station shall set this field to the  
32 Multiplex Option for Lower Data Rates associated with the  
33 Reverse Packet Data Channel (see [3]) for the proposed  
34 service configuration.

35 REV\_PDCH\_RC - Reverse Packet Data Channel Radio Configuration.

36 The mobile station shall set this field as follows:

37 If REV\_PDCH\_CC\_INCL is set to '0', then the mobile  
38 station shall omit this field; otherwise, the mobile station  
39 shall include this field and set it as follows:

1			For a <i>Status Response Message</i> , the mobile station shall
2			set this field to the Reverse Packet Data Channel Radio
3			Configuration (see [2]) for the current service
4			configuration.
5			For a <i>Service Request Message</i> or a <i>Service Response</i>
6			<i>Message</i> , the mobile station shall set this field to the
7			Reverse Packet Data Channel Radio Configuration (see
8			[2]) for the proposed service configuration.
9			The base station shall set this field as follows:
10			If REV_PDCH_CC_INCL field is set to '0', then the base
11			station shall omit this field; otherwise, the base station
12			shall include this field and set it as follows:
13			For a <i>Service Connect Message</i> , a <i>General Handoff</i>
14			<i>Direction Message</i> , or a <i>Universal Handoff Direction</i>
15			<i>Message</i> , the base station shall set this field to the actual
16			Reverse Packet Data Channel Radio Configuration to be
17			used (see [2]).
18			For a <i>Service Request Message</i> or a <i>Service Response</i>
19			<i>Message</i> , the base station shall set this field to the
20			Reverse Packet Data Channel Radio Configuration (see
21			[2]) for the proposed service configuration.
22	RESERVED	-	Reserved bits.
23			The mobile station shall set this field as follows:
24			The mobile station shall add reserved bits as needed in
25			order to make the length of the entire information record
26			equal to an integer number of octets. The mobile station
27			shall set these bits to '0'.
28			The base station shall set this field as follows:
29			The base station shall add reserved bits as needed in
30			order to make the length of the entire message equal to an
31			integer number of octets. The base station shall set these
32			bits to '0'.
33			

### 3.7.5.7.1 Channel Configuration for the Supplemental Channel

The channel configuration information for the Supplemental Channel consists of the following subfields:

Subfields	Length (bits)
SCH_REC_LEN	4
SCH_RC	5
CODING	1
FRAME_40_USED	1
FRAME_80_USED	1
MAX_RATE	4

**SCH\_REC\_LEN** - Supplemental Channel channel configuration record length.  
The mobile station or base station shall set this field to the number of octets included in this Supplemental Channel channel configuration record including this SCH\_REC\_LEN field.

**SCH\_RC** - Supplemental Channel Radio Configuration.  
The mobile station or base station shall set this field to the Radio Configuration for this Supplemental Channel. Radio Configurations are defined in [2].

**CODING** - Coding type.  
The mobile station or base station shall set this field to '1' if the mobile station or the base station is to use Convolutional Coding when the number of channel bits per frame is less than 360 and Turbo Coding when the number of channel bits per frame is equal to or greater than 360. The mobile station or base station shall set this field to '0' if the mobile station or the base station uses Convolution Coding for all block sizes.

**FRAME\_40\_USED** - 40ms frame used indicator  
The mobile station or base station shall set this field to '1' if 40ms frame is used; otherwise, the mobile station or base station shall set this field to '0'.  
If a f-dtch logical channel corresponding to the same sr\_id is mapped to both forward Supplemental Channels 0 and 1, then the mobile station or base station shall specify the same frame length for both forward Supplemental Channels 0 and 1.

1			If a r-dtch logical channel corresponding to the same sr_id is
2			mapped to both reverse Supplemental Channels 0 and 1,
3			then the mobile station or base station shall specify the same
4			frame length for both forward Supplemental Channels 0 and
5			1.
6			The base station shall not set both FRAME_40_USED and
7			FRAME_80_USED fields set to '1'.
8			
9	FRAME_80_USED	-	80ms frame used indicator.
10			The mobile station or base station shall set this field to '1' if
11			80ms frame is to be used; otherwise, the mobile station or
12			base station shall set this field to '0'.
13			If a f-dtch logical channel corresponding to the same sr_id is
14			mapped to both forward Supplemental Channels 0 and 1,
15			then the mobile station or base station shall specify the same
16			frame length for both forward Supplemental Channels 0 and
17			1.
18			If a r-dtch logical channel corresponding to the same sr_id is
19			mapped to both reverse Supplemental Channels 0 and 1,
20			then the mobile station or base station shall specify the same
21			frame length for both reverse Supplemental Channels 0 and
22			1.
23			Then the base station shall not set both FRAME_40_USED
24			and FRAME_80_USED fields set to '1'.
25	MAX_RATE	-	Maximum supplemental channel rate
26			The mobile station or base station shall set this field
27			according to Table 2.7.4.27.3-2 to indicate the maximum
28			forward or reverse supplemental channel data rate supported.
29			

## 3.7.5.8 Called Party Subaddress

This information record identifies the called party subaddress.

Type-Specific Field	Length (bits)
EXTENSION_BIT	1
SUBADDRESS_TYPE	3
ODD/EVEN_INDICATOR	1
RESERVED	3

Zero or more occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

EXTENSION\_BIT - The extension bit.

The base station shall set this field to '1'.

SUBADDRESS\_TYPE - Type of subaddress.

The base station shall set this field to the SUBADDRESS\_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.8.

ODD/EVEN\_INDICATOR - The indicator of odd/even bits.

The base station shall set this field to the ODD/EVEN\_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.8. It is only used when the type of subaddress is "User specified" and the coding is BCD.

RESERVED - Reserved bits.

The base station shall set this field to '000'.

CHAR<sub>i</sub> - Character.

The base station shall include one occurrence of this field for each character in the called party subaddress.

When the SUBADDRESS\_TYPE field is equal to '000', the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS\_TYPE field is set to '010', user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with [36] networks, BCD coding should be applied.

### 3.7.5.9 Calling Party Subaddress

This information record identifies the calling party subaddress.

3

Type-Specific Field	Length (bits)
EXTENSION_BIT	1
SUBADDRESS_TYPE	3
ODD/EVEN_INDICATOR	1
RESERVED	3

Zero or more occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

4

5       EXTENSION\_BIT   -   The extension bit.

6                       The base station shall set this field to '1'.

7       SUBADDRESS\_TYPE   -   Type of subaddress.

8                       The base station shall set this field to the  
9       SUBADDRESS\_TYPE value shown in Table 2.7.4.19-1  
10      corresponding to the type of the subaddress, as defined in [7],  
11      Section 4.5.10.

12      ODD/EVEN INDICATOR   -   The indicator of odd/even bits.

13                       The base station shall set this field to the  
14      ODD/EVEN\_INDICATOR value shown in Table 2.7.4.19-2  
15      corresponding to the indicator of even/odd bits, as defined in  
16      [7], Section 4.5.10. It is only used when the type of  
17      subaddress is "User specified" and the coding is BCD.

18      RESERVED       -   Reserved bits.

19                       The base station shall set this field to '000'.

20                       CHAR<sub>i</sub>   -   Character.

21                       The base station shall include one occurrence of this field for  
22      each character in the calling party subaddress.

23                       When the SUBADDRESS\_TYPE field is equal to '000', the  
24      NSAP address shall be encoded using the preferred binary  
25      encoding specified in [35].

26                       When the SUBADDRESS\_TYPE field is set to '010', user-  
27      specified subaddress field is encoded according to the user  
28      specification, subject to a maximum length of 20 octets.  
29      When interworking with [36] networks, BCD coding should  
30      be applied.

31

## 3.7.5.10 Connected Subaddress

This information record identifies the subaddress of the responding party.

Type-Specific Field	Length (bits)
EXTENSION_BIT	1
SUBADDRESS_TYPE	3
ODD/EVEN_INDICATOR	1
RESERVED	3

Zero or more occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

EXTENSION\_BIT - The extension bit.

The base station shall set this field to '1'.

SUBADDRESS\_TYPE - Type of subaddress.

The base station shall set this field to the SUBADDRESS\_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.14.

ODD/EVEN INDICATOR - The indicator of odd/even bits.

The base station shall set this field to the ODD/EVEN\_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.14. It is only used when the type of subaddress is "User specified" and the coding is BCD.

RESERVED - Reserved bits.

The base station shall set this field to '000'.

CHAR<sub>i</sub> - Character.

The base station shall include one occurrence of this field for each character in the connected subaddress.

When the SUBADDRESS\_TYPE field is equal to '000', the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS\_TYPE field is set to '010', user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with [36] networks, BCD coding should be applied.



### 3.7.5.11 Redirecting Number

This information record identifies the Redirecting Number.

3

Type-Specific Field	Length (bits)
EXTENSION_BIT_1	1
NUMBER_TYPE	3
NUMBER_PLAN	4
EXTENSION_BIT_2	0 or 1
PI	0 or 2
RESERVED	0 or 3
SI	0 or 2
EXTENSION_BIT_3	0 or 1
RESERVED	0 or 3
REDIRECTION_REASON	0 or 4

Zero or more occurrences of the following field:

{

CHARi	8
-------	---

}

4

5 EXTENSION\_BIT\_1 - The extension bit.

6 If the PI and SI are included in this record, the base station  
7 shall set this field to '0'; otherwise, the base station shall set  
8 this field to '1'.

9 NUMBER\_TYPE - Type of number.

10 The base station shall set this field to the NUMBER\_TYPE  
11 value shown in Table 2.7.1.3.2.4-2 corresponding to the type  
12 of the redirecting number, as defined in [34].

13 NUMBER\_PLAN - Numbering plan.

14 The base station shall set this field to the NUMBER\_PLAN  
15 value shown in Table 2.7.1.3.2.4-3 corresponding to the  
16 numbering plan used for the redirecting number, as defined  
17 in [34].

18 EXTENSION\_BIT\_2 - The extension bit.

1			If the EXTENSION_BIT_1 is set to '0' and
2			REDIRECTION_REASON is included in this record, the base
3			station shall set this field to '0'. If the EXTENSION_BIT_1 is
4			set to '0' and REDIRECTION_REASON is not included in this
5			record, the base station shall set this field to '1'. If the
6			EXTENSION_BIT_1 is set to '1', the base station shall omit
7			this field.
8	PI	-	Presentation indicator.
9			This field indicates whether or not the redirecting number
10			should be displayed.
11			if the EXTENSION_BIT_1 is set to '0', the base station shall
12			set this field to the PI value shown in Table 2.7.4.4-1
13			corresponding to the presentation indicator, as defined in
14			[34]; otherwise, the base station shall omit this field.
15	RESERVED	-	Reserved bits.
16			If the EXTENSION_BIT_1 is set to '0', the base station shall
17			set this field to '000'; otherwise, the base station shall omit
18			this field.
19	SI	-	Screening indicator.
20			This field indicates how the redirecting number was screened.
21			If the EXTENSION_BIT_1 is set to '0', the base station shall
22			set this field to the SI value shown in Table 2.7.4.4-2
23			corresponding to the screening indicator value, as defined in
24			[34]; otherwise, the base station shall omit this field.
25	EXTENSION_BIT_3	-	The extension bit.
26			If the EXTENSION_BIT_2 is set to '0', the base station shall
27			set this field to '1'; otherwise, the base station shall omit this
28			field.
29	RESERVED	-	Reserved bits.
30			If the EXTENSION_BIT_2 is set to '0', the base station shall
31			set this field to '000'; otherwise, the base station shall omit
32			this field.
33	REDIRECTION_REASON	-	The reason for redirection.
34			If the EXTENSION_BIT_2 is set to '0', the base station shall
35			set this field to the REDIRECTION_REASON value shown in
36			Table 3.7.5.5.11-1 corresponding to the redirection reason, as
37			defined in [34]; otherwise, the base station shall omit this
38			field.
39			

1

**Table 3.7.5.11-1. Redirection Reason**

<b>Description</b>	<b>REDIRECTION- REASON (binary)</b>
Unknown	0000
Call forwarding busy or called DTE busy	0001
Call forwarding no reply (circuit-mode only)	0010
Called DTE out of order (packet-mode only)	1001
Call forwarding by the called DTE (packet-mode only)	1010
Call forwarding unconditional or Systematic call redirection	1111
Reserved	others

2

3

**CHARi** - Character.

4

5

6

7

8

9

The base stations shall include one occurrence of this field for each character in the Redirecting Number. The base station shall set each occurrence of this field to the ASCII representation corresponding to the character, as specified in [9], with the most significant bit set to '0'.

## 3.7.5.12 Redirecting Subaddress

This information record identifies the subaddress of the responding party.

Type-Specific Field	Length (bits)
EXTENSION_BIT	1
SUBADDRESS_TYPE	3
ODD/EVEN_INDICATOR	1
RESERVED	3

Zero or more occurrences of the following field:

{

CHAR <sub>i</sub>	8
-------------------	---

}

EXTENSION\_BIT - The extension bit.

The base station shall set this field to '1'.

SUBADDRESS\_TYPE - Type of subaddress.

The base station shall set this field to the SUBADDRESS\_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [34].

ODD/EVEN INDICATOR - The indicator of odd /even bits.

The base station shall set this field to the ODD/EVEN\_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [34]. It is only used when the type of subaddress is "User specified" and the coding is BCD.

RESERVED - Reserved bits.

The base station shall set this field to '000'.

CHAR<sub>i</sub> - Character.

The base station shall include one occurrence of this field for each character in the redirecting subaddress.

When the SUBADDRESS\_TYPE field is equal to '000', the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS\_TYPE field is set to '010', user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with [36] networks, BCD coding should be applied.

1    3.7.5.13 Meter Pulses

2    This information record identifies the number of meter pulses and frequency of the alert  
3    tone.

4

Type-Specific Field	Length (bits)
PULSE_FREQUENCY	11
PULSE_ON_TIME	8
PULSE_OFF_TIME	8
PULSE_COUNT	4
RESERVED	1

5

6    PULSE\_FREQUENCY    -    Pulse frequency.

7    The base station shall set this field to the frequency of the  
8    alert signals in units of 10 Hz or to zero to indicate that line  
9    polarity control is to be used. If this field is set to zero, the  
10   PULSE\_ON\_TIME and PULSE\_OFF\_TIME shall be the period  
11   of line polarity reversal and normal line polarity, respectively.

12       PULSE\_ON\_TIME    -    Pulse on time.

13    The base station shall set this field to the period of the meter  
14    pulses in units of 5 ms.

15       PULSE\_OFF\_TIME    -    Pulse off time.

16    The base station shall set this field to the period of the inter-  
17    pulse spacing in units of 5 ms.

18       PULSE\_COUNT    -    Pulse count.

19    The base station shall set this field to the number of meter  
20    pulses.

21       RESERVED    -    Reserved bits.

22    The base station shall set this field to '0'.

23

## 3.7.5.14 Parametric Alerting

This information record allows the network to convey information to a user by means of programmable alerting signals.

Type-Specific Field	Length (bits)
CADENCE_COUNT	8
NUM_GROUPS	4

NUM\_GROUPS occurrences of the following record:

{ (NUM\_GROUPS)

AMPLITUDE	8
FREQ_1	10
FREQ_2	10
ON_TIME	8
OFF_TIME	8
REPEAT	4
DELAY	8

} (NUM\_GROUPS)

CADENCE_TYPE	2
RESERVED	2

CADENCE\_COUNT - Cadence count.

The base station shall set this field to the number of times the cadence of tone groups will be generated between 0x01 and 0xFE. The base station shall set this field to 0x00 to indicate that the mobile station should end alert tone generation. The base station shall set this field to 0xFF to indicate that the cadence will repeat indefinitely.

NUM\_GROUPS - Number of groups.

The base station shall set this field to the number of groups.

AMPLITUDE - Amplitude.

The base station shall set this field to the amplitude level of the tone group in units of -1 dBm.

FREQ\_1 - Tone frequency 1.

The base station shall set this field to the first frequency of the tone group in units of 5 Hz.

FREQ\_2 - Tone frequency 2.

- 1 The base station shall set this field to the second frequency of  
 2 the tone group in units of 5 Hz. Setting this field to zero  
 3 creates a single frequency tone.
- 4 ON\_TIME - On time.
- 5 The base station shall set this field to the duration of the tone  
 6 group in units of 50 ms.
- 7 OFF\_TIME - Off time.
- 8 The base station shall set this field to the duration of the  
 9 spacing between tones in units of 50 ms.
- 10 REPEAT - Repeat.
- 11 The base station shall set this field to the number of times  
 12 the tone group should repeat. The base station shall set this  
 13 field to 0xFF to indicate that the tone group will repeat  
 14 indefinitely.
- 15 DELAY - Delay.
- 16 The base station shall set this field to the length of time  
 17 before the next tone group begins in units of 50 ms.
- 18 CADENCE\_TYPE - Parametric Alerting cadence type.
- 19 The base station shall set this field to indicate that the alert  
 20 should be conveyed to the user as specified in Table 3.7.5.14.

**Table 3.7.5.14. Cadence Types**

<b>CADENCE_TYPE</b>	<b>Meaning</b>
00	Not specified
01	Acoustic earpiece or similar device
10	Device other than acoustic earpiece or similar device (Eg. Ringer)
11	Reserved

- 23 RESERVED - Reserved bits.
- 24 The base station shall set this field to '00'.
- 25

## 3.7.5.15 Line Control

This information record allows the network to convey line control information.

Type-Specific Field	Length (bits)
POLARITY_INCLUDED	1
TOGGLE_MODE	0 or 1
REVERSE_POLARITY	0 or 1
POWER_DENIAL_TIME	8
RESERVED	0 - 7 (as needed)

- POLARITY\_INCLUDED** - Polarity parameter included.
- If the mobile station is to change the line polarity, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
- TOGGLE\_MODE** - If POLARITY\_INCLUDED is set to '1', the base station shall include this field and set it to '1' to toggle the line polarity or to '0' to set the polarity to the absolute value indicated in the REVERSE\_POLARITY field.
- REVERSE\_POLARITY** - Reverse polarity.
- If POLARITY\_INCLUDED is set to '1' and TOGGLE\_MODE is equal to '0', the base station shall include this field and set it to '1' to reverse the tip and ring polarity or to '0' to use normal polarity. If POLARITY\_INCLUDED is set to '1' and TOGGLE\_MODE is set to '1', the base station shall include this field and set it to '0'; otherwise, the base station shall omit this field.
- POWER\_DENIAL\_TIME** - Power denial timeout.
- The base station shall include this field and set it to the duration of the power denial in increments of 5 ms.
- RESERVED** - Reserved bits.
- The base station shall add reserved bits as needed in order to make the length of the entire message equal to an integer number of octets. The base station shall set these bits to '0'.



### 3.7.5.16 Extended Display

This information record allows the network to supply supplementary service display information that may be displayed by the mobile station.

Type-Specific Field	Length (bits)
EXT_DISPLAY_IND	1
DISPLAY_TYPE	7

One or more occurrences of the following record:

{

DISPLAY_TAG	8
DISPLAY_LEN	8

DISPLAY\_LEN occurrences of the following field if the DISPLAY\_TAG field is not equal to '10000000' or '10000001':

{ (DISPLAY\_LEN)

CHAR <sub>i</sub>	8
-------------------	---

} (DISPLAY\_LEN)

}

5

6 EXT\_DISPLAY\_IND - The indicator of Extended Display Information record.

7 The base station shall set this field to '1'.

8 DISPLAY\_TYPE - The type of display.

9 The base station shall set this field to the DISPLAY\_TYPE  
10 value shown in Table 3.7.5.16-1 corresponding to the type of  
11 display, as defined in [8] Annex D.

12

**Table 3.7.5.16-1. Display Type**

Description	DISPLAY_TYPE (binary)
Normal	0000000
All other DISPLAY_TYPE values are reserved.	

14

15 DISPLAY\_TAG - The indicator of the display information.

16 There are three types of display tags: mandatory control tags  
17 (Blank and Skip), display text tags, and optional control tags,  
18 see [8] Annex D.

1  
2  
3  
4  
5  
6

The base station shall set this field to the DISPLAY\_TAG value shown in Table 3.7.5.16-2 corresponding to the type of information contained in the following CHARi field, as defined in [8] Annex D.

1  
2

**Table 3.7.5.16-2. Mandatory Control Tags and Display Text Tags**

<b>Description</b>	<b>DISPLAY_TAG (binary)</b>
Blank	10000000
Skip	10000001
Continuation	10000010
Called Address	10000011
Cause	10000100
Progress Indicator	10000101
Notification Indicator	10000110
Prompt	10000111
Accumulated Digits	10001000
Status	10001001
Inband	10001010
Calling Address	10001011
Reason	10001100
Calling Party Name	10001101
Called Party Name	10001110
Original Called Name	10001111
Redirecting Name	10010000
Connected Name	10010001
Originating Restrictions	10010010
Date & Time of Day	10010011
Call Appearance ID	10010100
Feature Address	10010101
Redirection Name	10010110
Redirection Number	10010111
Redirecting Number	10011000
Original Called Number	10011001
Connected Number	10011010
Text (e.g., ASCII)	10011110

3

1	DISPLAY_LEN	-	The display length.
2			The base station shall set this field to the number of octets of
3			display text. See [8] Annex D.
4	CHARi	-	Character.
5			The base station shall include DISPLAY_LEN occurrences of
6			this field, one for each character to be displayed, except for
7			blank and skip. The base station shall set each occurrence of
8			this field to the ASCII representation corresponding to the
9			character entered, as specified in [9], with the most
10			significant bit set to '0'.
11			

1    3.7.5.17 Extended Record Type - International

2    The use of this record type is country-specific. The first ten bits of the type-specific fields  
3    shall include the Mobile Country Code (MCC) associated with the national standards  
4    organization administering the use of the record type. Encoding of the MCC shall be as  
5    specified in 2.3.1.3. The remaining six bits of the first two octets of the type-specific fields  
6    shall be used to specify the country-specific record type.

7

1 3.7.5.18 Reserved

2

1 3.7.5.19 Reserved  
2

1    3.7.5.20 Non-Negotiable Service Configuration

2    This record is included in a *Service Connect Message* to specify the non-negotiable service  
3    configuration parameters to be used by the mobile station. This record can be included in  
4    a *General Handoff Direction Message* or a *Universal Handoff Direction Message* to specify  
5    the non-negotiable service configuration parameters to be used by the mobile station.

6



Type Specific Field	Length (bits)
FPC_INCL	1
FPC_PRI_CHAN	0 or 1
FPC_MODE	0 or 3
FPC_OLPC_FCH_INCL	0 or 1
FPC_FCH_FER	0 or 5
FPC_FCH_MIN_SETPT	0 or 8
FPC_FCH_MAX_SETPT	0 or 8
FPC_OLPC_DCCH_INCL	0 or 1
FPC_DCCH_FER	0 or 5
FPC_DCCH_MIN_SETPT	0 or 8
FPC_DCCH_MAX_SETPT	0 or 8

GATING_RATE_INCL	1
PILOT_GATING_RATE	0 or 2

FOR_SCH_INCL	1
NUM_FOR_SCH	0 or 2

If FOR\_SCH\_INCL = '1', include NUM\_FOR\_SCH occurrences of the following record:

{ (NUM\_FOR\_SCH)

FOR_SCH_ID	2
FOR_SCH_FRAME_OFFSET	2

} (NUM\_FOR\_SCH)

REV_SCH_INCL	1
NUM_REV_SCH	0 or 2

If REV\_SCH\_INCL = '1', include NUM\_REV\_SCH occurrences of the following record:

{ (NUM\_REV\_SCH)

REV_SCH_ID	2
REV_SCH_FRAME_OFFSET	2

} (NUM\_REV\_SCH)

LPM_IND	2
NUM_LPM_ENTRIES	0 or 4

If LPM\_IND = '01', include NUM\_LPM\_ENTRIES occurrences of the following record:

{ (NUM\_LPM\_ENTRIES)

SR_ID	3
LOGICAL_RESOURCE	4
PHYSICAL_RESOURCE	4
FORWARD_FLAG	1
REVERSE_FLAG	1
PRIORITY	4

} (NUM\_LPM\_ENTRIES)

NUM_REC	3
---------	---

NUM\_REC occurrences of the following record:

{ (NUM\_REC)

RECORD_LEN	8
SR_ID	3
SDB_SO_OMIT	1
RESERVED	0-7 (as needed)

} (NUM\_REC)

1  
2

1

Type Specific Field	Length (bits)
USE_FLEX_NUM_BITS	1
NUM_BITS_TABLES_INCL	0 or 1
NUM_BITS_TABLES_COUNT	0 or 3

If USE\_FLEX\_NUM\_BITS is equal to '1' and  
NUM\_BITS\_TABLES\_INCL is equal to '1', then include  
NUM\_BITS\_TABLES\_COUNT+1 occurrences of the following  
record:

*{ (NUM\_BITS\_TABLES\_COUNT+1)*

NUM_BITS_TABLE_ID	4
NUM_RECS	4

If USE\_FLEX\_NUM\_BITS is equal to '1', then NUM\_RECS +1  
occurrences of the following record:

*{ (NUM\_RECS+1)*

NUM_BITS_IDX	4
NUM_BITS	16
CRC_LEN_IDX	3

*} (NUM\_RECS+1)*

*} (NUM\_BITS\_TABLES\_COUNT+1)*

(continues on next page)

2

3

1

USE_VAR_RATE	1
VAR_TABLES_INCL	0 or 1
VAR_RATE_TABLES_COUNT	0 or 3

If USE\_VAR\_RATE is equal to '1' and VAR\_TABLES\_INCL is equal to '1', then include VAR\_RATE\_TABLES\_COUNT+1 occurrences of the following record

{ (VAR\_RATE\_TABLES\_COUNT+1)

VAR_RATE_TABLE_ID	3
NUM_RECS	4

If USE\_VAR\_RATE is equal to '1', include NUM\_RECS +1 occurrences of the following record

{ (NUM\_RECS+1)

NUM_BITS_IDX	4
MASK	NUM_BITS_IDX

} (NUM\_RECS+1)

} (VAR\_RATE\_TABLES\_COUNT+1)

If USE\_FLEX\_NUM\_BITS is equal to '1', include the following fields

USE_OLD_FLEX_MAPPING	1
FSCH0_NBIT_TABLE_ID	0 or 4

(continues on next page)

2

3

1

Type Specific Field	Length (bits)
RSCH0_NBIT_TABLE_ID	0 or 4
FSCH1_NBIT_TABLE_ID	0 or 4
RSCH1_NBIT_TABLE_ID	0 or 4
FFCH_NBIT_TABLE_ID	0 or 4
RFCH_NBIT_TABLE_ID	0 or 4
FDCCH_NBIT_TABLE_ID	0 or 4
FDCCH_NBITS_IDX	0 or 4
RDCCH_NBIT_TABLE_ID	0 or 4
RDCCH_NBITS_IDX	0 or 4

If USE\_VAR\_RATE is equal to '1', include the following fields

USE_OLD_VAR_MAPPING	1
FSCH0_VAR_TABLE_ID	0 or 3
RSCH0_VAR_TABLE_ID	0 or 3
FSCH1_VAR_TABLE_ID	0 or 3
RSCH1_VAR_TABLE_ID	0 or 3
R_INC_RATE_ALLOWED	0 or 1
F_INC_RATE_ALLOWED	0 or 1

LTU_INFO_INCL	1
LTU_TABLES_INCL	0 or 1
NUM_LTU_TABLES	0 or 2

Include NUM\_LTU\_TABLES + 1 occurrences of the following record

{ (NUM\_LTU\_TABLES+1)

LTU_TABLE_ID	3
--------------	---

(continues on next page)

2

3

1

Type Specific Field	Length (bits)
NUM_ROWS	4

NUM\_ROWS + 1 occurrences of the following records

{ (NUM\_ROWS+1)

NBITS_IDX	4
NUM_LTUS	4

} (NUM\_ROWS+1)

} (NUM\_LTU\_TABLES+1)

USE_OLD_LTU_MAPPING	0 or 1
FSCH0_LTU_TAB_ID	0 or 3
RSCH0_LTU_TAB_ID	0 or 3
FSCH1_LTU_TAB_ID	0 or 3
RSCH1_LTU_TAB_ID	0 or 3

PARTITION_TABLES_INFO_INCL	0 or 1
PARTITION_TABLES_INCL	0 or 1
NUM_PARTITION_TABLES	0 or 2

NUM\_PARTITION\_TABLES + 1 occurrences of the following records:

{ (NUM\_PARTITION\_TABLES+1)

PARTITION_TABLE_ID	3
NUM_ROWS	5

NUM\_ROWS + 1 occurrences of the following records

{ (NUM\_ROWS+1)

CATEGORY	5
MUX_HEADER_LEN	3
MUX_HEADER	MUX_HEADER_LEN

(continues on next page)

2

3

1

Type Specific Field	Length (bits)
NUM_PARTITIONS	3

NUM\_PARTITIONS + 1 occurrences of the following record:

{ (NUM\_PARTITIONS+1)

SR_ID	3
SRV_NUM_BITS	9

} (NUM\_PARTITIONS+1)

} (NUM\_ROWS+1)

} (NUM\_PARTITION\_TABLES+1)

USE_OLD_PART_MAPPING	0 or 1
FFCH_PART_TAB_ID	0 or 3
RFCH_PART_TAB_ID	0 or 3
FDCCH_PART_TAB_ID	0 or 3
RDCCH_PART_TAB_ID	0 or 3
USE_ERAM	0 or 1
SWITCHING_PARMES_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFTER_SWITCHING_FRAMES_CHM	0 or 4
RPC_INCL	1
RPC_NUM_REC	0 or 2
If RPC INCL is set to '1', RPC_NUM_REC occurrences of the following record: { (RPC_NUM_REC)	
RPC_ADJ_REC_TYPE	4
RPC_ADJ_REC_LEN	5
EXT_RPC_ADJ_REC_LEN	0 or 10
Type-specific fields	8× RPC_ADJ_REC_LEN, or 8× EXT_RPC_ADJ_REC_LEN
} (RPC_NUM_REC	
BCMC_LPM_INCL	1
BCMC_LPM_IND	0 or 2

NUM_BCMC_PROGRAMS	0 or 6
-------------------	--------

NUM\_BCMC\_PROGRAMS+1 occurrences of the following variable length record:

*{ (NUM\_BCMC\_PROGRAMS+1)*

BCMC_PROGRAM_ID_LEN	5
BCMC_PROGRAM_ID	BCMC_PROGRAM_ID_LEN + 1
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN

NUM\_FLOW\_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

*{ (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

BCMC_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIMINATOR_LEN
PHYSICAL_RESOURCE	4
FORWARD_FLAG	1
REVERSE_FLAG	1
BSR_ID_INCL	1
BSR_ID	0 or 3
FOR_TRAFFIC	0 or 4
REV_TRAFFIC	0 or 4

*} (NUM\_FLOW\_DISCRIMINATOR+1) or 1*

*} (NUM\_BCMC\_PROGRAMS+1)*

REV_PDCH_PARMS_INCL	1
REV_PDCH_PARMS_1_INCL	0 or 1
REV_PDCH_MAX_AUTO_TPR	0 or 8
REV_PDCH_NUM_ARQ_ROUNDS_NORMAL	0 or 2
REV_PDCH_OPER_PARMS_INCL	0 or 1
REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET	0 or 4
REV_PDCH_DEFAULT_PERSISTENCE	0 or 1
REV_PDCH_RESET_PERSISTENCE	0 or 1



REV_PDCH_GRANT_PRECEDENCE	0 or 1
REV_PDCH_MSIB_SUPPORTED	0 or 1
REV_PDCH_ALWAYS_ACK_FINAL_ROUND	0 or 1
REV_PDCH_SOFT_HANDOFF_RESET_IND	0 or 1
REV_PDCH_BOOST_PARMES_INCL	0 or 1
REV_PDCH_NUM_ARQ_ROUNDS_BOOST	0 or 2
REV_PDCH_BOOST_OVERSHOOT	0 or 5
REV_REQCH_ENABLED	0 or 1
REV_REQCH_PARMES_INCL	0 or 1
REV_REQCH_QUICK_REPEAT_ALLOWED	0 or 1
REV_REQCH_POWER_REPORTS_PARMES_INCL	0 or 1
REV_REQCH_POWER_HEADROOM_INCREASE	0 or 5
REV_REQCH_POWER_HEADROOM_DECREASE	0 or 5
REV_REQCH_HEADROOM_DURATION	0 or 8
REV_REQCH_MAX_POWER_UPDATE_DURATION	0 or 8
REV_PDCH_CRC_PARMES_INCL	0 or 1
REV_PDCH_INIT_TARGET_TPR	0 or 8
REV_PDCH_MAX_TARGET_TPR	0 or 8
REV_PDCH_QUICK_START_THRESHOLD	0 or 7
REV_PDCH_EP_MAP_LEN	0 or 1
REV_PDCH_EP_MAP	0 or $(11 \times (\text{REV\_PDCH\_EP\_MAP\_LEN} + 1))$
If REV_PDCH_CRC_PARMES_INCL is included and equals '1' $\{ ( \text{weight}(\text{REV\_PDCH\_EP\_MAP}) )$	
REV_PDCH_STEP_UP	8

REV_PDCH_STEP_DOWN	8
} ( <i>weight</i> (REV_PDCH_EP_MAP) )	
REV_PDCH_SR_ID_MAP	0 or 7
{ ( <i>weight</i> (REV_PDCH_SR_ID_MAP) )	
REV_PDCH_BOOST_ALLOWED	0 or 1
REV_PDCH_AUTO_ALLOWED	0 or 1
} ( <i>weight</i> (REV_PDCH_SR_ID_MAP) )	

(continues on next page)

1

If REV\_REQCH\_PARMS\_INCL is included and equals '1'

{ (weight(REV\_PDCH\_SR\_ID\_MAP)+1)

REV_REQCH_MIN_DURATION	8
REV_REQCH_USE_POWER_REPORTS	0 or 1
REV_REQCH_USE_BUFFER_REPORTS	1
REV_REQCH_USE_WATERMARKS	1
REV_REQCH_USE_DEFAULT_TAB	0 or 3
REV_REQCH_BUF_QUANT_PARM_1	0 or 8
REV_REQCH_BUF_QUANT_PARM_2	0 or 8
REV_REQCH_HIGH_WATERMARK_1	0 or 3
REV_REQCH_HIGH_WATERMARK_2	0 or 3
REV_REQCH_LOW_WATERMARK_1	0 or 3
REV_REQCH_LOW_WATERMARK_2	0 or 3
REV_REQCH_CEILING_1	0 or 3
REV_REQCH_CEILING_2	0 or 3
REV_REQCH_FLOOR_1	0 or 3
REV_REQCH_FLOOR_2	0 or 3

} ( weight(REV\_PDCH\_SR\_ID\_MAP)+1)

2

RESERVED	0-7 (as needed)
----------	-----------------

3

4

5

FPC\_INCL - Forward power control information included indicator.

6

7

8

The base station shall set this field to '1' if the forward power control information parameters are included in this record; otherwise, it shall set this field to '0'.

9

FPC\_PRI\_CHAN - Power Control Subchannel indicator.

10

11

12

If the FPC\_INCL field is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

13

14

15

16

17

18

The base station shall set this field to '0' if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel; the base station shall set this field to '1' if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.

1			If only Fundamental Channel is assigned, the base station
2			shall set this field to '0'. If only the Dedicated Control
3			Channel is assigned, the base station shall set this field to '1'.
4			If the F-CPCCH is assigned, the base station will multiplex
5			the Power Control Subchannel on the F-CPCCH; otherwise:
6			If this field is set to '0', the base station will multiplex the
7			Power Control Subchannel on the Forward Fundamental
8			Channel; otherwise, the base station will multiplex the Power
9			Control Subchannel on the Forward Dedicated Control
10			Channel.
11	FPC_MODE	-	Forward Power Control operation mode indicator.
12			If the FPC_INCL field is set to '0', the base station shall omit
13			this field; otherwise, the base station shall include this field
14			and set it as follows:
15			The base station shall set this field to the value of the forward
16			power control operation mode (see [2]).
17	FPC_OLPC_FCH_INCL	-	Fundamental Channel Outer Loop Power Control
18			parameter included indicator.
19			If the FPC_INCL field is set to '0', the base station shall omit
20			this field; otherwise, the base station shall include this field
21			and set it as follows:
22			If the forward link Fundamental Channel outer loop power
23			control parameters are included in this record, the base
24			station shall set this field to '1'; otherwise, the base station
25			shall set this field to '0'.
26	FPC_FCH_FER	-	Fundamental Channel target Frame Error Rate.
27			If FPC_OLPC_FCH_INCL is included and set to '1', the base
28			station shall set this field to the target Frame Error Rate on
29			the Forward Fundamental Channel, as specified in Table
30			3.7.3.3.2.25-2; otherwise, the base station shall omit this
31			field.
32	FPC_FCH_MIN_SETPT	-	Minimum Fundamental Channel Outer Loop Eb/Nt setpoint.
33			If FPC_OLPC_FCH_INCL is included and set to '1', the base
34			station shall set this field to minimum Fundamental Channel
35			Outer Loop Eb/Nt setpoint, in units of 0.125dB; otherwise,
36			the base station shall omit this field.
37	FPC_FCH_MAX_SETPT	-	Maximum Fundamental Channel Outer Loop Eb/Nt setpoint.
38			If FPC_OLPC_FCH_INCL is set to '1', the base station shall set
39			this field to maximum Fundamental Channel Outer Loop
40			Eb/Nt setpoint, in units of 0.125dB; otherwise, the base
41			station shall omit this field.
42	FPC_OLPC_DCCH_INCL	-	Dedicated Control Channel Outer Loop Power Control
43			parameter included indicator.
44			If the FPC_INCL field is set to '0', the base station shall omit
45			this field; otherwise, the base station shall include this field
46			and set it as follows:

- 1 If the forward link Dedicated Control Channel outer loop  
 2 power control parameters are included in this message, the  
 3 base station shall set this field to '1'; otherwise, the base  
 4 station shall set this field to '0'.
- 5 **FPC\_DCCH\_FER** - Dedicated Control Channel target Frame Error Rate.  
 6 If FPC\_OLPC\_DCCH\_INCL is included and set to '1', the base  
 7 station shall set this field to the target Frame Error Rate on  
 8 the Forward Dedicated Control Channel, as specified in Table  
 9 3.7.3.3.2.25-2; otherwise, the base station shall omit this  
 10 field.
- 11 **FPC\_DCCH\_MIN\_SETPT** - Minimum Dedicated Control Channel Outer Loop Eb/Nt  
 12 setpoint.  
 13 If FPC\_OLPC\_DCCH\_INCL is included and set to '1', the base  
 14 station shall set this field to minimum Dedicated Control  
 15 Channel Outer Loop Eb/Nt setpoint, in units of 0.125dB;  
 16 otherwise, the base station shall omit this field.
- 17 **FPC\_DCCH\_MAX\_SETPT** - Maximum Dedicated Control Channel Outer Loop Eb/Nt  
 18 setpoint.  
 19 If FPC\_OLPC\_DCCH\_INCL is included and set to '1', the base  
 20 station shall set this field to maximum Dedicated Control  
 21 Channel Outer Loop Eb/Nt setpoint, in units of 0.125dB;  
 22 otherwise, the base station shall omit this field.
- 23 **GATING\_RATE\_INCL** - Reverse Pilot Channel Gating rate included flag.  
 24 The base station shall set this field to '1' if the  
 25 PILOT\_GATING\_RATE field is included; otherwise, it shall set  
 26 this field to '0'.
- 27 **PILOT\_GATING\_RATE** - Reverse Pilot Channel Gating rate.  
 28 If the GATING\_RATE\_INCL field is set to '0', the base station  
 29 shall omit this field; otherwise, the base station shall set this  
 30 field as follows: The base station shall set this field to the  
 31 PILOT\_GATING\_RATE field shown in Table 3.7.5.20-1  
 32 corresponding to the gating rate on the Reverse Pilot  
 33 Channel.

**Table 3.7.5.20-1. Reverse Pilot Gating rate**

<b>PILOT_GATING_RATE field (binary)</b>	<b>Meaning</b>
00	Gating rate 1
01	Gating rate $\frac{1}{2}$
10	Gating rate $\frac{1}{4}$
11	Reserved

- 35
- 36 **FOR\_SCH\_INCL** - Forward Supplemental Channel information included  
 37 indicator.

1		The base station shall set this field to '1', if the forward
2		Supplemental Channel information is included; otherwise,
3		the base station shall set this field to '0'.
4	NUM_FOR_SCH	- Number of Forward Supplemental Channels.
5		If the FOR_SCH_INCL field is set to '0', the base station shall
6		omit this field; otherwise, the base station shall set this field
7		to the number of Forward Supplemental Channels associated
8		with this service configuration.
9	If the NUM_FOR_SCH field is present and is set to any value other than '00', the base	
10	station shall include one occurrence of the following two field record for each Forward	
11	Supplemental Channel included in this record:	
12	FOR_SCH_ID	- Forward Supplemental Channel Identification.
13		The base station shall set this field to the identifier of the
14		Forward Supplemental Channel pertaining to this record.
15	FOR_SCH_FRAME_OFFSET	- Forward Supplemental Channel multiple frame offset.
16		The base station shall set this field to the multiple frame
17		offset of this Forward Supplemental Channel. The frames of
18		this Forward Supplemental Channel are delayed by
19		$(\text{FRAME\_OFFSET} \times 1.25 + \text{FOR\_SCH\_FRAME\_OFFSET} \times 20)$
20		ms relative to system timing (see [2]).
21	REV_SCH_INCL	- Reverse Supplemental Channel information included
22		indicator.
23		The base station shall set this field to '1' if the reverse
24		Supplemental Channel information is included; otherwise,
25		the base station shall set this field to '0'.
26	NUM_REV_SCH	- Number of Reverse Supplemental Channels.
27		If the REV_SCH_INCL field is set to '0', the base station shall
28		omit this field; otherwise, the base station shall set this field
29		to the number of Reverse Supplemental Channels associated
30		with this service configuration.
31	If the NUM_REV_SCH field is present and is set to any value other than '00', the base	
32	station shall include one occurrence of the following two-field record for each Reverse	
33	Supplemental Channel included in this record:	
34	REV_SCH_ID	- Reverse Supplemental Channel Identification.
35		The base station shall set this field to the identifier of the
36		Reverse Supplemental Channel pertaining to this record.
37	REV_SCH_FRAME_OFFSET	- Reverse Supplemental Channel multiple frame offset.
38		The base station shall set this field to the multiple frame
39		offset with this Reverse Supplemental Channel. The frames
40		of this Reverse Supplemental Channel are delayed by
41		$(\text{FRAME\_OFFSET} \times 1.25 + \text{REV\_SCH\_FRAME\_OFFSET} \times 20)$
42		ms relative to system timing (see [2]).
43	LPM_IND	- Logical to Physical Mapping indicator.

The base station shall set this field to the LPM\_IND field value shown in Table 3.7.5.20-2 corresponding to the Logical to Physical Mapping indicator.

The base station shall not set this field to '00' if there is more than one service option connection in the current Service Configuration information record.

**Table 3.7.5.20-2. Logical to Physical Mapping indicator**

<b>LPM_IND Field (binary)</b>	<b>Logical-to-Physical Mapping indicator</b>
00	Use the default Logical-to-Physical Mapping
01	Use the Logical-to-Physical Mapping included in this record
10	Use the previously stored Logical-to-Physical Mapping
11	Reserved

**NUM\_LPM\_ENTRIES** - Number of Logical-to-Physical Mapping entries.

If the LPM\_IND field is set to '01', the base station shall include this field and set it as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the number of Logical-to-Physical Mapping entries that are included in this record.

If the NUM\_LPM\_ENTRIES field is included and is not equal to '0000', the base station shall include NUM\_LPM\_ENTRIES occurrences of the following six-field record for each Logical-to-Physical Mapping entry:

**SR\_ID** - Service reference identifier.

The base station shall set this field to the identifier of the service reference to which this Logical to Physical Mapping entry applies.

For the signaling service, the base station shall set this field to '000'.

**LOGICAL\_RESOURCE** - Logical resource identifier.

The base station shall set this field to the logical resource identifier shown in Table 3.7.5.20-3 which is to be mapped by this Logical to Physical Mapping entry.

**Table 3.7.5.20-3. Logical Resource Identifier.**

<b>LOGICAL_RESOURCE (binary)</b>	<b>Logical Resource</b>
0000	dtch
0001	dsch
0010 – 1111	Reserved

**PHYSICAL\_RESOURCE** - Physical resource identifier.

The base station shall set this field to the physical resource identifier shown in Table 3.7.5.20-4 to which the logical channel specified in this Logical to Physical Mapping entry is to be mapped.

If the LOGICAL\_RESOURCE field of this record is set to '0001', then the base station shall not set this field to '0010' or '0011'.

**Table 3.7.5.20-4. Physical Resource Identifier.**

<b>PHYSICAL_RESOURCE (binary)</b>	<b>Physical Resource</b>
0000	FCH
0001	DCCH
0010	SCH0
0011	SCH1
0100	PDCH
0101 – 1111	Reserved

**FORWARD\_FLAG** - Forward mapping indicator.

The base station shall set this field to '1' if the logical to physical channel mapping specified in this record applies to forward logical channels; otherwise, the base station shall set this field to '0'.

**REVERSE\_FLAG** - Reverse mapping indicator.

The base station shall set this field to '1' if the logical to physical channel mapping specified in this record applies to reverse logical channels; otherwise, the base station shall set this field to '0'.

**PRIORITY** - Multiplexing priority.

The base station shall set this field to '0000'.

**NUM\_REC** - Number of service-specific records.



1		The base station shall set this field to the number of the
2		following variable-length records included in the message.
3	The base station shall include one occurrence of the following variable-length record for	
4	each service option connection for which this record needs to be specified.	
5	RECORD_LEN	- Record length.
6		The base station shall set this field to the number of octets
7		included in this variable-length record including this field.
8	SR_ID	- Service reference identifier.
9		The base station shall set this field to the identifier of the
10		service reference associated with this service-specific record.
11	SDB_SO_OMIT	- Short Data Burst service option number omitted indicator.
12		The base station shall set this field to '1' if the mobile station
13		is required to omit the service option number when sending
14		Short Data Burst (see IS-707-A-2) for this service option
15		connection; otherwise, the base station shall set this field to
16		'0'.
17	RESERVED	- Reserved bits.
18		The base station shall add reserved bits as needed in order to
19		make the length of this record equal to an integer number of
20		octets. The base station shall set these bits to '0'.
21	USE_FLEX_NUM_BITS	- Use flexible (non-default) number of bits per frame indicator.
22		The base station shall set this field to '0' to indicate that the
23		mapping between the number of information bits per frame
24		[NUM_BITS], and a four-bit index field [NUM_BITS_IDX], shall
25		follow the default mapping identified in Table 3.7.3.3.2.37-2
26		and Table 3.7.3.3.2.37-4.
27		The base station shall set this field to '1' to indicate a non-
28		default mapping between the number of information bits per
29		frame, [NUM_BITS], and a four-bit index field
30		[NUM_BITS_IDX] is used for at least a forward or reverse
31		traffic channel.
32	NUM_BITS_TABLES_INCL	- Flexible Rate Tables included indicator.
33		If the USE_FLEX_NUM_BITS field is equal to '0', the base
34		station shall omit this field; otherwise, the base station shall
35		include this field and set this field as follows:
36		If the Flexible Rate Tables are included in this message, the
37		base station shall set this field to '1'; otherwise, the base
38		station shall set this field to '0'.
39	NUM_BITS_TABLES_COUNT	- Number of instances of the Flexible Rate Table included
40		in this message.

1 If the NUM\_BITS\_TABLES\_INCL field is included and is equal  
2 to '1', the base station shall include this field and set this  
3 field to one less than the number of instances of the Flexible  
4 Rate Table included in this message; otherwise, the base  
5 station shall omit this field.

6 If NUM\_TABLES\_INCL is included and is equal to '1', the base station shall include  
7 NUM\_BITS\_TABLES\_COUNT+1 instances of the Flexible Rate Table

8 NUM\_BITS\_TABLE\_ID - Flexible Rate Table ID.  
9 The base station shall set this field to the ID of the Flexible  
10 Rate Table that follows. The base station shall not set this  
11 field to '0000'.

12 NUM\_RECS - Number of records in the Flexible Rate Table.  
13 The base station shall set this field to one less than the  
14 number of three-field records that follows

15 The base station shall include NUM\_RECS+1 instances of the following three-field record:

16 NUM\_BITS\_IDX - Index to the number of bits array.  
17 The base station shall set this field to the index to the array  
18 that identifies the number of bits per frame.

19 NUM\_BITS - Number of bits array.  
20 The base station shall set this field to the number of  
21 information bits per frame corresponding to the index  
22 specified by NUM\_BITS\_IDX. The base station shall set the  
23 number of information bits per frame in accordance with the  
24 number of information bits per frame specified by the service  
25 option numbers included in the service configuration record.

26 CRC\_LEN\_IDX - Array of Number of CRC bits.  
27 The base station shall set this field to specify the number of  
28 CRC bits per frame corresponding to the index specified by  
29 NUM\_BITS\_IDX according to Table 3.7.5.20-5. The base  
30 station shall not specify more than one value of the CRC  
31 length for the same number of bits per frame for a specific  
32 channel (i.e., for a given channel, the number of information  
33 bits per frame uniquely specifies the length of the CRC field).

1

**Table 3.7.5.20-5. CRC\_LEN\_IDX**

<b>CRC_LEN_IDX (binary)</b>	<b>Number of CRC bits per frame</b>
000	0
001	6
010	8
011	10
100	12
101	16
110-111	Reserved

2

3        **USE\_VAR\_RATE**        -    Use variable rate on supplemental channels indicator.

4                                The base station shall set this field to '1' to indicate that at  
5                                least one of the forward or reverse supplemental channels is  
6                                to operate in the variable rate mode (i.e., the rate of the  
7                                supplemental channel can be picked from a pre-determined  
8                                set of rates autonomously).

9                                The base station shall set this bit to '0' to indicate that  
10                                variable rate on supplemental channels are not allowed.

11        **VAR\_TABLES\_INCL**        -    Variable Rate Tables included indicator.

12                                If the **USE\_VAR\_RATE** field is equal to '0', the base station  
13                                shall omit this field; otherwise, the base station shall include  
14                                this field and set this field as follows:

15                                If the Variable Rate Tables are included in this message, the  
16                                base station shall set this field to '1'; otherwise, the base  
17                                station shall set this field to '0'.

18        **VAR\_RATE\_TABLES\_COUNT** -    Number of instances of the Variable Rate Mask Table  
19                                included in this message.

20                                If **VAR\_TABLES\_INCL** is included and is equal to '1', the base  
21                                station shall include this field and set this field to one less  
22                                than the number of instances of the Variable Rate Mask table  
23                                included in this message as follows; otherwise, the base  
24                                station shall omit this field:

25        If **VAR\_TABLES\_INCL** is included and is equal to '1', the base station shall include  
26        **VAR\_RATE\_TABLES\_COUNT** +1 instances of the Variable Rate Mask table

27        **VAR\_RATE\_TABLE\_ID**        -    Variable Rate Mask table ID.

28                                The base station shall set this field to the ID of the Variable  
29                                Rate Mask table that follows.    The base station shall not set  
30                                this field to '000'.

31        **NUM\_RECS**        -    Number of records in the Variable Rate Mask table.

1		The base station shall set this field to one less than the
2		number of two-field records that follows
3	The base station shall include NUM_RECS+1 instances of the following two fields:	
4	NUM_BITS_IDX	- Index to the number of bits array.
5		The base station shall set this field to the index to the array
6		that identifies the number of bits per supplemental channel
7		frame.
8	MASK	- Number of bits array.
9		The base station shall set this field to a mask that identifies
10		the other members of the Variable Rate Set. The base station
11		shall set the $i^{\text{th}}$ LSB bit ( $i=1, \dots, \text{NUM\_BITS\_IDX}$ ) of this field
12		to '1' to indicates that the number of bits per frame specified
13		by the index NUM_BITS_IDX-i is to be included in the
14		Supplemental Variable Rate Set.
15	USE_OLD_FLEX_MAPPING	- Use the previously downloaded mapping between the
16		channels and Flexible Rate Tables.
17		If the USE_FLEX_NUM_BITS field is equal to '0', the base
18		station shall omit this field; otherwise, the base station shall
19		include this field and set this field as follows:
20		The base station shall set this field to '1' to indicate that the
21		mobile station is to use the previously downloaded mapping
22		between the channels and Flexible Rate Tables. The base
23		station shall set this field to '0', if the following eight fields are
24		included in this message.
25	FSCH0_NBIT_TABLE_ID	- Forward Supplemental Channel 0 Flexible Rate Table ID.
26		If the USE_OLD_FLEX_MAPPING field is included and is
27		equal to '0', the base station shall include this field and set
28		this field as follows; otherwise, the base station shall omit
29		this field:
30		The base station shall set this field to the ID of the Flexible
31		Rate Table corresponding to Forward Supplemental Channel
32		0. The base station shall set this field to '0000' to indicate
33		that the Flexible Rate feature is not used for Forward
34		Supplemental 0 and the default table specified in
35		3.7.3.3.2.37-4 shall be used.
36	RSCH0_NBIT_TABLE_ID	- Reverse Supplemental Channel 0 Flexible Rate Table ID.
37		If the USE_OLD_FLEX_MAPPING field is included and is
38		equal to '0', the base station shall include this field and set
39		this field as follows; otherwise, the base station shall omit
40		this field:

1		The base station shall set this field to the ID of the Flexible
2		Rate Table corresponding to Reverse Supplemental Channel
3		0. The base station shall set this field to '0000' to indicate
4		that the Flexible Rate feature is not used for Reverse
5		Supplemental 0 and the default table specified in
6		3.7.3.3.2.37-2 shall be used.
7	FSCH1_NBIT_TABLE_ID -	Forward Supplemental Channel 1 Flexible Rate Table ID.
8		If the USE_OLD_FLEX_MAPPING field is included and is
9		equal to '0', the base station shall include this field and set
10		this field as follows; otherwise, the base station shall omit
11		this field:
12		The base station shall set this field to the ID of the Flexible
13		Rate Table corresponding to Forward Supplemental Channel
14		1. The base station shall set this field to '0000' to indicate
15		that the Flexible Rate feature is not used for Forward
16		Supplemental 1 and the default table specified in
17		3.7.3.3.2.37-4 shall be used.
18	RSCH1_NBIT_TABLE_ID -	Reverse Supplemental Channel 1 Flexible Rate Table ID.
19		If the USE_OLD_FLEX_MAPPING field is included and is
20		equal to '0', the base station shall include this field and set
21		this field as follows; otherwise, the base station shall omit
22		this field:
23		The base station shall set this field to the ID of the Flexible
24		Rate Table corresponding to Reverse Supplemental Channel
25		1. The base station shall set this field to '0000' to indicate
26		that the Flexible Rate feature is not used for Reverse
27		Supplemental 1 and the default table specified in
28		3.7.3.3.2.37-2 shall be used.
29	FFCH_NBIT_TABLE_ID -	Forward Fundamental Channel Flexible Rate Table ID.
30		If the USE_OLD_FLEX_MAPPING field is included and is
31		equal to '0', the base station shall include this field and set
32		this field as follows; otherwise, the base station shall omit
33		this field:
34		The base station shall set this field to the ID of the Flexible
35		Rate Table corresponding to the Forward Fundamental
36		Channel. The base station shall set this field to '0000' to
37		indicate that the Flexible Rate feature is not used for the
38		Forward Fundamental Channel.
39	RFCH_NBIT_TABLE_ID -	Reverse Fundamental Channel Flexible Rate Table ID.
40		If the USE_OLD_FLEX_MAPPING field is included and is
41		equal to '0', the base station shall include this field and set
42		this field as follows; otherwise, the base station shall omit
43		this field:
44		The base station shall set this field to the ID of the Flexible
45		Rate Table corresponding to the Reverse Fundamental
46		Channel. The base station shall set this field to '0000' to
47		indicate that the Flexible Rate feature is not used for the
48		Reverse Fundamental Channel.

1	FDCCH_NBIT_TABLE_ID	-	Forward Dedicated Control Channel Flexible Rate Table ID.
2			If the USE_OLD_FLEX_MAPPING field is included and is
3			equal to '0', the base station shall include this field and set
4			this field as follows; otherwise, the base station shall omit
5			this field:
6			The base station shall set this field to the ID of the Flexible
7			Rate Table corresponding to the Forward Dedicated Control
8			Channel. The base station shall set this field to '0000' to
9			indicate that the Flexible Rate feature is not used for the
10			Forward Dedicated Control Channel.
11	FDCCH_NBITS_IDX	-	Forward Dedicated Control Channel number of information
12			bits per frame index.
13			If the FDCCH_NBIT_TABLE_ID field is included and is not
14			equal to '0000', the base station shall include this field and
15			set this field to indicate the number of information bits per
16			Forward Dedicated Control Channel frame; otherwise, the
17			base station shall omit this field.
18			The number of information bits per frame is specified by the
19			Flexible Rate Table associated with Forward Dedicated
20			Control Channel and FDCCH_NBITS_IDX as the index to the
21			table (i.e.,
22			NUM_BITS <sub>s</sub> [FDCCH_NBIT_TABLE_ID <sub>r</sub> ][FDCCH_NBITS_IDX].
23	RDCCH_NBIT_TABLE_ID	-	Reverse Dedicated Control Channel Flexible Rate Table ID.
24			If the USE_OLD_FLEX_MAPPING field is included and is
25			equal to '0', the base station shall include this field and set
26			this field as follows; otherwise, the base station shall omit
27			this field:
28			The base station shall set this field to the ID of the Flexible
29			Rate Table corresponding to the Reverse Dedicated Control
30			Channel. The base station shall set this field to '0000' to
31			indicate that the Flexible Rate feature is not used for the
32			Reverse Dedicated Control Channel.
33	RDCCH_NBITS_IDX	-	Reverse Dedicated Control Channel number of information
34			bits per frame index.
35			If the RDCCH_NBIT_TABLE_ID field is included and is not
36			equal to '0000', the base station shall include this field and
37			set this field to indicate the number of information bits per
38			Reverse Dedicated Control Channel frame; otherwise, the
39			base station shall omit this field.
40			The number of information bits per frame is specified by the
41			Flexible Rate Table associated with Reverse Dedicated
42			Control Channel and RDCCH_NBITS_IDX as the index to the
43			table (i.e.,
44			NUM_BITS <sub>s</sub> [RDCCH_NBIT_TABLE_ID <sub>r</sub> ][RDCCH_NBITS_IDX].

1	USE_OLD_VAR_MAPPING	-	Use the previously downloaded mapping between the
2			channels and Variable Rate Mask Tables.
3			If the USE_VAR_RATE field is equal to '0', the base station
4			shall omit this field; otherwise, the base station shall include
5			this field and set this field as follows:
6			The base station shall set this field to '1' to indicate that the
7			mobile station is to use the previously downloaded mapping
8			between the channels and Variable Rate Mask Tables. The
9			base station shall set this field to '0', if the following four
10			fields are included in this message.
11	FSCH0_VAR_TABLE_ID	-	Forward Supplemental Channel 0 Variable Rate Mask Table
12			ID.
13			If the USE_OLD_VAR_MAPPING field is included and is equal
14			to '0', the base station shall include this field and set this
15			field as follows; otherwise, the base station shall omit this
16			field:
17			The base station shall set this field to the ID of the Variable
18			Rate Mask Table corresponding to Forward Supplemental
19			Channel 0. The base station shall set this field to '000' to
20			indicate that no variable rate operation is performed on the F-
21			SCH0.
22	RSCH0_VAR_TABLE_ID	-	Reverse Supplemental Channel 0 Variable Rate Mask Table
23			ID.
24			If the USE_OLD_VAR_MAPPING field is included and is equal
25			to '0', the base station shall include this field and set this
26			field as follows; otherwise, the base station shall omit this
27			field:
28			The base station shall set this field to the ID of the Variable
29			Rate Mask Table corresponding to Reverse Supplemental
30			Channel 0. The base station shall set this field to '000' to
31			indicate that the mobile station is not to autonomously
32			change the rate of the R-SCH0.
33	FSCH1_VAR_TABLE_ID	-	Forward Supplemental Channel 1 Variable Rate Mask Table
34			ID.
35			If the USE_OLD_VAR_MAPPING field is included and is equal
36			to '0', the base station shall include this field and set this
37			field as follows; otherwise, the base station shall omit this
38			field:
39			The base station shall set this field to the ID of the Variable
40			Rate Mask Table corresponding to Forward Supplemental
41			Channel 1. The base station shall set this field to '000' to
42			indicate that no variable rate operation is performed on the F-
43			SCH1.
44	RSCH1_VAR_TABLE_ID	-	Reverse Supplemental Channel 1 Variable Rate Mask Table
45			ID.

1		If the USE_OLD_VAR_MAPPING field is included and is equal
2		to '0', the base station shall include this field and set this
3		field as follows; otherwise, the base station shall omit this
4		field:
5		The base station shall set this field to the ID of the Variable
6		Rate Mask Table corresponding to Reverse Supplemental
7		Channel 1. The base station shall set this field to '000' to
8		indicate that the mobile station is not to autonomously
9		change the rate of the R-SCH1.
10	R_INC_RATE_ALLOWED	- Reverse increase rate within Variable Rate Set Allowed
11		indicator.
12		If the USE_VAR_RATE field is included and is equal to '1', the
13		base station shall include this field and set this field as
14		follows; otherwise, the base station shall omit this field:
15		The base station shall set this field to '1' to indicate that the
16		mobile station is allowed to switch between any of the rates
17		(i.e., number of bits per frame) in the Variable Rate Set for the
18		Reverse Supplemental channels. The base station shall set
19		this field to '0' to indicate that only a downward transition in
20		rate within the rates (i.e., number of bits per frame) in the
21		Variable Rate Set for the Reverse Supplemental channels is
22		allowed.
23	F_INC_RATE_ALLOWED	- Forward increase rate within Variable Rate Set Allowed
24		indicator.
25		If the USE_VAR_RATE field is included and is equal to '1', the
26		base station shall include this field and set this field as
27		follows; otherwise, the base station shall omit this field:
28		The base station shall set this field to '1' to indicate that the
29		base station is allowed to switch between any of the rates
30		(i.e., number of bits per frame) in the Variable Rate Set for the
31		Forward Supplemental channels. The base station shall set
32		this field to '0' to indicate that only a downward transition in
33		rate within the rates (i.e., number of bits per frame) in the
34		Variable Rate Set for the Forward Supplemental channels is
35		possible.
36	LTU_INFO_INCL	- LTU Tables included indicator.
37		The base station shall set this field to '1' if the base station
38		includes LTU related information in this message; otherwise,
39		the base station shall set this field to '0'.
40		The base station shall set this field to '0' if the mobile station
41		indicates that it does not support downloadable LTU Table in
42		the capability information (i.e., the
43		F_SCH_LTU_TAB_SUPPORTED and
44		R_SCH_LTU_TAB_SUPPORTED fields in the capability
45		information are equal to '0').
46	LTU_TABLES_INCL	- LTU Tables included indicator.



1 If the LTU\_INFO\_INCL field is equal to '0', the base station  
2 shall omit this field; otherwise, the base stations shall  
3 include this field and set this field as follows:

4 If the LTU Tables are included in this message, the base  
5 station shall set this field to '1'; otherwise, the base station  
6 shall set this field to '0'.

7 If LTU\_TABLES\_INCL is included and is equal to '1', the base station shall include the  
8 following fields related to the LTU Table information:

9 NUM\_LTU\_TABLES - Number of LTU tables included.  
10 The base station shall set this field to the number of LTU  
11 Tables minus one included in this message.

12 If LTU\_TABLES\_INCL is included and is equal to '1', then the base station shall include  
13 NUM\_LTU\_TABLES + 1 occurrences of the following fields:

14 LTU\_TABLE\_ID - LTU Table ID.  
15 The base station shall set this field to the ID of the LTU Table  
16 that follows. The base station shall not set this field to '000'.

17 NUM\_ROWS - Number of configurations associated with the LTU Table  
18 identified by LTU\_TABLE\_ID.  
19 The base station shall set this field to one less than the  
20 number of rows of the LTU Table identified by  
21 LTU\_TABLE\_ID.

22 If LTU\_TABLES\_INCL is included and is equal to '1', then the base station shall include the  
23 NUM\_ROWS + 1 occurrences of the following fields:

24 NBITS\_IDX - Number of bits per frame index.  
25 The base station shall set this field to the 4-bit index that  
26 specified the number of information bits per supplemental  
27 channel frame.

28 NUM\_LTUS - Number of LTUs per physical layer supplemental channel  
29 frame.  
30 The base station shall specify the number of LTUs per  
31 physical layer supplemental channel frame corresponding to  
32 the number of information bits per supplemental channel  
33 frame specified by NBITS\_IDX according to Table 3.7.5.20-6.  
34 The base station shall set this field to '0000' to indicate that  
35 no LTUs are supported for the number of information bits per  
36 frame specified by NBITS\_IDX.

1

**Table 3.7.5.20-6. NUM\_LTUS**

<b>NUM_LTUS (binary)</b>	<b>Number of LTUS per supplemental channel frame</b>
0000	0
0001	2
0010	3
0011	4
0100	5
0101	6
0110	7
0111	8
1000-1111	Reserved

2

3

4 **USE\_OLD\_LTU\_MAPPING** - Use the previously downloaded mapping between the  
5 channels and LTU Tables.

6 If the LTU\_INFO\_INCL field is equal to '0', the base station  
7 shall omit this field; otherwise, the base station shall include  
8 this field and set this field as follows:

9 The base station shall set this field to '1' to indicate that the  
10 mobile station is to use the previously downloaded mapping  
11 between the channels and LTU Tables. The base station shall  
12 set this field to '0' if the following four fields are included in  
13 this message.

14 **FSCH0\_LTU\_TAB\_ID** - Forward Supplemental Channel LTU Table ID.

15 If **USE\_OLD\_LTU\_MAPPING** is included and is equal to '0',  
16 the base station shall include this field and set this field as  
17 follows; otherwise, the base station shall omit this field:

18 The base station shall set this field to the LTU Table ID to be  
19 used for the Forward Supplemental Channel 0. The base  
20 station shall set this field to '000' to indicate that the default  
21 number of LTUs are to be used (see [3]). The base station  
22 shall set this field to '000' if MuxPDU Type 5 is not used on  
23 this channel (see [3]).

24 **RSCH0\_LTU\_TAB\_ID** - Reverse Supplemental Channel LTU Table ID.

25 If **USE\_OLD\_LTU\_MAPPING** is included and is equal to '0',  
26 the base station shall include this field and set this field as  
27 follows; otherwise, the base station shall omit this field:

1			The base station shall set this field to the LTU Table ID to be
2			used for the Reverse Supplemental Channel 0. The base
3			station shall set this field to '000' to indicate that the default
4			number of LTUs are to be used (see [3]). The base station
5			shall set this field to '000' if MuxPDU Type 5 is not used on
6			this channel (see [3]).
7	FSCH1_LTU_TAB_ID	-	Forward Supplemental Channel LTU Table ID.
8			If USE_OLD_LTU_MAPPING is included and is equal to '0',
9			the base station shall include this field and set this field as
10			follows; otherwise, the base station shall omit this field:
11			The base station shall set this field to the LTU Table ID to be
12			used for the Forward Supplemental Channel 1. The base
13			station shall set this field to '000' to indicate that the default
14			number of LTUs are to be used (see [3]). The base station
15			shall set this field to '000' if MuxPDU Type 5 is not used on
16			this channel (see [3]).
17	RSCH1_LTU_TAB_ID	-	Reverse Supplemental Channel LTU Table ID.
18			If USE_OLD_LTU_MAPPING is included and is equal to '0',
19			the base station shall include this field and set this field as
20			follows; otherwise, the base station shall omit this field:
21			The base station shall set this field to the LTU Table ID to be
22			used for the Reverse Supplemental Channel 1. The base
23			station shall set this field to '000' to indicate that the default
24			number of LTUs are to be used (see [3]). The base station
25			shall set this field to '000' if MuxPDU Type 5 is not used on
26			this channel (see [3]).
27	PARTITION_TABLES_INFO_INCL	-	Partition Tables information included indicator.
28			If USE_FLEX_NUM_BITS is equal to '0', the base station shall
29			omit this field; otherwise, the base station shall include this
30			field and set this field as follows:
31			If Partition Tables information is included in this message,
32			the base station shall set this field to '1'; otherwise, the base
33			station shall set this field to '0'.
34	PARTITION_TABLES_INCL	-	Partition Tables included indicator.
35			If PARTITION_TABLES_INFO_INCL is equal to '0', the base
36			station shall omit this field; otherwise, the base station shall
37			include this field and set this field as follows:
38			If the Partition Tables are included in this message, the base
39			station shall set this field to '1'; otherwise, the base station
40			shall set this field to '0'.
41			
42	If PARTITION_TABLES_INCL is included and is equal to '1', then the base station shall		
43	include the following fields		
44	NUM_PARTITION_TABLES	-	Number of partition tables.

- 1                   The base station shall set this field to one less than the  
 2                   number of Partition Tables corresponding to an FCH or  
 3                   DCCH included in this message.
- 4   If PARTITION\_TABLES\_INCL is included and is equal to '1', then the base station shall  
 5   include the NUM\_PARTITION\_TABLES + 1 occurrences of the following fields:
- 6   PARTITION\_TABLE\_ID   -   Partition Table ID.
- 7                   The base station shall set this field to the ID of the Partition  
 8                   Table that follows. The base station shall not set this field to  
 9                   '000'.
- 10           NUM\_ROWS   -   Number of configurations associated with the Partition Table  
 11           identified by PARTITION\_TABLE\_ID.
- 12           The base station shall set this field to one less than the  
 13           number of rows of the Partition Table identified by  
 14           PARTITION\_TABLE\_ID.
- 15   If PARTITION\_TABLES\_INCL is included and is equal to '1', then the base station shall  
 16   include NUM\_ROWS + 1 occurrences of the following fields:
- 17           CATEGORY   -   Category number.
- 18           The base station shall set this field to the category number of  
 19           the entry of the Partition Table identified by number of bits  
 20           per each service as specified below. The base station shall  
 21           not set this field to '00001' or '00010'. The base station shall  
 22           place rows of the Partition Table corresponding to the same  
 23           number of total information bits per frame consecutively. See  
 24           [3].
- 25   MUX\_HEADER\_LEN   -   Multiplex Sublayer Header Length.
- 26           The base station shall set this field to the length of the  
 27           multiplex sublayer header corresponding to the entry of the  
 28           Partition Table identified by number of bits per each service  
 29           as specified below.
- 30   MUX\_HEADER       -   Multiplex Sublayer Header.
- 31           The base station shall set this field to the multiplex sublayer  
 32           header corresponding to the entry of the Partition Table  
 33           identified by number of bits per each service as specified  
 34           below.<sup>22</sup>
- 35   NUM\_PARTITIONS   -   Number of partitions.

---

<sup>22</sup> The values of the MUX\_HEADER corresponding to a specific number of bits per frame, shall be encoded using prefix-free codes. Prefix-free code is defined to be a code constructed so that any partial code word, beginning at the start of a code word but terminating prior to the end of that code word, is not a valid code word.

1                   The base station shall set this field to one less than the  
2                   number of partitions corresponding to each service (including  
3                   signaling) included in the entry of the Partition Table  
4                   identified by CATEGORY.

5   If PARTITION\_TABLES\_INCL is included and is equal to '1', then the base station shall  
6   include NUM\_PARTITIONS + 1 occurrences of the following fields:

7                   SR\_ID     -   Service Reference ID.

8                   The base station shall set this field to the sr\_id of the service  
9                   (sr\_id = '000' for signaling) present in this category.

10                  SRV\_NUM\_BITS   -   Number of bits allocated to the service.

11                   The base station shall set this field to the number of bits  
12                   allocated to the service (including signaling) identified by  
13                   SR\_ID.

14   USE\_OLD\_PART\_MAPPING   -   Use the previously downloaded mapping between the  
15   channels and Partition Tables.

16                   If PARTITION\_TABLES\_INFO\_INCL is equal to '1', the base  
17                   station shall include this field and set this field as follows;  
18                   otherwise, the base station shall omit this field:

19                   The base station shall set this field to '1' to indicate that the  
20                   mobile station is to use the previously downloaded mapping  
21                   between the channels and Partition Tables. The base station  
22                   shall set this field to '0', if the following four fields are  
23                   included in this message.

24   FFCH\_PART\_TAB\_ID     -   Forward Fundamental Channel Partition Table ID.

25                   If USE\_OLD\_PART\_MAPPING is included and is equal to '0',  
26                   the base station shall include this field and set this field as  
27                   follows; otherwise, the base station shall omit this field:

28                   The base station shall set this field to the Partition Table ID  
29                   to be used for the Forward Fundamental Channel. The base  
30                   station shall set this field to '000' to indicate that the default  
31                   number of bits per service is to be used (see MuxPDU Type 1  
32                   and 2 Categories and Formats for the FCH and DCCH in [3]).  
33                   The base station shall set this field to a value other than '000'  
34                   if the FFCH\_NBIT\_TABLE\_ID field is included in this message  
35                   and is not set to '0000'.

36   RFCH\_PART\_TAB\_ID     -   Reverse Fundamental Channel Partition Table ID.

37                   If USE\_OLD\_PART\_MAPPING is included and is equal to '0',  
38                   the base station shall include this field and set this field as  
39                   follows; otherwise, the base station shall omit this field:

40                   The base station shall set this field to the Partition Table ID  
41                   to be used for the Reverse Fundamental Channel. The base  
42                   station shall set this field to '000' to indicate that the default  
43                   number of bits per service is to be used (see MuxPDU Type 1

1		and 2 Categories and Formats for the FCH and DCCH in [3]).
2		The base station shall set this field to a value other than '000'
3		if the RFCH_NBIT_TABLE_ID is included in this message and
4		field is not set to '0000'.
5	FDCCH_PART_TAB_ID	- Forward Dedicated Control Channel Partition Table ID.
6		If USE_OLD_PART_MAPPING is included and is equal to '0',
7		the base station shall include this field and set this field as
8		follows; otherwise, the base station shall omit this field:
9		The base station shall set this field to the Partition Table ID
10		to be used for the Forward Dedicated Control Channel. The
11		base station shall set this field to '000' to indicate that the
12		default number of bits per service is to be used (see MuxPDU
13		Type 1 and 2 Categories and Formats for the FCH and DCCH
14		in [3]). The base station shall set this field to a value other
15		than '000' if the FDCCH_NBIT_TABLE_ID field is included in
16		this message and is not set to '0000'.
17	RDCCH_PART_TAB_ID	- Reverse Dedicated Control Channel Partition Table ID.
18		If USE_OLD_PART_MAPPING is included and is equal to '0',
19		the base station shall include this field and set this field as
20		follows; otherwise, the base station shall omit this field:
21		The base station shall set this field to the Partition Table ID
22		to be used for the Reverse Dedicated Control Channel. The
23		base station shall set this field to '000' to indicate that the
24		default number of bits per service is to be used (see MuxPDU
25		Type 1 and 2 Categories and Formats for the FCH and DCCH
26		in [3]). The base station shall set this field to a value other
27		than '000' if the RDCCH_NBIT_TABLE_ID field is included in
28		this message and is not set to '0000'.
29	USE_ERAM	- Use the Enhanced Rate Adaptation Mode indicator.
30		The base station shall include this field only if
31		USE_FLEX_NUM_BITS or USE_VAR_RATE is equal to '1'. If
32		included, the base station shall set this field to '1' if the base
33		station is to use lower rate turbo codes for RC4 and RC5
34		Forward Supplemental Channel and the mobile station is to
35		use lower rate turbo codes for RC4 Reverse Supplemental
36		Channel to match the desired channel interleaver block size
37		instead of pure code symbol repetition; otherwise, the base
38		station shall set this field to '0'.
39	SWITCHING_PARMS_INCL	- R-CQICH switching parameters included indicator.
40		If the GATING_RATE_INCL field is set to '0', the base station
41		shall omit this field; otherwise, the base station shall include
42		this field and set it as follows:

1 The base station shall set this field to '1' if the parameters for  
2 R-CQICH soft and softer switching are included in this  
3 message; otherwise, the base station shall set this field to '0'.

4 NUM\_SOFT\_SWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH soft  
5 switching while in Control Hold.

6 If SWITCHING\_PARMS\_INCL is not included or included and  
7 set to '0', then the base station shall omit this field;  
8 otherwise, the base station shall include this field and set it  
9 as follows:

10 The base station shall set this field to the duration of the cell  
11 switching period, in units of 20 ms, minus one, during which  
12 the mobile station, while in Control Hold, is to transmit the  
13 cell switch sequence on the R-CQICH when it switches  
14 between two pilots which are in different groups.

15 NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM - Number of frames for R-CQICH softer  
16 switching while in Control Hold.

17 If SWITCHING\_PARMS\_INCL is not included or included and  
18 set to '0', then the base station shall omit this field;  
19 otherwise, the base station shall include this field and set it  
20 as follows:

21 The base station shall set this field to the duration of the cell  
22 switching period, in units of 20 ms, minus one, during which  
23 the mobile station, while in Control Hold, is to transmit the  
24 cell switch sequence on the R-CQICH when it switches  
25 between two pilots which are in the same group.

26 RPC\_INCL - Reverse Link Power Control parameter included indicator.

27 If the reverse power control related information is included in  
28 this message, the base station shall set this field to '1';  
29 otherwise, the base station shall set this field to '0'.

30 RPC\_NUM\_REC - Number of records for Reverse Link Power Control.

31 If RPC\_INCL is set to '0', the base station shall omit this field;  
32 otherwise, the base station shall set this field to one less than  
33 the number of records included in this message.

34 If RPC\_NUM\_REC is included in this message, the base station shall include  
35 RPC\_NUM\_REC occurrences of the following record:

36 RPC\_ADJ\_REC\_TYPE - Reverse Link Power Control adjustment record type.

37 The base station shall set this field to the value shown in  
38 Table 3.7.3.3.2.25-3 corresponding to the type of adjustment  
39 that is to be used.

40 RPC\_ADJ\_REC\_LEN - Reverse Link Power Control adjustment record length.

41 If RPC\_ADJ\_REC\_TYPE is not equal to '0100', the base  
42 station shall set this field to the number of octets in the type-  
43 specific fields of this adjustment record as given in Table  
44 3.7.3.3.2.25-3.

45 If RPC\_ADJ\_REC\_TYPE is equal to '0100', the base station  
46 shall set this field to '0000'.

- EXT\_RPC\_ADJ\_REC\_LEN - Reverse Link Power Control adjustment record length.
- If RPC\_ADJ\_REC\_TYPE is not equal to '0100', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.
- If RPC\_ADJ\_REC\_TYPE is equal to '0100', the base station shall set this field to the number of octets in the type-specific fields of this adjustment record as given in Table 3.7.3.3.2.25-3.
- Type-specific fields - Reverse Link Power Control adjustment record type-specific fields.
- The base station shall include type-specific fields based on the RPC\_ADJ\_REC\_TYPE of this adjustment record, as specified as below.
- If RPC\_ADJ\_REC\_TYPE is equal to '0000', the base station shall set type-specific fields as specified in Table 3.7.5.20-4.

**Table 3.7.5.20-4. Type Specific Fields for RECORD\_TYPE = '0000'**

Fields	Length (Bits)
FCH_INCL	1
FCH_CHAN_ADJ_GAIN	0 or 8
DCCH_INCL	1
DCCH_CHAN_ADJ_GAIN	0 or 8
SCH0_INCL	1
SCH0_CHAN_ADJ_GAIN	0 or 8
SCH1_INCL	1
SCH1_CHAN_ADJ_GAIN	0 or 8
REV_ACKCH_INCL	1
REV_ACKCH_CHAN_ADJ_GAIN	0 or 8
REV_CQICH_INCL	1
REV_CQICH_CHAN_ADJ_GAIN	0 or 8
RESERVED	0-7 (if needed)

- FCH\_INCL - FCH channel adjustment gain included indicator.
- If FCH\_CHAN\_ADJ\_GAIN is included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
- FCH\_CHAN\_ADJ\_GAIN - Channel adjustment gain for Reverse Fundamental Channel.



1			If FCH_INCL is set to '0', the base station shall omit this field;
2			otherwise, the base station shall set each field to the value of
3			the gain adjustment that the mobile station is to make for the
4			Reverse Fundamental Channel. The base station shall set
5			this field to the correction factor expressed as a two's
6			complement value in units of 0.125 dB. The base station
7			shall set the value in the range from -48 to 48 inclusive.
8	DCCH_INCL	-	DCCH channel adjustment gain included indicator.
9			If DCCH_CHAN_ADJ_GAIN is included in this message, the
10			base station shall set this field to '1'; otherwise, the base
11			station shall set this field to '0'.
12	DCCH_CHAN_ADJ_GAIN	-	Channel adjustment gain for the Reverse Dedicated Control
13			Channel.
14			If DCCH_INCL is set to '0', the base station shall omit this
15			field; otherwise, the base station shall set each field to the
16			value of the gain adjustment that the mobile station is to
17			make for the Reverse Dedicated Control Channel. The base
18			station shall set this field to the correction factor expressed
19			as a two's complement value in units of 0.125 dB. The base
20			station shall set the value in the range from -48 to 48
21			inclusive.
22	SCH0_INCL	-	SCH0 channel adjustment gain included indicator.
23			If SCH0_CHAN_ADJ_GAIN is included in this message, the
24			base station shall set this field to '1'; otherwise, the base
25			station shall set this field to '0'.
26	SCH0_CHAN_ADJ_GAIN	-	Channel adjustment gain for Reverse Supplemental Channel
27			0.
28			If SCH0_INCL is set to '0', the base station shall omit this
29			field; otherwise, the base station shall set each field to the
30			value of the gain adjustment that the mobile station is to
31			make for the Reverse Supplemental Channel 0. The base
32			station shall set this field to the correction factor expressed
33			as a two's complement value in units of 0.125 dB. The base
34			station shall set the value in the range from -48 to 48
35			inclusive.
36	SCH1_INCL	-	SCH1 channel adjustment gain included indicator.
37			If SCH1_CHAN_ADJ_GAIN is included in this message, the
38			base station shall set this field to '1'; otherwise, the base
39			station shall set this field to '0'.
40	SCH1_CHAN_ADJ_GAIN	-	Channel adjustment gain for Reverse Supplemental Channel
41			1.
42			If SCH1_INCL is set to '0', the base station shall omit this
43			field; otherwise, the base station shall set each field to the
44			value of the gain adjustment that the mobile station is to
45			make for the Supplemental Channel 1. The base station shall
46			set this field to the correction factor expressed as a two's
47			complement value in units of 0.125 dB. The base station
48			shall set the value in the range from -48 to 48 inclusive.

1	REV_ACKCH_INCL	-	Reverse Acknowledgment Channel channel adjustment gain
2			included indicator.
3			If REV_ACKCH_CHAN_ADJ_GAIN is included in this message,
4			the base station shall set this field to '1'; otherwise, the base
5			station shall set this field to '0'.
6	REV_ACKCH_CHAN_ADJ_GAIN	-	Channel adjustment gain for Reverse
7			Acknowledgment Channel.
8			If REV_ACKCH_INCL is set to '0', the base station shall omit
9			this field; otherwise, the base station shall set each field to
10			the value of the gain adjustment that the mobile station is to
11			make for the Reverse Acknowledgment Channel. The base
12			station shall set this field to the correction factor expressed
13			as a two's complement value in units of 0.125 dB. The base
14			station shall set the value in the range from -24 to 24
15			inclusive.
16	REV_CQICH_INCL	-	Reverse Channel Quality Indicator Channel channel
17			adjustment gain included indicator.
18			If REV_CQICH_CHAN_ADJ_GAIN is included in this message,
19			the base station shall set this field to '1'; otherwise, the base
20			station shall set this field to '0'.
21	REV_CQICH_CHAN_ADJ_GAIN	-	Channel adjustment gain for Reverse Channel Quality
22			Indicator Channel.
23			If REV_CQICH_INCL is set to '0', the base station shall omit
24			this field; otherwise, the base station shall set each field to
25			the value of the gain adjustment that the mobile station is to
26			make for the Reverse Channel Quality Indicator Channel. The
27			base station shall set this field to the correction factor
28			expressed as a two's complement value in units of 0.125 dB.
29			The base station shall set the value in the range from -16 to
30			16 inclusive.
31	RESERVED	-	Reserved bits.
32			The base station shall add reserved bits as needed in order to
33			make the length of the entire record equal to an integer
34			number of octets. The base station shall set these bits to '0'.
35	If RPC_ADJ_REC_TYPE is equal to '0001', the base station shall set type-specific fields as		
36	specified in Table 3.7.5.20-5.		

**Table 3.7.5.20-5. Type Specific Fields for RECORD\_TYPE  
= '0001'**

<b>Fields</b>	<b>Length (Bits)</b>
RL_ATT_ADJ_GAIN_TYPE	1
RC3_RC5_20MS_INCL	1
RL_ATT_ADJ_GAIN_1500	0 or 8
RL_ATT_ADJ_GAIN_2700	0 or 8
RL_ATT_ADJ_GAIN_4800	0 or 8
RL_ATT_ADJ_GAIN_9600	0 or 8
RC4_RC6_20MS_INCL	1
RL_ATT_ADJ_GAIN_1800	0 or 8
RL_ATT_ADJ_GAIN_3600	0 or 8
RL_ATT_ADJ_GAIN_7200	0 or 8
RL_ATT_ADJ_GAIN_14400	0 or 8
5MS_INCL	1
RL_ATT_ADJ_GAIN_9600_5MS	0 or 8
RC3_RC5_40MS_INCL	1
RL_ATT_ADJ_GAIN_1350_40MS	0 or 8
RL_ATT_ADJ_GAIN_2400_40MS	0 or 8
RL_ATT_ADJ_GAIN_4800_40MS	0 or 8
RL_ATT_ADJ_GAIN_9600_40MS	0 or 8
RC4_RC6_40MS_INCL	1
RL_ATT_ADJ_GAIN_1800_40MS	0 or 8
RL_ATT_ADJ_GAIN_3600_40MS	0 or 8
RL_ATT_ADJ_GAIN_7200_40MS	0 or 8
RL_ATT_ADJ_GAIN_14400_40MS	0 or 8
RC3_RC5_80MS_INCL	1
RL_ATT_ADJ_GAIN_1200_80MS	0 or 8
RL_ATT_ADJ_GAIN_2400_80MS	0 or 8
RL_ATT_ADJ_GAIN_4800_80MS	0 or 8

(continues on next page)

Fields	Length (Bits)
RL_ATT_ADJ_GAIN_9600_80MS	0 or 8
RC4_RC6_80MS_INCL	1
RL_ATT_ADJ_GAIN_1800_80MS	0 or 8
RL_ATT_ADJ_GAIN_3600_80MS	0 or 8
RL_ATT_ADJ_GAIN_7200_80MS	0 or 8
RL_ATT_ADJ_GAIN_14400_80MS	0 or 8

RESERVED	0-7 (if needed)
----------	-----------------

RL\_ATT\_ADJ\_GAIN\_TYPE - Reverse Link Attribute Adjustment Gain value type indicator.

If the following fields are set to the nominal attribute gain adjustment values that the mobile station is to use for the transmission attributes (relative to Nominal\_Attribute\_Gain specified in [2]), the base station shall set this field to '0'. If the following fields are set to the pilot reference level adjustment values that the mobile station is to use for the transmission attributes (relative to Pilot\_Reference\_Level specified in [2]), the base station shall set this field to '1'.

RC3\_RC5\_20MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20 ms frame included indicator.

If Reverse Link Attribute adjustment Gain for Radio Configuration 3 or 5 of 20 ms frame is included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

RL\_ATT\_ADJ\_GAIN\_1500- Reverse Link Attribute Adjustment Gain for the transmission rate 1500 bits/s.

If RC3\_RC5\_20MS\_INCL is set to '0', the base station shall omit this field.

If RC3\_RC5\_20MS\_INCL is set to '1' and RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1500 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from -48 to 48 inclusive.

If RC3\_RC5\_20MS\_INCL is set to '1' and RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1500 bits/s, convolutional code and 20ms frame.

1		The base station shall set this field to the correction factor
2		expressed as a two's complement value in units of 0.125 dB.
3	RL_ATT_ADJ_GAIN_2700-	Reverse Link Attribute Adjustment Gain for the transmission
4		rate 2700 bits/s.
5		If RC3_RC5_20MS_INCL is set to '0', the base station shall
6		omit this field.
7		If RC3_RC5_20MS_INCL is set to '1' and
8		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
9		set this field to the value of the nominal attribute gain
10		adjustment that the mobile station is to make for the
11		transmission attributes with transmission rate 2700 bits/s,
12		convolutional code and 20ms frame. The base station shall
13		set the value in the range from -48 to 48 inclusive.
14		If RC3_RC5_20MS_INCL is set to '1' and
15		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
16		set this field to the value of the pilot reference level
17		adjustment that the mobile station is to make for the
18		transmission attributes with transmission rate 2700 bits/s,
19		convolutional code and 20ms frame.
20		The base station shall set this field to the correction factor
21		expressed as a two's complement value in units of 0.125 dB.
22	RL_ATT_ADJ_GAIN_4800-	Reverse Link Attribute Gain Adjustment for the transmission
23		rate 4800 bits/s.
24		If RC3_RC5_20MS_INCL is set to '0', the base station shall
25		omit this field.
26		If RC3_RC5_20MS_INCL is set to '1' and
27		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
28		set this field to the value of the nominal attribute gain
29		adjustment that the mobile station is to make for the
30		transmission attributes with transmission rate 4800 bits/s,
31		convolutional code and 20ms frame. The base station shall
32		set the value in the range from -48 to 48 inclusive.
33		If RC3_RC5_20MS_INCL is set to '1' and
34		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
35		set this field to the value of the pilot reference level
36		adjustment that the mobile station is to make for the
37		transmission attributes with transmission rate 4800 bits/s,
38		convolutional code and 20ms frame.
39		The base station shall set this field to the correction factor
40		expressed as a two's complement value in units of 0.125 dB.
41	RL_ATT_ADJ_GAIN_9600-	Reverse Link Attribute Gain Adjustment for the transmission
42		rate 9600 bits/s.
43		If RC3_RC5_20MS_INCL is set to '0', the base station shall
44		omit this field.

1		If RC3_RC5_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
3		set this field to the value of the nominal attribute gain
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 9600 bits/s,
6		convolutional code and 20ms frame. The base station shall
7		set the value in the range from -48 to 48 inclusive.
8		If RC3_RC5_20MS_INCL is set to '1' and
9		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
10		set this field to the value of the pilot reference level
11		adjustment that the mobile station is to make for the
12		transmission attributes with transmission rate 9600 bits/s,
13		convolutional code and 20ms frame.
14		The base station shall set this field to the correction factor
15		expressed as a two's complement value in units of 0.125 dB.
16	RC4_RC6_20MS_INCL -	Reverse Link Attribute Adjustment Gain for Radio
17		Configuration 4 or 6 of 20ms frame included indicator.
18		If Reverse Link Attribute Adjustment Gain for Radio
19		Configuration 4 or 6 of 20ms frame is included in this
20		message, the base station shall set this field to '1'; otherwise,
21		the base station shall set this field to '0'.
22	RL_ATT_ADJ_GAIN_1800-	Reverse Link Attribute Gain Adjustment for the transmission
23		rate 1800 bits/s.
24		If RC4_RC6_20MS_INCL is set to '0', the base station shall
25		omit this field.
26		If RC4_RC6_20MS_INCL is set to '1' and
27		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
28		set this field to the value of the nominal attribute gain
29		adjustment that the mobile station is to make for the
30		transmission attributes with transmission rate 1800 bits/s,
31		convolutional code and 20ms frame. The base station shall
32		set the value in the range from -48 to 48 inclusive.
33		If RC4_RC6_20MS_INCL is set to '1' and
34		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
35		set this field to the value of the pilot reference level
36		adjustment that the mobile station is to make for the
37		transmission attributes with transmission rate 1800 bits/s,
38		convolutional code and 20ms frame.
39		The base station shall set this field to the correction factor
40		expressed as a two's complement value in units of 0.125 dB.
41	RL_ATT_ADJ_GAIN_3600-	Reverse Link Attribute Adjustment Gain for the transmission
42		rate 3600 bits/s.
43		If RC4_RC6_20MS_INCL is set to '0', the base station shall
44		omit this field.

1		If RC4_RC6_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
3		set this field to the value of the nominal attribute gain
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 3600 bits/s,
6		convolutional code and 20ms frame. The base station shall
7		set the value in the range from -48 to 48 inclusive.
8		If RC4_RC6_20MS_INCL is set to '1' and
9		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
10		set this field to the value of the pilot reference level
11		adjustment that the mobile station is to make for the
12		transmission attributes with transmission rate 3600 bits/s,
13		convolutional code and 20ms frame.
14		The base station shall set this field to the correction factor
15		expressed as a two's complement value in units of 0.125 dB.
16	RL_ATT_ADJ_GAIN_7200-	Reverse Link Attribute Adjustment Gain for the transmission
17		rate 7200 bits/s.
18		If RC4_RC6_20MS_INCL is set to '0', the base station shall
19		omit this field.
20		If RC4_RC6_20MS_INCL is set to '1' and
21		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
22		set this field to the value of the nominal attribute gain
23		adjustment that the mobile station is to make for the
24		transmission attributes with transmission rate 7200 bits/s,
25		convolutional code and 20ms frame. The base station shall
26		set the value in the range from -48 to 48 inclusive.
27		If RC4_RC6_20MS_INCL is set to '1' and
28		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
29		this field to the value of the pilot reference level adjustment
30		that the mobile station is to make for the transmission
31		attributes with transmission rate 7200 bits/s, convolutional
32		code and 20ms frame.
33		The base station shall set this field to the correction factor
34		expressed as a two's complement value in units of 0.125 dB.
35	RL_ATT_ADJ_GAIN_14400-	Reverse Link Attribute Adjustment Gain for the transmission
36		rate 14400 bits/s.
37		If RC4_RC6_20MS_INCL is set to '0', the base station shall
38		omit this field.
39		If RC4_RC6_20MS_INCL is set to '1' and
40		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
41		set this field to the value of the nominal gain adjustment that
42		the mobile station is to make for the transmission attributes
43		with transmission rate 14400 bits/s, convolutional code and
44		20ms frame. The base station shall set the value in the range
45		from -48 to 48 inclusive.

1 If RC4\_RC6\_20MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 14400 bits/s,  
 6 convolutional code and 20ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 5MS\_INCL - 5ms frame Reverse Link Attribute Adjustment Gain included  
 10 indicator.

11 If Reverse Link Attribute Adjustment Gain for 5ms frame is  
 12 included in this message, the base station shall set this field  
 13 to '1'; otherwise, the base station shall set this field to '0'.

14 RL\_ATT\_ADJ\_GAIN\_9600\_5MS - Reverse Link Attribute Adjustment Gain for the  
 15 transmission rate 9600 bits/s with 5ms frame.

16 If 5MS\_INCL is set to '0', the base station shall omit this field.

17 If 5MS\_INCL is set to '1' and RL\_ATT\_ADJ\_GAIN\_TYPE is set  
 18 to '0', the base station shall set this field to the value of the  
 19 nominal attribute gain adjustment that the mobile station is  
 20 to make for the transmission attributes with transmission  
 21 rate 9600 bits/s, convolutional code and 5ms frame. The  
 22 base station shall set the value in the range from -48 to 48  
 23 inclusive.

24 If 5MS\_INCL is set to '1' and RL\_ATT\_ADJ\_GAIN\_TYPE is set  
 25 to '1', the base station shall set this field to the value of the  
 26 pilot reference level adjustment that the mobile station is to  
 27 make for the transmission attributes with transmission rate  
 28 9600 bits/s, convolutional code and 5ms frame.

29 The base station shall set this field to the correction factor  
 30 expressed as a two's complement value in units of 0.125 dB.

31 RC3\_RC5\_40MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 32 Configuration 3 or 5 of 40 ms frame included indicator.

33 If Reverse Link Attribute adjustment Gain for Radio  
 34 Configuration 3 or 5 of 40 ms frame is included in this  
 35 message, the base station shall set this field to '1'; otherwise,  
 36 the base station shall set this field to '0'.

37 RL\_ATT\_ADJ\_GAIN\_1350\_40MS - Reverse Link Attribute Adjustment Gain for the  
 38 transmission rate 1350 bits/s.

39 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 40 omit this field.

41 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 42 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 43 set this field to the value of the nominal attribute gain  
 44 adjustment that the mobile station is to make for the  
 45 transmission attributes with transmission rate 1350 bits/s,  
 46 convolutional code and 40ms frame. The base station shall  
 47 set the value in the range from -48 to 48 inclusive.



1 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 1350 bits/s,  
 6 convolutional code and 40ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_2400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 10 transmission rate 2400 bits/s.

11 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 2400 bits/s,  
 18 convolutional code and 40ms frame. The base station shall  
 19 set the value in the range from -48 to 48 inclusive.

20 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 22 set this field to the value of the pilot reference level  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 2400 bits/s,  
 25 convolutional code and 40ms frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_4800\_40MS - Reverse Link Attribute Gain Adjustment for the  
 29 transmission rate 4800 bits/s.

30 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 31 omit this field.

32 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 33 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 34 set this field to the value of the nominal attribute gain  
 35 adjustment that the mobile station is to make for the  
 36 transmission attributes with transmission rate 4800 bits/s,  
 37 convolutional code and 40ms frame. The base station shall  
 38 set the value in the range from -48 to 48 inclusive.

39 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 41 set this field to the value of the pilot reference level  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 4800 bits/s,  
 44 convolutional code and 40ms frame.

45 The base station shall set this field to the correction factor  
 46 expressed as a two's complement value in units of 0.125 dB.

47 RL\_ATT\_ADJ\_GAIN\_9600\_40MS - Reverse Link Attribute Gain Adjustment for the  
 48 transmission rate 9600 bits/s.

1 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
2 omit this field.

3 If RC3\_RC5\_40MS\_INCL is set to '1' and  
4 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
5 set this field to the value of the nominal attribute gain  
6 adjustment that the mobile station is to make for the  
7 transmission attributes with transmission rate 9600 bits/s,  
8 convolutional code and 40ms frame. The base station shall  
9 set the value in the range from -48 to 48 inclusive.

10 If RC3\_RC5\_40MS\_INCL is set to '1' and  
11 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
12 set this field to the value of the pilot reference level  
13 adjustment that the mobile station is to make for the  
14 transmission attributes with transmission rate 9600 bits/s,  
15 convolutional code and 40ms frame.

16 The base station shall set this field to the correction factor  
17 expressed as a two's complement value in units of 0.125 dB.

18 RC4\_RC6\_40MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
19 Configuration 4 or 6 of 40ms frame included indicator.

20 If Reverse Link Attribute Adjustment Gain for Radio  
21 Configuration 4 or 6 of 40ms frame is included in this  
22 message, the base station shall set this field to '1'; otherwise,  
23 the base station shall set this field to '0'.

24 RL\_ATT\_ADJ\_GAIN\_1800\_40MS - Reverse Link Attribute Gain Adjustment for the  
25 transmission rate 1800 bits/s.

26 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
27 omit this field.

28 If RC4\_RC6\_40MS\_INCL is set to '1' and  
29 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
30 set this field to the value of the nominal attribute gain  
31 adjustment that the mobile station is to make for the  
32 transmission attributes with transmission rate 1800 bits/s,  
33 convolutional code and 40ms frame. The base station shall  
34 set the value in the range from -48 to 48 inclusive.

35 If RC4\_RC6\_40MS\_INCL is set to '1' and  
36 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
37 set this field to the value of the pilot reference level  
38 adjustment that the mobile station is to make for the  
39 transmission attributes with transmission rate 1800 bits/s,  
40 convolutional code and 40ms frame.

41 The base station shall set this field to the correction factor  
42 expressed as a two's complement value in units of 0.125 dB.

43 RL\_ATT\_ADJ\_GAIN\_3600\_40MS - Reverse Link Attribute Adjustment Gain for the  
44 transmission rate 3600 bits/s.

45 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
46 omit this field.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 3 set this field to the value of the nominal attribute gain  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 3600 bits/s,  
 6 convolutional code and 40ms frame. The base station shall  
 7 set the value in the range from -48 to 48 inclusive.

8 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 9 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 10 set this field to the value of the pilot reference level  
 11 adjustment that the mobile station is to make for the  
 12 transmission attributes with transmission rate 3600 bits/s,  
 13 convolutional code and 40ms frame.

14 The base station shall set this field to the correction factor  
 15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_7200\_40MS - Reverse Link Attribute Adjustment Gain for the  
 17 transmission rate 7200 bits/s.

18 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 19 omit this field.

20 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 22 set this field to the value of the nominal attribute gain  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 7200 bits/s,  
 25 convolutional code and 40ms frame. The base station shall  
 26 set the value in the range from -48 to 48 inclusive.

27 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 28 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 29 this field to the value of the pilot reference level adjustment  
 30 that the mobile station is to make for the transmission  
 31 attributes with transmission rate 7200 bits/s, convolutional  
 32 code and 40ms frame.

33 The base station shall set this field to the correction factor  
 34 expressed as a two's complement value in units of 0.125 dB.

35 RL\_ATT\_ADJ\_GAIN\_14400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 36 transmission rate 14400 bits/s.

37 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 38 omit this field.

39 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 41 set this field to the value of the nominal gain adjustment that  
 42 the mobile station is to make for the transmission attributes  
 43 with transmission rate 14400 bits/s, convolutional code and  
 44 40ms frame. The base station shall set the value in the range  
 45 from -48 to 48 inclusive.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 14400 bits/s,  
 6 convolutional code and 40ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RC3\_RC5\_80MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 10 Configuration 3 or 5 of 80 ms frame included indicator.

11 If Reverse Link Attribute adjustment Gain for Radio  
 12 Configuration 3 or 5 of 80 ms frame is included in this  
 13 message, the base station shall set this field to '1'; otherwise,  
 14 the base station shall set this field to '0'.

15 RL\_ATT\_ADJ\_GAIN\_1200\_80MS - Reverse Link Attribute Adjustment Gain for the  
 16 transmission rate 1200 bits/s.

17 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 18 omit this field.

19 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 20 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 21 set this field to the value of the nominal attribute gain  
 22 adjustment that the mobile station is to make for the  
 23 transmission attributes with transmission rate 1200 bits/s,  
 24 convolutional code and 80ms frame. The base station shall  
 25 set the value in the range from -48 to 48 inclusive.

26 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 27 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 28 set this field to the value of the pilot reference level  
 29 adjustment that the mobile station is to make for the  
 30 transmission attributes with transmission rate 1200 bits/s,  
 31 convolutional code and 80ms frame.

32 The base station shall set this field to the correction factor  
 33 expressed as a two's complement value in units of 0.125 dB.

34 RL\_ATT\_ADJ\_GAIN\_2400\_80MS - Reverse Link Attribute Adjustment Gain for the  
 35 transmission rate 2400 bits/s.

36 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 37 omit this field.

38 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 39 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 40 set this field to the value of the nominal attribute gain  
 41 adjustment that the mobile station is to make for the  
 42 transmission attributes with transmission rate 2400 bits/s,  
 43 convolutional code and 80ms frame. The base station shall  
 44 set the value in the range from -48 to 48 inclusive.

1 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 2400 bits/s,  
 6 convolutional code and 80ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_4800\_80MS - Reverse Link Attribute Gain Adjustment for the  
 10 transmission rate 4800 bits/s.

11 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 4800 bits/s,  
 18 convolutional code and 80ms frame. The base station shall  
 19 set the value in the range from -48 to 48 inclusive.

20 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 22 set this field to the value of the pilot reference level  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 4800 bits/s,  
 25 convolutional code and 80ms frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_9600\_80MS - Reverse Link Attribute Gain Adjustment for the  
 29 transmission rate 9600 bits/s.

30 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 31 omit this field.

32 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 33 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 34 set this field to the value of the nominal attribute gain  
 35 adjustment that the mobile station is to make for the  
 36 transmission attributes with transmission rate 9600 bits/s,  
 37 convolutional code and 80ms frame. The base station shall  
 38 set the value in the range from -48 to 48 inclusive.

39 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 41 set this field to the value of the pilot reference level  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 9600 bits/s,  
 44 convolutional code and 80ms frame.

45 The base station shall set this field to the correction factor  
 46 expressed as a two's complement value in units of 0.125 dB.

47 RC4\_RC6\_80MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 48 Configuration 4 or 6 of 80ms frame included indicator.

1 If Reverse Link Attribute Adjustment Gain for Radio  
2 Configuration 4 or 6 of 80ms frame is included in this  
3 message, the base station shall set this field to '1'; otherwise,  
4 the base station shall set this field to '0'.

5 RL\_ATT\_ADJ\_GAIN\_1800\_80MS - Reverse Link Attribute Gain Adjustment for the  
6 transmission rate 1800 bits/s.

7 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
8 omit this field.

9 If RC4\_RC6\_80MS\_INCL is set to '1' and  
10 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
11 set this field to the value of the nominal attribute gain  
12 adjustment that the mobile station is to make for the  
13 transmission attributes with transmission rate 1800 bits/s,  
14 convolutional code and 80ms frame. The base station shall  
15 set the value in the range from -48 to 48 inclusive.

16 If RC4\_RC6\_80MS\_INCL is set to '1' and  
17 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
18 set this field to the value of the pilot reference level  
19 adjustment that the mobile station is to make for the  
20 transmission attributes with transmission rate 1800 bits/s,  
21 convolutional code and 80ms frame.

22 The base station shall set this field to the correction factor  
23 expressed as a two's complement value in units of 0.125 dB.

24 RL\_ATT\_ADJ\_GAIN\_3600\_80MS - Reverse Link Attribute Adjustment Gain for the  
25 transmission rate 3600 bits/s.

26 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
27 omit this field.

28 If RC4\_RC6\_80MS\_INCL is set to '1' and  
29 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
30 set this field to the value of the nominal attribute gain  
31 adjustment that the mobile station is to make for the  
32 transmission attributes with transmission rate 3600 bits/s,  
33 convolutional code and 80ms frame. The base station shall  
34 set the value in the range from -48 to 48 inclusive.

35 If RC4\_RC6\_80MS\_INCL is set to '1' and  
36 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
37 set this field to the value of the pilot reference level  
38 adjustment that the mobile station is to make for the  
39 transmission attributes with transmission rate 3600 bits/s,  
40 convolutional code and 80ms frame.

41 The base station shall set this field to the correction factor  
42 expressed as a two's complement value in units of 0.125 dB.

43 RL\_ATT\_ADJ\_GAIN\_7200\_80MS - Reverse Link Attribute Adjustment Gain for the  
44 transmission rate 7200 bits/s.

45 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
46 omit this field.

1		If RC4_RC6_80MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
3		set this field to the value of the nominal attribute gain
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 7200 bits/s,
6		convolutional code and 80ms frame. The base station shall
7		set the value in the range from -48 to 48 inclusive.
8		If RC4_RC6_80MS_INCL is set to '1' and
9		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
10		this field to the value of the pilot reference level adjustment
11		that the mobile station is to make for the transmission
12		attributes with transmission rate 7200 bits/s, convolutional
13		code and 80ms frame.
14		The base station shall set this field to the correction factor
15		expressed as a two's complement value in units of 0.125 dB.
16	RL_ATT_ADJ_GAIN_14400_80MS	- Reverse Link Attribute Adjustment Gain for the
17		transmission rate 14400 bits/s.
18		If RC4_RC6_80MS_INCL is set to '0', the base station shall
19		omit this field.
20		If RC4_RC6_80MS_INCL is set to '1' and
21		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
22		set this field to the value of the nominal gain adjustment that
23		the mobile station is to make for the transmission attributes
24		with transmission rate 14400 bits/s, convolutional code and
25		80ms frame. The base station shall set the value in the range
26		from -48 to 48 inclusive.
27		If RC4_RC6_40MS_INCL is set to '1' and
28		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
29		set this field to the value of the pilot reference level
30		adjustment that the mobile station is to make for the
31		transmission attributes with transmission rate 14400 bits/s,
32		convolutional code and 80ms frame.
33		The base station shall set this field to the correction factor
34		expressed as a two's complement value in units of 0.125 dB.
35	RESERVED	- Reserved bits.
36		The base station shall add reserved bits as needed in order to
37		make the length of the entire record equal to an integer
38		number of octets. The base station shall set these bits to '0'.
39	If RPC_ADJ_REC_TYPE is equal to '0010', the base station shall set type-specific fields as	
40	specified in Table 3.7.5.20-6.	

**Table 3.7.5.20-6. Type Specific Fields for RECORD\_TYPE  
= '0010'**

<b>Fields</b>	<b>Length (Bits)</b>
CODE_TYPE	1
RL_ATT_ADJ_GAIN_TYPE	1
RC3_RC5_20MS_INCL	1
RL_ATT_ADJ_GAIN_19200	0 or 8
RL_ATT_ADJ_GAIN_38400	0 or 8
RL_ATT_ADJ_GAIN_76800	0 or 8
RL_ATT_ADJ_GAIN_153600	0 or 8
RL_ATT_ADJ_GAIN_307200	0 or 8
RL_ATT_ADJ_GAIN_614400	0 or 8
RC4_RC6_20MS_INCL	1
RL_ATT_ADJ_GAIN_28800	0 or 8
RL_ATT_ADJ_GAIN_57600	0 or 8
RL_ATT_ADJ_GAIN_115200	0 or 8
RL_ATT_ADJ_GAIN_230400	0 or 8
RL_ATT_ADJ_GAIN_460800	0 or 8
RL_ATT_ADJ_GAIN_1036800	0 or 8
RC3_RC5_40MS_INCL	1
RL_ATT_ADJ_GAIN_19200_40MS	0 or 8
RL_ATT_ADJ_GAIN_38400_40MS	0 or 8
RL_ATT_ADJ_GAIN_76800_40MS	0 or 8
RL_ATT_ADJ_GAIN_153600_40MS	0 or 8
RL_ATT_ADJ_GAIN_307200_40MS	0 or 8
RC4_RC6_40MS_INCL	1
RL_ATT_ADJ_GAIN_28800_40MS	0 or 8
RL_ATT_ADJ_GAIN_57600_40MS	0 or 8
RL_ATT_ADJ_GAIN_115200_40MS	0 or 8

(continues on next page)



Fields	Length (Bits)
RL_ATT_ADJ_GAIN_230400_40MS	0 or 8
RL_ATT_ADJ_GAIN_518400_40MS	0 or 8
RC3_RC5_80MS_INCL	1
RL_ATT_ADJ_GAIN_19200_80MS	0 or 8
RL_ATT_ADJ_GAIN_38400_80MS	0 or 8
RL_ATT_ADJ_GAIN_76800_80MS	0 or 8
RL_ATT_ADJ_GAIN_153600_80MS	0 or 8
RC4_RC6_80MS_INCL	1
RL_ATT_ADJ_GAIN_28800_80MS	0 or 8
RL_ATT_ADJ_GAIN_57600_80MS	0 or 8
RL_ATT_ADJ_GAIN_115200_80MS	0 or 8
RL_ATT_ADJ_GAIN_259200_80MS	0 or 8

RESERVED	0-7 (if needed)
----------	-----------------

1

2

3           CODE\_TYPE    -   Coding type indicator.

4                               If the following corresponding gain adjustment fields apply for  
5                               the convolucional code, the base station shall set this field to  
6                               '0'. If the following corresponding gain adjustment fields  
7                               apply for the Turbo code, the base station shall set this field  
8                               to '1'.

9   RL\_ATT\_ADJ\_GAIN\_TYPE   -   Reverse Link Attribute adjustment Gain value type  
10 indicator.

11                            If the following corresponding gain adjustment fields are set  
12                            to the value of the nominal attribute gain adjustment that the  
13                            mobile station is to make for the corresponding transmission  
14                            attributes (relative to Nominal\_Attribute\_Gain specified in  
15                            [2]), the base station shall set this field to '0'. If the following  
16                            corresponding gain adjustment fields are set to the value of  
17                            the pilot reference level adjustment that the mobile station is  
18                            to use for the corresponding transmission attributes (relative  
19                            to Pilot\_Reference\_Level specified in [2]), the base station  
20                            shall set this field to '1'.

21   RC3\_RC5\_20MS\_INCL   -   Reverse Link Attribute Adjustment Gain for Radio  
22                               Configuration 3 or 5 of 20ms frame included indicator.

23                            If Reverse Link Attribute Adjustment Gain for Radio  
24                            Configuration 3 or 5 of 20ms frame is included in this  
25                            message, the base station shall set this field to '1'; otherwise,  
26                            the base station shall set this field to '0'.

1	RL_ATT_ADJ_GAIN_19200	- Reverse Link Attribute Adjustment Gain for the
2		transmission rate 19200 bits/s.
3		If RC3_RC5_20MS_INCL is set to '0', the base station shall
4		omit this field.
5		If RC3_RC5_20MS_INCL is set to '1' and
6		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
7		set this field to the value of the nominal attribute gain
8		adjustment that the mobile station is to make for the
9		transmission attributes with transmission rate 19200 bits/s,
10		and 20ms frame. The base station shall set the value in the
11		range from -48 to 48 inclusive.
12		If RC3_RC5_20MS_INCL is set to '1' and
13		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
14		set this field to the value of the pilot reference level
15		adjustment that the mobile station is to make for the
16		transmission attributes with transmission rate 19200 bits/s
17		and 20ms frame.
18		The base station shall set this field to the correction factor
19		expressed as a two's complement value in units of 0.125 dB.
20	RL_ATT_ADJ_GAIN_38400	- Reverse Link Attribute Adjustment Gain for the
21		transmission rate 38400 bits/s.
22		If RC3_RC5_20MS_INCL is set to '0', the base station shall
23		omit this field.
24		If RC3_RC5_20MS_INCL is set to '1' and
25		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
26		set this field to the value of the nominal attribute gain
27		adjustment that the mobile station is to make for the
28		transmission attributes with transmission rate 38400 bits/s,
29		and 20ms frame. The base station shall set the value in the
30		range from -48 to 48 inclusive.
31		If RC3_RC5_20MS_INCL is set to '1' and
32		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
33		this field to the value of the pilot reference level adjustment
34		that the mobile station is to make for the transmission
35		attributes with transmission rate 38400 bits/s and 20ms
36		frame.
37		The base station shall set this field to the correction factor
38		expressed as a two's complement value in units of 0.125 dB.
39	RL_ATT_ADJ_GAIN_76800	- Reverse Link Attribute Adjustment Gain for the
40		transmission rate 76800 bits/s.
41		If RC3_RC5_20MS_INCL is set to '0', the base station shall
42		omit this field.

1 If RC3\_RC5\_20MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 3 set this field to the value of the nominal attribute gain  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 76800 bits/s,  
 6 and 20ms frame. The base station shall set the value in the  
 7 range from -48 to 48 inclusive.

8 If RC3\_RC5\_20MS\_INCL is set to '1' and  
 9 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 10 set this field to the value of the pilot reference level  
 11 adjustment that the mobile station is to make for the  
 12 transmission attributes with transmission rate 76800 bits/s  
 13 and 20ms frame.

14 The base station shall set this field to the correction factor  
 15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_153600 - Reverse Link Attribute Adjustment Gain for the  
 17 transmission rate 153600 bits/s.

18 If RC3\_RC5\_20MS\_INCL is set to '0', the base station shall  
 19 omit this field.

20 If RC3\_RC5\_20MS\_INCL is set to '1' and  
 21 NORM\_ATT\_GAIN\_TYPE is set to '0', the base station shall set  
 22 this field to the value of the nominal attribute gain  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 153600  
 25 bits/s, and 20ms frame. The base station shall set the value  
 26 in the range from -48 to 48 inclusive.

27 If RC3\_RC5\_20MS\_INCL is set to '1' and  
 28 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 29 this field to the value of the pilot reference level adjustment  
 30 that the mobile station is to make for the transmission  
 31 attributes with transmission rate 153600 bits/s and 20ms  
 32 frame.

33 The base station shall set this field to the correction factor  
 34 expressed as a two's complement value in units of 0.125 dB.

35 RL\_ATT\_ADJ\_GAIN\_307200 - Reverse Link Attribute Adjustment Gain for the  
 36 transmission rate 307200 bits/s.

37 If RC3\_RC5\_20MS\_INCL is set to '0', the base station shall  
 38 omit this field.

39 If RC3\_RC5\_20MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 41 set this field to the value of the nominal attribute gain  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 307200  
 44 bits/s, and 20ms frame. The base station shall set the value  
 45 in the range from -48 to 48 inclusive.

1		If RC3_RC5_20MS_INCL is set to '1' and
2		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
3		set this field to the value of the pilot reference level
4		adjustment that the mobile station is to make for the
5		transmission attributes with transmission rate 307200 bits/s
6		and 20ms frame.
7		The base station shall set this field to the correction factor
8		expressed as a two's complement value in units of 0.125 dB.
9	RL_ATT_ADJ_GAIN_614400	- Reverse Link Attribute Adjustment Gain for the
10		transmission rate 614400 bits/s.
11		If RC3_RC5_20MS_INCL is set to '0', the base station shall
12		omit this field.
13		If RC3_RC5_20MS_INCL is set to '1' and
14		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
15		set this field to the value of the nominal attribute gain
16		adjustment that the mobile station is to make for the
17		transmission attributes with transmission rate 614400
18		bits/s, and 20ms frame. The base station shall set the value
19		in the range from -48 to 48 inclusive.
20		If RC3_RC5_20MS_INCL is set to '1' and
21		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
22		set this field to the value of the pilot reference level
23		adjustment that the mobile station is to make for the
24		transmission attributes with transmission rate 614400 bits/s
25		and 20ms frame.
26		The base station shall set this field to the correction factor
27		expressed as a two's complement value in units of 0.125 dB.
28	RC4_RC6_20MS_INCL	- Reverse Link Attribute Adjustment Gain for Radio
29		Configuration 4 or 6 of 20ms frame included indicator.
30		If Reverse Link Attribute Adjustment Gain for Radio
31		Configuration 4 or 6 of 20ms frame is included in this
32		message, the base station shall set this field to '1'; otherwise,
33		the base station shall set this field to '0'.
34	RL_ATT_ADJ_GAIN_28800	- Reverse Link Attribute Adjustment Gain for the
35		transmission rate 28800 bits/s.
36		If RC4_RC6_20MS_INCL is set to '0', the base station shall
37		omit this field.
38		If RC4_RC6_20MS_INCL is set to '1' and
39		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
40		set this field to the value of the nominal attribute gain
41		adjustment that the mobile station is to make for the
42		transmission attributes with transmission rate 28800 bits/s,
43		and 20ms frame. The base station shall set the value in the
44		range from -48 to 48 inclusive.

1		If RC4_RC6_20MS_INCL is set to '1' and
2		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
3		this field to the value of the pilot reference level adjustment
4		that the mobile station is to make for the transmission
5		attributes with transmission rate 28800 bits/s and 20ms
6		frame.
7		The base station shall set this field to the correction factor
8		expressed as a two's complement value in units of 0.125 dB.
9	RL_ATT_ADJ_GAIN_57600	- Reverse Link Attribute Adjustment Gain for the
10		transmission rate 57600 bits/s.
11		If RC4_RC6_20MS_INCL is set to '0', the base station shall
12		omit this field.
13		If RC4_RC6_20MS_INCL is set to '1' and
14		NORM_ATT_GAIN_TYPE is set to '0', the base station shall set
15		this field to the value of the nominal attribute gain
16		adjustment that the mobile station is to make for the
17		transmission attributes with transmission rate 57600 bits/s,
18		and 20ms frame. The base station shall set the value in the
19		range from -48 to 48 inclusive.
20		If RC4_RC6_20MS_INCL is set to '1' and
21		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
22		this field to the value of the pilot reference level adjustment
23		that the mobile station is to make for the transmission
24		attributes with transmission rate 57600 bits/s and 20ms
25		frame.
26		The base station shall set this field to the correction factor
27		expressed as a two's complement value in units of 0.125 dB.
28	RL_ATT_ADJ_GAIN_115200	- Reverse Link Attribute Adjustment Gain for the
29		transmission rate 115200 bits/s.
30		If RC4_RC6_20MS_INCL is set to '0', the base station shall
31		omit this field.
32		If RC4_RC6_20MS_INCL is set to '1' and
33		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
34		set this field to the value of the nominal attribute gain
35		adjustment that the mobile station is to make for the
36		transmission attributes with transmission rate 115200
37		bits/s, and 20ms frame. The base station shall set the value
38		in the range from -48 to 48 inclusive.
39		If RC4_RC6_20MS_INCL is set to '1' and
40		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
41		set this field to the value of the pilot reference level
42		adjustment that the mobile station is to make for the
43		transmission attributes with transmission rate 115200 bits/s
44		and 20ms frame.
45		The base station shall set this field to the correction factor
46		expressed as a two's complement value in units of 0.125 dB.
47	RL_ATT_ADJ_GAIN_230400	- Reverse Link Attribute Adjustment Gain for the
48		transmission rate 230400 bits/s.

1 If RC4\_RC6\_20MS\_INCL is set to '0', the base station shall  
2 omit this field.

3 If RC4\_RC6\_20MS\_INCL is set to '1' and  
4 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
5 set this field to the value of the nominal attribute gain  
6 adjustment that the mobile station is to make for the  
7 transmission attributes with transmission rate 230400  
8 bits/s, and 20ms frame. The base station shall set the value  
9 in the range from -48 to 48 inclusive.

10 If RC4\_RC6\_20MS\_INCL is set to '1' and  
11 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
12 set this field to the value of the pilot reference level  
13 adjustment that the mobile station is to make for the  
14 transmission attributes with transmission rate 230400 bits/s  
15 and 20ms frame.

16 The base station shall set this field to the correction factor  
17 expressed as a two's complement value in units of 0.125 dB.

18 RL\_ATT\_ADJ\_GAIN\_460800 - Reverse Link Attribute Adjustment Gain for the  
19 transmission rate 460800 bits/s.

20 If RC4\_RC6\_20MS\_INCL is set to '0', the base station shall  
21 omit this field.

22 If RC4\_RC6\_20MS\_INCL is set to '1' and  
23 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
24 set this field to the value of the nominal attribute gain  
25 adjustment that the mobile station is to make for the  
26 transmission attributes with transmission rate 460800  
27 bits/s, and 20ms frame. The base station shall set the value  
28 in the range from -48 to 48 inclusive.

29 If RC4\_RC6\_20MS\_INCL is set to '1' and  
30 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
31 set this field to the value of the pilot reference level  
32 adjustment that the mobile station is to make for the  
33 transmission attributes with transmission rate 460800 bits/s  
34 and 20ms frame.

35 The base station shall set this field to the correction factor  
36 expressed as a two's complement value in units of 0.125 dB.

37 RL\_ATT\_ADJ\_GAIN\_1036800- Reverse Link Attribute Adjustment Gain for the  
38 transmission rate 1036800 bits/s.

39 If RC4\_RC6\_20MS\_INCL is set to '0', the base station shall  
40 omit this field.

41 If RC4\_RC6\_20MS\_INCL is set to '1' and  
42 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
43 set this field to the value of the nominal attribute gain  
44 adjustment that the mobile station is to make for the  
45 transmission attributes with transmission rate 1036800  
46 bits/s, and 20ms frame. The base station shall set the value  
47 in the range from -48 to 48 inclusive.

1 If RC4\_RC6\_20MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 1306800  
 6 bits/s and 20ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RC3\_RC5\_40MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 10 Configuration 3 or 5 of 40ms frame included indicator.

11 If Reverse Link Attribute Adjustment Gain for Radio  
 12 Configuration 3 or 5 of 40ms frame is included in this  
 13 message, the base station shall set this field to '1'; otherwise,  
 14 the base station shall set this field to '0'.

15 RL\_ATT\_ADJ\_GAIN\_19200\_40MS - Reverse Link Attribute Adjustment Gain for the  
 16 transmission rate 19200 bits/s.

17 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 18 omit this field.

19 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 20 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 21 set this field to the value of the nominal attribute gain  
 22 adjustment that the mobile station is to make for the  
 23 transmission attributes with transmission rate 19200 bits/s,  
 24 and 40ms frame. The base station shall set the value in the  
 25 range from -48 to 48 inclusive.

26 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 27 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 28 set this field to the value of the pilot reference level  
 29 adjustment that the mobile station is to make for the  
 30 transmission attributes with transmission rate 19200 bits/s  
 31 and 40ms frame.

32 The base station shall set this field to the correction factor  
 33 expressed as a two's complement value in units of 0.125 dB.

34 RL\_ATT\_ADJ\_GAIN\_38400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 35 transmission rate 38400 bits/s.

36 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
 37 omit this field.

38 If RC3\_RC5\_40MS\_INCL is set to '1' and  
 39 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 40 set this field to the value of the nominal attribute gain  
 41 adjustment that the mobile station is to make for the  
 42 transmission attributes with transmission rate 38400 bits/s,  
 43 and 40ms frame. The base station shall set the value in the  
 44 range from -48 to 48 inclusive.

1 If RC3\_RC5\_20MS\_INCL is set to '1' and  
2 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
3 this field to the value of the pilot reference level adjustment  
4 that the mobile station is to make for the transmission  
5 attributes with transmission rate 38400 bits/s and 40ms  
6 frame.

7 The base station shall set this field to the correction factor  
8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_76800\_40MS - Reverse Link Attribute Adjustment Gain for the  
10 transmission rate 76800 bits/s.

11 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
12 omit this field.

13 If RC3\_RC5\_40MS\_INCL is set to '1' and  
14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
15 set this field to the value of the nominal attribute gain  
16 adjustment that the mobile station is to make for the  
17 transmission attributes with transmission rate 76800 bits/s,  
18 and 40ms frame. The base station shall set the value in the  
19 range from -48 to 48 inclusive.

20 If RC3\_RC5\_40MS\_INCL is set to '1' and  
21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
22 set this field to the value of the pilot reference level  
23 adjustment that the mobile station is to make for the  
24 transmission attributes with transmission rate 76800 bits/s  
25 and 40ms frame.

26 The base station shall set this field to the correction factor  
27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_153600\_40MS - Reverse Link Attribute Adjustment Gain for the  
29 transmission rate 153600 bits/s.

30 If RC3\_RC5\_40MS\_INCL is set to '0', the base station shall  
31 omit this field.

32 If RC3\_RC5\_40MS\_INCL is set to '1' and  
33 NORM\_ATT\_GAIN\_TYPE is set to '0', the base station shall set  
34 this field to the value of the nominal attribute gain  
35 adjustment that the mobile station is to make for the  
36 transmission attributes with transmission rate 153600  
37 bits/s, and 40ms frame. The base station shall set the value  
38 in the range from -48 to 48 inclusive.

39 If RC3\_RC5\_40MS\_INCL is set to '1' and  
40 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
41 this field to the value of the pilot reference level adjustment  
42 that the mobile station is to make for the transmission  
43 attributes with transmission rate 153600 bits/s and 40ms  
44 frame.

45 The base station shall set this field to the correction factor  
46 expressed as a two's complement value in units of 0.125 dB.

47 RL\_ATT\_ADJ\_GAIN\_307200\_40MS - Reverse Link Attribute Adjustment Gain for the  
48 transmission rate 307200 bits/s.



1		If RC3_RC5_40MS_INCL is set to '0', the base station shall
2		omit this field.
3		If RC3_RC5_40MS_INCL is set to '1' and
4		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
5		set this field to the value of the nominal attribute gain
6		adjustment that the mobile station is to make for the
7		transmission attributes with transmission rate 307200
8		bits/s, and 40ms frame. The base station shall set the value
9		in the range from -48 to 48 inclusive.
10		If RC3_RC5_40MS_INCL is set to '1' and
11		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
12		set this field to the value of the pilot reference level
13		adjustment that the mobile station is to make for the
14		transmission attributes with transmission rate 307200 bits/s
15		and 40ms frame.
16		The base station shall set this field to the correction factor
17		expressed as a two's complement value in units of 0.125 dB.
18	RC4_RC6_40MS_INCL	- Reverse Link Attribute Adjustment Gain for Radio
19		Configuration 4 or 6 of 40ms frame included indicator.
20		If Reverse Link Attribute Adjustment Gain for Radio
21		Configuration 4 or 6 of 40ms frame is included in this
22		message, the base station shall set this field to '1'; otherwise,
23		the base station shall set this field to '0'.
24	RL_ATT_ADJ_GAIN_28800_40MS	- Reverse Link Attribute Adjustment Gain for the
25		transmission rate 28800 bits/s.
26		If RC4_RC6_40MS_INCL is set to '0', the base station shall
27		omit this field.
28		If RC4_RC6_40MS_INCL is set to '1' and
29		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
30		set this field to the value of the nominal attribute gain
31		adjustment that the mobile station is to make for the
32		transmission attributes with transmission rate 28800 bits/s,
33		and 40ms frame. The base station shall set the value in the
34		range from -48 to 48 inclusive.
35		If RC4_RC6_40MS_INCL is set to '1' and
36		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
37		this field to the value of the pilot reference level adjustment
38		that the mobile station is to make for the transmission
39		attributes with transmission rate 28800 bits/s and 40ms
40		frame.
41		The base station shall set this field to the correction factor
42		expressed as a two's complement value in units of 0.125 dB.
43	RL_ATT_ADJ_GAIN_57600_40MS	- Reverse Link Attribute Adjustment Gain for the
44		transmission rate 57600 bits/s.
45		If RC4_RC6_40MS_INCL is set to '0', the base station shall
46		omit this field.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
2 NORM\_ATT\_GAIN\_TYPE is set to '0', the base station shall set  
3 this field to the value of the nominal attribute gain  
4 adjustment that the mobile station is to make for the  
5 transmission attributes with transmission rate 57600 bits/s,  
6 and 40ms frame. The base station shall set the value in the  
7 range from -48 to 48 inclusive.

8 If RC4\_RC6\_40MS\_INCL is set to '1' and  
9 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
10 this field to the value of the pilot reference level adjustment  
11 that the mobile station is to make for the transmission  
12 attributes with transmission rate 57600 bits/s and 40ms  
13 frame.

14 The base station shall set this field to the correction factor  
15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_115200\_40MS - Reverse Link Attribute Adjustment Gain for the  
17 transmission rate 115200 bits/s.

18 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
19 omit this field.

20 If RC4\_RC6\_40MS\_INCL is set to '1' and  
21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
22 set this field to the value of the nominal attribute gain  
23 adjustment that the mobile station is to make for the  
24 transmission attributes with transmission rate 115200  
25 bits/s, and 40ms frame. The base station shall set the value  
26 in the range from -48 to 48 inclusive.

27 If RC4\_RC6\_40MS\_INCL is set to '1' and  
28 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
29 set this field to the value of the pilot reference level  
30 adjustment that the mobile station is to make for the  
31 transmission attributes with transmission rate 115200 bits/s  
32 and 40ms frame.

33 The base station shall set this field to the correction factor  
34 expressed as a two's complement value in units of 0.125 dB.

35 RL\_ATT\_ADJ\_GAIN\_230400\_40MS - Reverse Link Attribute Adjustment Gain for the  
36 transmission rate 230400 bits/s.

37 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
38 omit this field.

39 If RC4\_RC6\_40MS\_INCL is set to '1' and  
40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
41 set this field to the value of the nominal attribute gain  
42 adjustment that the mobile station is to make for the  
43 transmission attributes with transmission rate 230400  
44 bits/s, and 40ms frame. The base station shall set the value  
45 in the range from -48 to 48 inclusive.

1 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 230400 bits/s  
 6 and 40ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_518400\_40MS - Reverse Link Attribute Adjustment Gain for the  
 10 transmission rate 518400 bits/s.

11 If RC4\_RC6\_40MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 518400  
 18 bits/s, and 40ms frame. The base station shall set the value  
 19 in the range from -48 to 48 inclusive.

20 If RC4\_RC6\_40MS\_INCL is set to '1' and  
 21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 22 set this field to the value of the pilot reference level  
 23 adjustment that the mobile station is to make for the  
 24 transmission attributes with transmission rate 518400 bits/s  
 25 and 40ms frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RC3\_RC5\_80MS\_INCL - Reverse Link Attribute Adjustment Gain for Radio  
 29 Configuration 3 or 5 of 80ms frame included indicator.

30 If Reverse Link Attribute Adjustment Gain for Radio  
 31 Configuration 3 or 5 of 80ms frame is included in this  
 32 message, the base station shall set this field to '1'; otherwise,  
 33 the base station shall set this field to '0'.

34 RL\_ATT\_ADJ\_GAIN\_19200\_80MS - Reverse Link Attribute Adjustment Gain for the  
 35 transmission rate 19200 bits/s.

36 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 37 omit this field.

38 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 39 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 40 set this field to the value of the nominal attribute gain  
 41 adjustment that the mobile station is to make for the  
 42 transmission attributes with transmission rate 19200 bits/s,  
 43 and 80ms frame. The base station shall set the value in the  
 44 range from -48 to 48 inclusive.

1 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 19200 bits/s  
 6 and 80ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RL\_ATT\_ADJ\_GAIN\_38400\_80MS - Reverse Link Attribute Adjustment Gain for the  
 10 transmission rate 38400 bits/s.

11 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 12 omit this field.

13 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 14 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 15 set this field to the value of the nominal attribute gain  
 16 adjustment that the mobile station is to make for the  
 17 transmission attributes with transmission rate 38400 bits/s,  
 18 and 80ms frame. The base station shall set the value in the  
 19 range from -48 to 48 inclusive.

20 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 21 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
 22 this field to the value of the pilot reference level adjustment  
 23 that the mobile station is to make for the transmission  
 24 attributes with transmission rate 38400 bits/s and 80ms  
 25 frame.

26 The base station shall set this field to the correction factor  
 27 expressed as a two's complement value in units of 0.125 dB.

28 RL\_ATT\_ADJ\_GAIN\_76800\_80MS - Reverse Link Attribute Adjustment Gain for the  
 29 transmission rate 76800 bits/s.

30 If RC3\_RC5\_80MS\_INCL is set to '0', the base station shall  
 31 omit this field.

32 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 33 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
 34 set this field to the value of the nominal attribute gain  
 35 adjustment that the mobile station is to make for the  
 36 transmission attributes with transmission rate 76800 bits/s,  
 37 and 80ms frame. The base station shall set the value in the  
 38 range from -48 to 48 inclusive.

39 If RC3\_RC5\_80MS\_INCL is set to '1' and  
 40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 41 set this field to the value of the pilot reference level  
 42 adjustment that the mobile station is to make for the  
 43 transmission attributes with transmission rate 76800 bits/s  
 44 and 80ms frame.

45 The base station shall set this field to the correction factor  
 46 expressed as a two's complement value in units of 0.125 dB.

47 RL\_ATT\_ADJ\_GAIN\_153600\_80MS - Reverse Link Attribute Adjustment Gain for the  
 48 transmission rate 153600 bits/s.

1		If RC3_RC5_80MS_INCL is set to '0', the base station shall
2		omit this field.
3		If RC3_RC5_80MS_INCL is set to '1' and
4		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
5		set this field to the value of the nominal attribute gain
6		adjustment that the mobile station is to make for the
7		transmission attributes with transmission rate 153600
8		bits/s, and 80ms frame. The base station shall set the value
9		in the range from -48 to 48 inclusive.
10		If RC3_RC5_80MS_INCL is set to '1' and
11		RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
12		set this field to the value of the pilot reference level
13		adjustment that the mobile station is to make for the
14		transmission attributes with transmission rate 153600 bits/s
15		and 80ms frame.
16		The base station shall set this field to the correction factor
17		expressed as a two's complement value in units of 0.125 dB.
18	RC4_RC6_80MS_INCL	- Reverse Link Attribute Adjustment Gain for Radio
19		Configuration 4 or 6 of 80ms frame included indicator.
20		If Reverse Link Attribute Adjustment Gain for Radio
21		Configuration 4 or 6 of 80ms frame is included in this
22		message, the base station shall set this field to '1'; otherwise,
23		the base station shall set this field to '0'.
24	RL_ATT_ADJ_GAIN_28800_80MS	- Reverse Link Attribute Adjustment Gain for the
25		transmission rate 28800 bits/s.
26		If RC4_RC6_80MS_INCL is set to '0', the base station shall
27		omit this field.
28		If RC4_RC6_80MS_INCL is set to '1' and
29		RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall
30		set this field to the value of the nominal attribute gain
31		adjustment that the mobile station is to make for the
32		transmission attributes with transmission rate 28800 bits/s,
33		and 80ms frame. The base station shall set the value in the
34		range from -48 to 48 inclusive.
35		If RC4_RC6_80MS_INCL is set to '1' and
36		NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
37		this field to the value of the pilot reference level adjustment
38		that the mobile station is to make for the transmission
39		attributes with transmission rate 28800 bits/s and 80ms
40		frame.
41		The base station shall set this field to the correction factor
42		expressed as a two's complement value in units of 0.125 dB.
43	RL_ATT_ADJ_GAIN_57600_80MS	- Reverse Link Attribute Adjustment Gain for the
44		transmission rate 57600 bits/s.
45		If RC4_RC6_80MS_INCL is set to '0', the base station shall
46		omit this field.

1 If RC4\_RC6\_80MS\_INCL is set to '1' and  
2 NORM\_ATT\_GAIN\_TYPE is set to '0', the base station shall set  
3 this field to the value of the nominal attribute gain  
4 adjustment that the mobile station is to make for the  
5 transmission attributes with transmission rate 57600 bits/s,  
6 and 80ms frame. The base station shall set the value in the  
7 range from -48 to 48 inclusive.

8 If RC4\_RC6\_80MS\_INCL is set to '1' and  
9 NORM\_ATT\_GAIN\_TYPE is set to '1', the base station shall set  
10 this field to the value of the pilot reference level adjustment  
11 that the mobile station is to make for the transmission  
12 attributes with transmission rate 57600 bits/s and 80ms  
13 frame.

14 The base station shall set this field to the correction factor  
15 expressed as a two's complement value in units of 0.125 dB.

16 RL\_ATT\_ADJ\_GAIN\_115200\_80MS - Reverse Link Attribute Adjustment Gain for the  
17 transmission rate 115200 bits/s.

18 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
19 omit this field.

20 If RC4\_RC6\_80MS\_INCL is set to '1' and  
21 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
22 set this field to the value of the nominal attribute gain  
23 adjustment that the mobile station is to make for the  
24 transmission attributes with transmission rate 115200  
25 bits/s, and 80ms frame. The base station shall set the value  
26 in the range from -48 to 48 inclusive.

27 If RC4\_RC6\_80MS\_INCL is set to '1' and  
28 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
29 set this field to the value of the pilot reference level  
30 adjustment that the mobile station is to make for the  
31 transmission attributes with transmission rate 115200 bits/s  
32 and 80ms frame.

33 The base station shall set this field to the correction factor  
34 expressed as a two's complement value in units of 0.125 dB.

35 RL\_ATT\_ADJ\_GAIN\_259200\_80MS - Reverse Link Attribute Adjustment Gain for the  
36 transmission rate 259200 bits/s.

37 If RC4\_RC6\_80MS\_INCL is set to '0', the base station shall  
38 omit this field.

39 If RC4\_RC6\_80MS\_INCL is set to '1' and  
40 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base station shall  
41 set this field to the value of the nominal attribute gain  
42 adjustment that the mobile station is to make for the  
43 transmission attributes with transmission rate 259200  
44 bits/s, and 80ms frame. The base station shall set the value  
45 in the range from -48 to 48 inclusive.

1 If RC4\_RC6\_80MS\_INCL is set to '1' and  
 2 RL\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base station shall  
 3 set this field to the value of the pilot reference level  
 4 adjustment that the mobile station is to make for the  
 5 transmission attributes with transmission rate 259200 bits/s  
 6 and 80ms frame.

7 The base station shall set this field to the correction factor  
 8 expressed as a two's complement value in units of 0.125 dB.

9 RESERVED - Reserved bits.

10 The base station shall add reserved bits as needed in order to  
 11 make the length of the entire record equal to an integer  
 12 number of octets. The base station shall set these bits to '0'.

13

14 If RPC\_ADJ\_REC\_TYPE is equal to '0011', the base station shall set type-specific fields as  
 15 specified in Table 3.7.5.20-7.

16 **Table 3.7.5.20-7. Type Specific Fields for RECORD\_TYPE**  
 17 **= '0011'**

Fields	Length (Bits)
RL_CQICH_ATT_ADJ_GAIN_TYPE	1
RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL	1
RL_CQICH_ATT_ADJ_GAIN_HIGH	0 or 8
RL_CQICH_ATT_ADJ_GAIN_LOW_INCL	1
RL_CQICH_ATT_ADJ_GAIN_LOW	0 or 8
RESERVED	0-7 (if needed)

18

19 RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE - Reverse Channel Quality Indicator Channel  
 20 attribute adjustment gain value type indicator

21 If the following fields are set to the nominal attribute gain  
 22 adjustment values that the mobile station is to use for the  
 23 transmission attributes (relative to Nominal\_Attribute\_Gain  
 24 specified in [2]), the base station shall set this field to '0'. If  
 25 the following fields are set to the pilot reference level  
 26 adjustment values that the mobile station is to use for the  
 27 transmission attributes (relative to Pilot\_Reference\_Level  
 28 specified in [2]), the base station shall set this field to '1'.

29 RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH\_INCL - Reverse Channel Quality Indicator Channel  
 30 attribute adjustment gain for the high power level included  
 31 indicator.

32 If the attribute adjustment gain for the high power level of  
 33 Reverse Channel Quality Indicator Channel transmission is  
 34 included in this message, the base station shall set this field  
 35 to '1'; otherwise, the base station shall set this field to '0'.

1 RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH - Attribute adjustment gain for Reverse Channel  
 2 Quality Indicator Channel for the high Channel Quality  
 3 Indicator gain power level.

4 If RL\_CQICH\_ATT\_ADJ\_GAIN\_HIGH\_INCL is set to '0', the  
 5 base station shall omit this field; otherwise, the base station  
 6 shall set this field as follows:

7 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base  
 8 station shall set this field to the value of the nominal  
 9 attribute gain adjustment that the mobile station is to make  
 10 for the transmission attributes for the high power level of R-  
 11 CQICH. The base station shall set the value in the range from  
 12 -40 to 16 inclusive.

13 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base  
 14 station shall set this field to the value of the pilot reference  
 15 level adjustment that the mobile station is to make for the  
 16 transmission attributes for the high power level of R-CQICH.

17 The base station shall set this field to the correction factor  
 18 expressed as a two's complement value in units of 0.125 dB.

19 RL\_CQICH\_ATT\_ADJ\_GAIN\_LOW\_INCL - Reverse Channel Quality Indicator Channel  
 20 attribute adjustment gain for the low power level included  
 21 indicator.

22 If the attribute adjustment gain for the low power level of  
 23 Reverse Channel Quality Indicator Channel transmission is  
 24 included in this message, the base station shall set this field  
 25 to '1'; otherwise, the base station shall set this field to '0'.

26 RL\_CQICH\_ATT\_ADJ\_GAIN\_LOW - Attribute adjustment gain for Reverse Channel  
 27 Quality Indicator Channel for the low Channel Quality  
 28 Indicator gain power level.

29 If RL\_CQICH\_ATT\_ADJ\_GAIN\_LOW\_INCL is set to '0', the base  
 30 station shall omit this field; otherwise, the base station shall  
 31 set this field as follows:

32 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '0', the base  
 33 station shall set this field to the value of the nominal  
 34 attribute gain adjustment that the mobile station is to make  
 35 for the transmission attributes for the low power level of R-  
 36 CQICH. The base station shall set the value in the range from  
 37 -16 to 16 inclusive.

38 If RL\_CQICH\_ATT\_ADJ\_GAIN\_TYPE is set to '1', the base  
 39 station shall set this field to the value of the pilot reference  
 40 level adjustment that the mobile station is to make for the  
 41 transmission attributes for the low power level of R-CQICH.

42 The base station shall set this field to the correction factor  
 43 expressed as a two's complement value in units of 0.125 dB.



- 1 If `RPC_ADJ_REC_TYPE` is equal to '0100', the base station shall set type-specific fields as  
 2 specified in Table 3.7.5.20-8.

3 **Table 3.7.5.20-8. Type Specific Fields for `RECORD_TYPE` = '0100'**

Fields	Length (Bits)
<code>REV_REQCH_ADJ_INCL</code>	1
<code>REV_REQCH_ADJ_GAIN</code>	0 or 8
<code>REV_SPICH_ADJ_INCL</code>	1
<code>REV_SPICH_ADJ_GAIN</code>	0 or 8
<code>REV_SPICH_EP_SIZE</code>	0 or 4
<code>REV_PDCCH_ADJ_INCL</code>	1
<code>REV_PDCCH_ADJ_GAIN</code>	0 or 8
<code>REV_PDCCH_ATTRIBUTE_ADJ_INCL</code>	1
<code>REV_PDCCH_EP_SIZE_NUM</code>	0 or 4

*{ (REV\_PDCCH\_EP\_SIZE\_NUM + 1)*

*{ (2)*

<code>REV_PDCCH_ATTRIBUTE_ADJ_GAIN</code>	8
---	---

*} (2)*

*} (REV\_PDCCH\_EP\_SIZE\_NUM + 1)*

<code>REV_PDCCH_BOOST_ADJ_INCL</code>	1
---------------------------------------	---

*{ (2)*

<code>REV_PDCCH_BOOST_ADJ_GAIN</code>	0 or 8
---------------------------------------	--------

*} (2)*

<code>REV_PDCCH_PAYLOAD_ADJ_INCL</code>	1
---	---

<code>REV_PDCCH_EP_SIZE_NUM_1</code>	0 or 4
--------------------------------------	--------

*{ (REV\_PDCCH\_EP\_SIZE\_NUM\_1 + 1)*

<code>REV_PDCCH_PAYLOAD_ADJ_GAIN</code>	8
---	---

*} (REV\_PDCCH\_EP\_SIZE\_NUM\_1 + 1)*

4

5

Fields	Length (Bits)
REV_PDCH_ADJ_INCL	1
REV_PDCH_ADJ_GAIN	0 or 8
REV_PDCH_PAYLOAD_ADJ_INCL	1
REV_PDCH_EP_SIZE_NUM	0 or 4
{ (REV_PDCH_EP_SIZE_NUM +1)	
REV_PDCH_PAYLOAD_ADJ_GAIN	8
} (REV_PDCH_EP_SIZE_NUM +1)	
REV_PDCH_BOOST_ADJ_INCL	1
{ (2)	
REV_PDCH_BOOST_ADJ_GAIN	8
} (2)	
REV_PDCH_SUBPACKET_ADJ_INCL	1
REV_PDCH_RETRX_NUM	0 or 2
{ (REV_PDCH_RETRX_NUM+1)	
REV_PDCH_SUBPACKET_ADJ_GAIN	8
} (REV_PDCH_RETRX_NUM+1)	
REV_PDCH_ATTRIBUTE_ADJ_INCL	1
REV_PDCH_EP_SIZE_NUM_1	0 or 4
REV_PDCH_RETRX_NUM_1	0 or 2
{ (REV_PDCH_EP_SIZE_NUM_1 +1)	
{ (REV_PDCH_RETRX_NUM_1+1)	
{ (2)	
REV_PDCH_ATTRIBUTE_ADJ_GAIN	8
} (2)	
} (REV_PDCH_RETRX_NUM_1+1)	
} (REV_PDCH_EP_SIZE_NUM_1 +1)	
RESERVED	0-7 (if needed)

- 1
- 2 REV\_REQCH\_ADJ\_INCL - Reverse Request Channel Adjustment included field.
- 3 If the attribute adjustment gains for the Reverse Request
- 4 Channel are included in this message, the base station shall
- 5 set this field to '1'; otherwise, the base station shall set this
- 6 field to '0'.
- 7 REV\_REQCH\_ADJ\_GAIN - Reverse Request Channel Adjustment Gain.

1		If REV_REQCH_ADJ_INCL is set to '0', the base station shall
2		omit this field; otherwise, the base station shall include this
3		field, and set it as follows.
4		The base station shall set this field to the value of the
5		nominal attribute gain adjustment that the mobile station is
6		to make for the transmission attributes for the power level of
7		R-REQCH.
8		The base station shall set the value in the range from -24 to
9		40 inclusive. The base station shall set this field to the
10		correction factor expressed as a two's complement value in
11		units of 0.125 dB.
12	REV_SPICH_ADJ_INCL	- Reverse Secondary Pilot Channel Adjustment included
13		field.
14		If the attribute adjustment gains for the Reverse Secondary
15		Pilot Channel are included in this message, the base station
16		shall set this field to '1'; otherwise, the base station shall set
17		this field to '0'.
18	REV_SPICH_ADJ_GAIN	- Reverse Secondary Pilot Channel Adjustment Gain.
19		If REV_SPICH_ADJ_INCL is set to '0', the base station shall
20		omit this field; otherwise, the base station shall include this
21		field, and set it as follows.
22		The base station shall set this field to the value of the
23		nominal attribute gain adjustment that the mobile station is
24		to make for the transmission attributes for the power level of
25		R-SPICH.
26		The base station shall set the value in the range from -16 to
27		48 inclusive. The base station shall set this field to the
28		correction factor expressed as a two's complement value in
29		units of 0.125 dB.
30	REV_SPICH_EP_SIZE	- Minimum Encoder Packet Size for which the Reverse Secondary Pilot
31		Channel is used.
32		If REV_SPICH_ADJ_INCL is set to '0', the base station shall
33		omit this field; otherwise, the base station shall include this
34		field, and set it as follows.
35		The base station shall set this field to the minimum encoder
36		packet size for which the Reverse Secondary Pilot Channel is
37		used (see [2] and [3]).
38		This field shall take the values 0 to 10 corresponding to the
39		encoder packet sizes 192, 408, 792, 1560, 3096, 4632, 6168,
40		9240, 12312, 15384, 18456 bits.
41	REV_PDCCH_ADJ_INCL	- Reverse Packet Data Control Channel Adjustment
42		included field.
43		If the attribute adjustment gains for the Reverse Packet Data
44		Control Channel are included in this message, the base
45		station shall set this field to '1'; otherwise, the base station
46		shall set this field to '0'.

1       REV\_PDCCH\_ADJ\_GAIN - Reverse Packet Data Control Channel Adjustment Gain.

2               If REV\_PDCCH\_ADJ\_INCL is set to '0', the base station shall

3               omit this field; otherwise, the base station shall include this

4               field, and set it as follows.

5               The base station shall set this field to the value of the

6               nominal attribute gain adjustment that the mobile station is

7               to make for the transmission attributes for the power level of

8               R-PDCCH.

9               The base station shall set the value in the range from -32 to

10              32 inclusive. The base station shall set this field to the

11              correction factor expressed as a two's complement value in

12              units of 0.125 dB.

13      REV\_PDCCH\_ATTRIBUTE\_ADJ\_INCL - Reverse Packet Data Control Channel

14              Attribute Adjustment included field.

15              If the attribute adjustment gains for the Reverse Packet Data

16              Control Channel are included per encoder packet size and per

17              boost mode in this message, the base station shall set this

18              field to '1'; otherwise, the base station shall set this field to

19              '0'.

20      REV\_PDCCH\_EP\_SIZE\_NUM - Number of occurrences of Reverse Packet Data Control

21              Channel Attribute Adjustment Gains.

22              If REV\_PDCCH\_ATTRIBUTE\_ADJ\_INCL is set to '0', the base

23              station shall omit this field; otherwise, the base station shall

24              include this field, and set it as follows.

25              The base station shall set this field to one less than half the

26              number of occurrences of the field included hereafter. The

27              records are listed per encoder packet size, in the following

28              ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,

29              9240, 12312, 15384, 18456 bits.

30      If REV\_PDCCH\_ATTRIBUTE\_ADJ\_INCL is set to '1', the base station shall include

31      REV\_PDCCH\_EP\_SIZE\_NUM+1 occurrences of the following record:

32      The base station shall include 2 occurrences of the following field. The first occurrence of

33      this field is for the non-boosted mode, while the second is for the boosted mode.

34      REV\_PDCCH\_ATTRIBUTE\_ADJ\_GAIN - Reverse Packet Data Control Channel Attribute

35              Adjustment Gain.

36              The base station shall set this field to the value of the

37              nominal attribute gain adjustment that the mobile station is

38              to make for the transmission attributes for the power level of

39              R-PDCCH, for the i-th encoder packet size, and for the non-

40              boosted and boosted modes.

41              The base station shall set the value in the range from -32 to

42              32 inclusive. The base station shall set this field to the

43              correction factor expressed as a two's complement value in

44              units of 0.125 dB.

45      REV\_PDCCH\_BOOST\_ADJ\_INCL - Reverse Packet Data Control Channel Boost

1 Adjustment included field.

2 If the attribute adjustment gains for the Reverse Packet Data  
3 Control Channel per boosted mode are included in this  
4 message, the base station shall set this field to '1'; otherwise,  
5 the base station shall set this field to '0'.

6 If REV\_PDCCH\_BOOST\_ADJ\_INCL is set to '1', the base station shall include two  
7 occurrences of the following record:

8 REV\_PDCCH\_BOOST\_ADJ\_GAIN - Reverse Packet Data Control Channel Boost  
9 Adjustment Gains.

10 The base station shall set this field to the value of the  
11 nominal attribute gain adjustment that the mobile station is  
12 to make for the transmission attributes for the power level of  
13 R-PDCCH, for the appropriate mode.

14 The base station shall set the value in the range from -32 to  
15 32 inclusive.

16 The first occurrence of this field is for the non-boosted mode,  
17 while the second is for the boosted mode. The base station  
18 shall set this field to the correction factor expressed as a  
19 two's complement value in units of 0.125 dB.

20 REV\_PDCCH\_PAYLOAD\_ADJ\_INCL - Reverse Packet Data Control Channel Payload  
21 Attribute Adjustment included field.

22 If the attribute adjustment gains for the Reverse Packet Data  
23 Control Channel are included per encoder packet size in this  
24 message, the base station shall set this field to '1'; otherwise,  
25 the base station shall set this field to '0'.

26 REV\_PDCCH\_EP\_SIZE\_NUM\_1 - Number of occurrences of Reverse Packet Data Control  
27 Channel Payload Attribute Adjustment Gain records.

28 If REV\_PDCCH\_PAYLOAD\_ADJ\_INCL is set to '0', the base  
29 station shall omit this field; otherwise, the base station shall  
30 include this field, and set it as follows.

31 The base station shall set this field to one less than the  
32 number of occurrences of the field included hereafter. The  
33 fields are listed per encoder packet size, in the following  
34 ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,  
35 9240, 12312, 15384, 18456 bits.

36 If REV\_PDCCH\_PAYLOAD\_ADJ\_INCL is set to '1', the base station shall include  
37 (REV\_PDCCH\_EP\_SIZE\_NUM\_1+1)x2 occurrences of the following record:

1 REV\_PDCCH\_PAYLOAD\_ADJ\_GAIN - Reverse Packet Data Control Channel Payload  
 2 Attribute Adjustment Gain.

3 The base station shall set this field to the value of the  
 4 nominal attribute gain adjustment that the mobile station is  
 5 to make for the transmission attributes for the power level of  
 6 R-PDCCH, for the i-th encoder packet size, and for the non-  
 7 boosted and boosted modes. In each set for the i-th encoder  
 8 packet, the first occurrence of this field is for the non-boosted  
 9 mode, while the second is for the boosted mode.

10 The base station shall set the value in the range from -32 to  
 11 32 inclusive. The base station shall set this field to the  
 12 correction factor expressed as a two's complement value in  
 13 units of 0.125 dB.

14 REV\_PDCH\_ADJ\_INCL - Reverse Packet Data Channel Adjustment included field.

15 If the attribute adjustment gains for the Reverse Packet Data  
 16 Channel are included in this message, the base station shall  
 17 set this field to '1'; otherwise, the base station shall set this  
 18 field to '0'.

19 REV\_PDCH\_ADJ\_GAIN - Reverse Packet Data Channel Adjustment Gain.

20 If REV\_PDCH\_ADJ\_INCL is set to '0', the base station shall  
 21 omit this field; otherwise, the base station shall include this  
 22 field, and set it as follows.

23 The base station shall set this field to the value of the  
 24 nominal attribute gain adjustment that the mobile station is  
 25 to make for the transmission attributes for the power level of  
 26 R-PDCH.

27 The base station shall set the value in the range from -40 to  
 28 56 inclusive. The base station shall set this field to the  
 29 correction factor expressed as a two's complement value in  
 30 units of 0.125 dB.

31 REV\_PDCH\_PAYLOAD\_ADJ\_INCL - Reverse Packet Data Channel Adjustment included  
 32 field.

33 If the attribute adjustment gains for the Reverse Packet Data  
 34 Channel are included per encoder packet size in this  
 35 message, the base station shall set this field to '1'; otherwise,  
 36 the base station shall set this field to '0'.

37 REV\_PDCH\_EP\_SIZE\_NUM - Number of occurrences of Reverse Packet Data Channel  
 38 Payload Adjustment Gains.

39 If REV\_PDCH\_PAYLOAD\_ADJ\_INCL is set to '0', the base  
 40 station shall omit this field; otherwise, the base station shall  
 41 include this field, and set it as follows.

42 The base station shall set this field to one less than the  
 43 number of occurrences of the following field. The fields are  
 44 listed per encoder packet size, in the following ascending  
 45 order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312,  
 46 15384, 18456 bits.

1 If REV\_PDCH\_PAYLOAD\_ADJ\_INCL is set to '1', the base station shall include  
 2 REV\_PDCH\_EP\_SIZE\_NUM+1 occurrences of the following record:

3 REV\_PDCH\_PAYLOAD\_ADJ\_GAIN - Reverse Packet Data Channel Payload Adjustment  
 4 Gain.

5 The base station shall set this field to the value of the  
 6 nominal attribute gain adjustment that the mobile station is  
 7 to make for the transmission attributes for the power level of  
 8 R-PDCH, for the i-th encoder packet size.

9 The base station shall set the value in the range from -40 to  
 10 56 inclusive. The base station shall set this field to the  
 11 correction factor expressed as a two's complement value in  
 12 units of 0.125 dB.

13 REV\_PDCH\_BOOST\_ADJ\_INCL - Reverse Packet Data Channel Adjustment included  
 14 field.

15 If the attribute adjustment gains for the Reverse Packet Data  
 16 Channel are included per boosted mode in this message, the  
 17 base station shall set this field to '1'; otherwise, the base  
 18 station shall set this field to '0'.

19 If REV\_PDCH\_BOOST\_ADJ\_INCL is set to '1', the base station shall include two  
 20 occurrences of the following record. The first occurrence of this field is for the non-boosted  
 21 mode, while the second is for the boosted mode.

22 REV\_PDCH\_BOOST\_ADJ\_GAIN - Reverse Packet Data Channel Boost-dependent  
 23 Adjustment Gain.

24 The base station shall set this field to the value of the  
 25 nominal attribute gain adjustment that the mobile station is  
 26 to make for the transmission attributes for the power level of  
 27 R-PDCH.

28 The base station shall set the value in the range from -40 to  
 29 56 inclusive. The first occurrence of this field is for the non-  
 30 boosted mode, while the second is for the boosted mode. The  
 31 base station shall set this field to the correction factor  
 32 expressed as a two's complement value in units of 0.125 dB.

33 REV\_PDCH\_SUBPACKET\_ADJ\_INCL - Reverse Packet Data Channel Subpacket  
 34 Adjustment included field.

35 If the attribute adjustment gains for the Reverse Packet Data  
 36 Channel are included per subpacket transmission round in  
 37 this message, the base station shall set this field to '1';  
 38 otherwise, the base station shall set this field to '0'.

39 REV\_PDCH\_RETRX\_NUM - Number of occurrences of the Reverse Packet Data  
 40 Channel Subpacket Adjustment Gains.

41 If REV\_PDCH\_SUBPACKET\_ADJ\_INCL is set to '0', the base  
 42 station shall omit this field; otherwise, the base station shall  
 43 include this field, and set it as follows.

44 The base station shall set this field to one less than the  
 45 number of occurrences of the following field.

If REV\_PDCH\_SUBPACKET\_ADJ\_INCL is set to '1', the base station shall include (REV\_PDCH\_RETRX\_NUM+1) occurrences of the following record:

REV\_PDCH\_SUBPACKET\_ADJ\_GAIN - Reverse Packet Data Channel Subpacket Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH on the i-th transmission round.

The base station shall set the value in the range from -40 to 56 inclusive. The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

REV\_PDCH\_ATTRIBUTE\_ADJ\_INCL - Reverse Packet Data Channel Attribute Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Channel are included per encoder packet size and per subpacket transmission round in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

REV\_PDCH\_EP\_SIZE\_NUM\_1 - Number of occurrences of the Reverse Packet Data Channel Attribute Adjustment Gains record.

If REV\_PDCH\_ATTRIBUTE\_ADJ\_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the following subrecord. The subrecords are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV\_PDCH\_ATTRIBUTE\_ADJ\_INCL is set to '1', the base station shall include (REV\_PDCH\_EP\_SIZE\_NUM\_1+1) occurrences of the following subrecord:

REV\_PDCH\_RETRX\_NUM\_1 - Number of occurrences of the Reverse Packet Data Channel Subpacket Adjustment Gains.

The base station shall set this field to one less than the number of occurrences of the following field.

The base station shall include (REV\_PDCH\_RETRX\_NUM\_1+1) occurrences of the following record:

The base station shall include 2 occurrences of the following field. The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.



1	REV_PDCH_ATTRIBUTE_ADJ_GAIN	-	Reverse Packet Data Channel Attribute
2			Adjustment Gain.
3			The base station shall set this field to the value of the
4			nominal attribute gain adjustment that the mobile station is
5			to make for the transmission attributes for the power level of
6			R-PDCH, for the i-th encoder packet size on a j-th
7			transmission round, using the non-boosted or boosted mode.
8			The base station shall set the value in the range from -40 to
9			56 inclusive. The base station shall set this field to the
10			correction factor expressed as a two's complement value in
11			units of 0.125 dB.
12	RESERVED	-	Reserved bits.
13			The base station shall add reserved bits as needed in order to
14			make the length of the entire record equal to an integer
15			number of octets. The base station shall set these bits to '0'.
16	BCMC_LPM_INCL	-	BCMC Logical to Physical Mapping included indicator.
17			The base station shall set this field to '1' if BCMC Logical to
18			Physical Mapping is included in this message; otherwise, the
19			base station shall set this field to '0'.
20	BCMC_LPM_IND	-	BCMC Logical to Physical Mapping indicator.
21			If the BCMC_LPM_INCL field is set to '0', the base station
22			shall omit this field; otherwise, the base station shall include
23			this field and set it as follows:
24			The base station shall set this field to '01' or '10' as shown in
25			Table 3.7.5.20-2 corresponding to the Logical to Physical
26			Mapping indicator.
27	NUM_BCMC_PROGRAMS	-	Number of BCMC Programs
28			If the BCMC_LPM_IND field is not included or is included and
29			is not set to '01', the base station shall omit this field;
30			otherwise, the base station shall include this field and set it
31			as follows:
32			The base station shall set this field to the number of BCMC
33			programs included in this LPM record minus 1.
34	The base station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following		
35	variable length record:		
36	BCMC_PROGRAM_ID_LEN	-	Length of BCMC_PROGRAM_ID field
37			The base station shall set this field to one less than the
38			length, in bits, of the BCMC_PROGRAM_ID of this program.
39	BCMC_PROGRAM_ID	-	BCMC program Identifier
40			The length of this field shall be one more than the value of
41			BCMC_PROGRAM_ID_LEN bits.

1		The base station shall set this field to the identifier of the
2		BCMC program to which this Logical to Physical Mapping
3		entry applies.
4	BCMC_FLOW_DISCRIMINATOR_LEN	- Length of BCMC_FLOW_DISCRIMINATOR field
5		The base station shall set this field to the length, in bits, of
6		the BCMC_FLOW_DISCRIMINATOR of this program.
7	NUM_FLOW_DISCRIMINATOR	- Number of flow discriminators
8		The length of this field shall be determined by the value of the
9		BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
10		BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
11		is omitted; otherwise, the length of this field shall be
12		BCMC_FLOW_DISCRIMINATOR_LEN bits.
13		The base station shall set this field to the number of flow
14		discriminators included for this program.
15	If NUM_FLOW_DISCRIMINATOR field is included, the base station shall include	
16	NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;	
17	otherwise, the base station shall include 1 occurrence of the following variable length	
18	record:	
19	BCMC_FLOW_DISCRIMINATOR	- BCMC Flow discriminator.
20		The length of this field shall be determined by the value of the
21		BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
22		BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
23		is omitted; otherwise, the length of this field shall be
24		BCMC_FLOW_DISCRIMINATOR_LEN bits.
25		The base station shall set this field to the BCMC flow
26		discriminator to which this Logical to Physical Mapping entry
27		applies.
28	PHYSICAL_RESOURCE	- Physical resource identifier.
29		The base station shall set this field to the physical resource
30		identifier '0000', '0001', '0010', '0011' as shown in Table
31		3.7.5.20-4 to which the logical BCMC traffic channel
32		corresponding to BCMC_FLOW_ID specified in this BCMC
33		Logical to Physical Mapping entry is to be mapped.
34	FORWARD_FLAG	- Forward mapping indicator.
35		The base station shall set this field to '1' if the logical to
36		physical channel mapping specified in this record applies to
37		forward logical channels; otherwise, the base station shall set
38		this field to '0'.
39	REVERSE_FLAG	- Reverse mapping indicator.

- 1 The base station shall set this field to '1' if the logical to  
 2 physical channel mapping specified in this record applies to  
 3 reverse logical channels; otherwise, the base station shall set  
 4 this field to '0'.
- 5       BSR\_ID\_INCL   -   BSR\_ID included indicator.
- 6       The base station shall set this field to '1' if BSR\_ID field is  
 7 included in this message; otherwise, the base station shall  
 8 set this field to '0' and include FOR\_TRAFFIC, REV\_TRAFFIC  
 9 fields in this message.
- 10       BSR\_ID       -   BCMC Service Reference Identifier
- 11       If the BSR\_ID\_INCL field is set to '0', the base station shall  
 12 omit this field; otherwise, the base station shall include this  
 13 field and set it as follows:
- 14       The base station shall set this field to the BCMC Service  
 15 Reference identifier corresponding to this BCMC flow to  
 16 which this Logical to Physical Mapping entry applies.
- 17       The base station shall not set this field to a value of 0 .
- 18       FOR\_TRAFFIC   -   Forward Traffic Channel traffic type.
- 19       If the BSR\_ID\_INCL field is set to '1', the base station shall  
 20 omit this field; otherwise, the base station shall include this  
 21 field and set it as follows:
- 22       The base station shall set this field to the FOR\_TRAFFIC code  
 23 shown in Table 3.7.5.20-5 corresponding to the Forward  
 24 Traffic Channel traffic type to be used with the BCMC flow to  
 25 which this Logical to Physical Mapping entry applies.

26

27

**Table 3.7.5.20-5. FOR\_TRAFFIC Codes**

<b>FOR_TRAFFIC (binary)</b>	<b>Description</b>
0000	The BCMC flow does not use Forward Traffic Channel traffic.
0001	The BCMC flow uses primary traffic on the Forward Traffic Channel.
0010	The BCMC flow uses secondary traffic on the Forward Traffic Channel.
0011	Reserved.
0100	The BCMC flow uses the Forward Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.
All other FOR_TRAFFIC codes are reserved.	

REV\_TRAFFIC - Reverse Traffic Channel traffic type.

If the BSR\_ID\_INCL field is set to '1', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the REV\_TRAFFIC code shown in Table 3.7.5.20-6 corresponding to the Reverse Traffic Channel traffic type to be used with the BCMC flow to which this Logical to Physical Mapping entry applies.

**Table 3.7.5.20-6. REV\_TRAFFIC Codes**

REV_TRAFFIC (binary)	Description
0000	The BCMC flow does not use Reverse Traffic Channel traffic.
0001	The BCMC flow uses primary traffic on the Reverse Traffic Channel.
0010	The BCMC flow uses secondary traffic on the Reverse Traffic Channel.
0011	Reserved.
0100	The BCMC flow uses the Reverse Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.
All other REV_TRAFFIC codes are reserved.	

REV\_PDCH\_PARMS\_INCL - Reverse PDCH Parameters Included indicator.

The base station shall set this field to '1' if the reverse Packet Data Channel parameters are included; otherwise, the base station shall set this field to '0'.

REV\_PDCH\_PARMS\_1\_INCL - Reverse Packet Data Channel parameters subset included indicator.

If REV\_PDCH\_PARMS\_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to '0'.

REV\_PDCH\_MAX\_AUTO\_TPR - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.

If REV\_PDCH\_PARMS\_1\_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

1		The base station shall set this field to the maximum traffic to
2		pilot ratio for autonomous transmission on the Reverse
3		Packet Data Channel (see [2] and [3]).
4		The base station shall set this field to a value in the range 0
5		to 18 dB inclusive in units of 0.125 dB.
6	REV_PDCH_NUM_ARQ_ROUNDS_NORMAL -	Maximum number of allowed ARQ rounds
7		on the Reverse PDCH in the non-boosted mode.
8		If REV_PDCH_PARMS_1_INCL is set to '0', the base station
9		shall omit this field; otherwise, the base station shall include
10		this field and set it as follows.
11		The base station shall set this field to one less the maximum
12		number of allowed ARQ rounds on the Reverse PDCH in the
13		non-boosted mode. The base station shall set this field to 0,
14		1, or 2 corresponding to 1, 2, or 3 rounds respectively (See
15		[3]).
16	REV_PDCH_OPER_PARMS_INCL -	Reverse Packet Data Channel operational parameters
17		included indicator.
18		If REV_PDCH_PARMS_INCL is set to '0', the base station shall
19		omit this field; otherwise, the base station shall include this
20		field and set it as follows.
21		The base station shall set this field to '1' if the following R-
22		PDCH operational parameters are included in this message;
23		otherwise, the base station shall set this field to '0'.
24	REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET -	Maximum Allowed Reverse
25		PDCH encoder packet size.
26		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
27		included and set to '0', the base station shall omit this field;
28		otherwise, the base station shall include this field and set it
29		as follows.
30		The base station shall set this field to the maximum size
31		encoder packet that the mobile station is allowed to use. (see
32		[2] and [3]).
33		The base station shall set this field to a value in the range 0
34		to 10 inclusive, corresponding to the encoder packet sizes
35		192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384,
36		and 18456 bits respectively.
37	REV_PDCH_DEFAULT_PERSISTENCE -	Reverse Packet Data Channel default initial
38		persistence.
39		If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
40		included and set to '0', the base station shall omit this field;
41		otherwise, the base station shall include this field and set it
42		as follows:
43		The base station shall set this field to '1' if the mobile station
44		is to be persistent at the call setup; otherwise, the base
45		station shall set this field to '0' (See [3]).

1 REV\_PDCH\_RESET\_PERSISTENCE - Reverse Packet Data Channel reset persistence  
2 indicator.

3 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
4 included and set to '0', the base station shall omit this field;  
5 otherwise, the base station shall include this field and set it  
6 as follows:

7 The base station shall set this field to '1' if, at the end of a  
8 persistent grant, the mobile station shall reset its persistent  
9 indicator to persistent; otherwise, the base station shall set  
10 this field to '0' if the mobile station shall reset its persistent  
11 indicator to non-persistent (See [3]).

12 REV\_PDCH\_GRANT\_PRECEDENCE - Reverse Packet Data Channel Grant Precedence  
13 Indicator.

14 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
15 included and set to '0', the base station shall omit this field;  
16 otherwise, the base station shall include this field and set it  
17 as follows:

18 The base station shall set this field to '1' if unicast Forward  
19 Grant Channel messages have precedence over Rate Control  
20 commands; otherwise, the base station shall set this field to  
21 '0' to indicate that Rate Control down commands from non-  
22 serving sectors have precedence over Forward Grant Channel  
23 messages (see [3]).

24 REV\_PDCH\_MSIB\_SUPPORTED - Reverse Packet Data Channel MSIB usage indicator.

25 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
26 included and set to '0', the base station shall omit this field;  
27 otherwise, the base station shall include this field and set it  
28 as follows:

29 The base station shall set this field to '1' if the mobile station  
30 is to use the MSIB bit on the Reverse Packet Data Control  
31 Channel; otherwise, the base station shall set this field to  
32 '0'(See [3]).

33 REV\_PDCH\_ALWAYS\_ACK\_FINAL\_ROUND - Reverse Packet Data Channel Final Round  
34 Always Acknowledged

35 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is  
36 included and set to '0', the base station shall omit this field;  
37 otherwise, the base station shall include this field and set it  
38 as follows:

39 The base station shall set this field to '1' if all of the following  
40 conditions are true:

- 41 • The Forward Acknowledgment Channel is assigned to  
42 the mobile station,
- 43 • The base station does not send an acknowledgment  
44 on the assigned Forward Acknowledgment Channel  
45 whenever a Reverse Packet Data Channel  
46 transmission is not successfully decoded on the last

1 ARQ round, and

2 • The base station sends an acknowledgment on the

3 assigned Forward Acknowledgment Channel to the

4 mobile station whenever a Reverse Packet Data

5 Channel transmission is successfully decoded on the

6 last ARQ round,

7 Otherwise, the base station shall set this field to '0'.

8 REV\_PDCH\_SOFT\_HANDOFF\_RESET\_IND - Reverse Packet Data Channel soft handoff

9 reset indicator.

10 If REV\_PDCH\_OPER\_PARMS\_INCL is omitted, or if it is

11 included and set to '0', the base station shall omit this field;

12 otherwise, the base station shall include this field and set it

13 as follows:

14 The base station shall set this field to '1' if the mobile station

15 is to initialize RPDCHCF when soft selection occurs in the

16 FPDCHCF; otherwise, the base station shall set this field to

17 '0' (see [3]).

18 REV\_PDCH\_BOOST\_PARMS\_INCL - Reverse Packet Data Channel boosted mode

19 parameters included indicator.

20 If REV\_PDCH\_PARMS\_INCL is set to '0', the base station shall

21 omit this field; otherwise, the base station shall include this

22 field and set it as follows.

23 The base station shall set this field to '1' if the Reverse Packet

24 Data Channel boosted mode parameters are included;

25 otherwise, the base station shall set this field to '0'.

26 REV\_PDCH\_NUM\_ARQ\_ROUNDS\_BOOST - Maximum number of allowed ARQ rounds

27 on the Reverse PDCH in the boosted mode.

28 If REV\_PDCH\_BOOST\_PARMS\_INCL is omitted, or if it is

29 included and set to '0', the base station shall omit this field;

30 otherwise, the base station shall include this field and set it

31 as follows.

32 The base station shall set this field to one less the maximum

33 number of allowed ARQ rounds on the Reverse PDCH in the

34 boosted mode. The base station shall set this field to 0, 1, or

35 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

36 REV\_PDCH\_BOOST\_OVERSHOOT - Reverse Packet Data Channel Boost Overshoot.

37 If REV\_PDCH\_BOOST\_PARMS\_INCL is omitted, or if it is

38 included and set to '0', the base station shall omit this field;

39 otherwise, the base station shall include this field and set it

40 as follows.

41 The base station shall set this field to the boosted QoS

42 parameter that defines the overshoot allowed by boosted QoS

43 on the Reverse Packet Data Channel (see [3]).

44 The base station shall set this field to a value in the range 0

45 to 3.875 dB inclusive in units of 0.125 dB.

1	REV_REQCH_ENABLED - Reverse Request Channel Enabled.
2	If REV_PDCH_PARMS_INCL is set to '0', the base station shall
3	omit this field; otherwise, the base station shall include this
4	field and set it as follows.
5	The base station shall set this field to '1' if the mobile station
6	is to enable the Reverse Request Channel; otherwise, the base
7	station shall set this field to '0'.
8	REV_REQCH_PARMS_INCL - Reverse Request Channel Parameters Included Indicator.
9	If REV_REQCH_ENABLED is omitted, or if it is included and
10	is set to '0', the base station shall omit this field; otherwise,
11	the base station shall include this field and set it as follows.
12	The base station shall set this field to '1' if the Reverse
13	Request Channel Parameters are included hereafter;
14	otherwise, the base station shall set this field to '0'.
15	REV_REQCH_QUICK_REPEAT_ALLOWED - Reverse Request Channel Quick Repeat
16	Allowed indicator.
17	If REV_REQCH_PARMS_INCL is omitted, or if it is included
18	and set to '0', the base station shall omit this field; otherwise,
19	the base station shall include this field and set it as follows.
20	The base station shall set this field to '1' if quick repeats are
21	allowed on the Reverse Request Channel; otherwise, the base
22	station shall set this field to '0' (see [3]).
23	REV_REQCH_POWER_REPORTS_PARMS_INCL - Reverse Request Channel Power Report
24	Parameters Included indicator.
25	If REV_REQCH_PARMS_INCL is omitted, or if it is included
26	and set to '0', the base station shall omit this field; otherwise,
27	the base station shall include this field and set it as follows.
28	The base station shall set this field to '1' if the parameters
29	needed for power status reports are included hereafter;
30	otherwise, the base station shall set this field to '0'.
31	REV_REQCH_POWER_HEADROOM_INCREASE - Reverse Request Channel Power
32	headroom increase delta to trigger power report.
33	If REV_REQCH_POWER_REPORTS_PARMS_INCL is omitted,
34	or if it is included and set to '0', the base station shall omit
35	this field; otherwise, the base station shall include this field
36	and set it as follows.
37	The base station shall set this field to the power headroom
38	increase delta that triggers a power report (see [3]).
39	The base station shall set this field to a value in the range 0
40	to 18 dB inclusive in units of 1 dB, or to 31 which means
41	plus infinity.
42	REV_REQCH_POWER_HEADROOM_DECREASE - Reverse Request Channel Power
43	headroom decrease delta to trigger power report.



1		If REV_REQCH_POWER_REPORTS_PARMs_INCL is omitted,
2		or if it is included and set to '0', the base station shall omit
3		this field; otherwise, the base station shall include this field
4		and set it as follows.
5		The base station shall set this field to the power headroom
6		decrease delta that triggers a power report (see [3]).
7		The base station shall set this field to a value in the range 0
8		to 18 dB inclusive in units of 1 dB, or to 31 which means
9		plus infinity.
10	REV_REQCH_HEADROOM_DURATION - Reverse Request Channel minimum power	
11	headroom update trigger interval.	
12		If REV_REQCH_POWER_REPORTS_PARMs_INCL is omitted,
13		or if it is included and set to '0', the base station shall omit
14		this field; otherwise, the base station shall include this field
15		and set it as follows.
16		The base station shall set this field to the minimum power
17		headroom update trigger interval (see [3]).
18		The base station shall set this field to a value in the range 0
19		to 5.10 seconds inclusive in units of 20 ms.
20	REV_REQCH_MAX_POWER_UPDATE_DURATION - Reverse Request Channel	
21	maximum power headroom update trigger interval.	
22		If REV_REQCH_POWER_REPORTS_PARMs_INCL is omitted,
23		or if it is included and set to '0', the base station shall omit
24		this field; otherwise, the base station shall include this field
25		and set it as follows.
26		The base station shall set this field to the maximum power
27		headroom update trigger interval (see [3]).
28		The base station shall set this field to a value in the range
29		0.02 to 5.10 seconds inclusive in units of 20 ms, or to 0
30		which means plus infinity.
31	REV_PDCH_CRC_PARMs_INCL - Reverse Packet Data Channel Common Rate Control	
32	Parameters Included Indicator.	
33		If REV_PDCH_PARMs_INCL is set to '0', the base station shall
34		omit this field; otherwise, the base station shall include this
35		field and set it as follows.
36		The base station shall set this field to '1' if Reverse Packet
37		Data Channel Common Rate Control Parameters are included
38		hereafter; otherwise, the base station shall set this field to '0'.
39	REV_PDCH_INIT_TARGET_TPR - Reverse Packet Data Channel initial target traffic to	
40	pilot ratio.	
41		If REV_PDCH_CRC_PARMs_INCL is omitted, or if it is
42		included and set to '0', the base station shall omit this field;
43		otherwise, the base station shall include this field and set it
44		as follows.
45		The base station shall set this field to the initial target traffic
46		to pilot ratio on the Reverse Packet Data Channel (see [3]).

1		The base station shall set this field to a value in the range 0
2		to 18 dB inclusive in units of 0.125 dB.
3	REV_PDCH_MAX_TARGET_TPR -	Reverse Packet Data Channel maximum target traffic
4		to pilot ratio.
5		If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is
6		included and set to '0', the base station shall omit this field;
7		otherwise, the base station shall include this field and set it
8		as follows.
9		The base station shall set this field to the maximum target
10		traffic to pilot ratio on the Reverse Packet Data Channel (see
11		[3]).
12		The base station shall set this field to a value in the range 0
13		to 18 dB inclusive in units of 0.125 dB.
14	REV_PDCH_QUICK_START_THRESH -	Reverse Packet Data Channel quick start
15		threshold.
16		If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is
17		included and set to '0', the base station shall omit this field;
18		otherwise, the base station shall include this field and set it
19		as follows.
20		The base station shall set this field to the quick start
21		threshold on the Reverse Packet Data Channel (see [3]).
22		The base station shall set this field to a value in the range 0
23		to 9 dB inclusive in units of 0.125 dB.
24	REV_PDCH_EP_MAP_LEN -	Length of the Reverse PDCH Encoder Packet size map.
25		If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is
26		included and set to '0', the base station shall omit this field;
27		otherwise, the base station shall include this field and set it
28		as follows.
29		The base station shall set this field to '0' (the only Encoder
30		Packet size map length supported is 11 bits).
31	REV_PDCH_EP_MAP -	Number of Reverse PDCH Encoder Packet sizes.
32		If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is
33		included and set to '0', the base station shall omit this field;
34		otherwise, the base station shall include this field and set it
35		as follows.
36		The base station shall set the i-th bit to '1' for each encoder
37		packet size for which a subrecord is included hereafter. The
38		first 11 bits correspond to the following encoder packet sizes:
39		192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384,
40		18456 bits.
41	If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is included and set to '0', the base	
42	station shall omit the following subrecord; otherwise, the base station shall include the	
43	following subrecord for each bit set to '1' in REV_PDCH_EP_MAP:	
44	REV_PDCH_STEP_UP -	Reverse Packet Data Channel Step "up" for rate control.

1 The base station shall set this field to the step “up” value of  
2 the rate control on the Reverse Packet Data Channel for the i-  
3 th encoder packet size signaled in REV\_PDCH\_EP\_MAP (see  
4 [3]).

5 The base station shall set this field to a value in the range 0  
6 to 7.96875 dB inclusive in units of 0.03125 dB.

7 REV\_PDCH\_STEP\_DOWN - Reverse Packet Data Channel Step “down” for rate  
8 control.

9 The base station shall set this field to the step “down” value  
10 of rate control on the Reverse Packet Data Channel for the i-  
11 th encoder packet size signaled in REV\_PDCH\_EP\_MAP (see  
12 [3]).

13 The base station shall set this field to a value in the range 0  
14 to 7.96875 dB inclusive in units of 0.03125 dB.

15 REV\_PDCH\_SR\_ID\_MAP - Number of Reverse PDCH Encoder Packet sizes.

16 If REV\_PDCH\_PARMS\_INCL is set to ‘0’, the base station shall  
17 omit this field; otherwise, the base station shall include this  
18 field and set it as follows.

19 The base station shall set the i-th bit to ‘1’ for each SR\_ID  
20 associated with the Reverse Packet Data Channel. The LSB  
21 corresponds to SR\_ID 0. The MSB corresponds to SR\_ID 6.

22 The base station shall include the following subrecord for each bit set to ‘1’ in  
23 REV\_PDCH\_SR\_ID\_MAP:

24 REV\_PDCH\_BOOST\_ALLOWED - Reverse PDCH TPR Boost Allowed indicator.

25 If REV\_PDCH\_PARMS\_INCL is omitted or is included and is  
26 set to ‘0’, then the base station shall omit this field;  
27 otherwise, the base station shall include this field and set it  
28 as follows:

29 The base station shall set this field to ‘1’ if TPR (traffic to pilot  
30 ratio) power boost on the Reverse PDCH is allowed; otherwise,  
31 the base station shall set this field to ‘0’.

32 REV\_PDCH\_AUTO\_ALLOWED - Reverse PDCH Autonomous Transmission Allowed  
33 indicator.

34 If REV\_PDCH\_PARMS\_INCL is set to ‘0’, the base station shall  
35 omit this field; otherwise, the base station shall include this  
36 field and set it as follows.

37 The base station shall set this field to ‘1’ if autonomous  
38 transmission on the Reverse PDCH is allowed; otherwise, the  
39 base station shall set this field to ‘0’.

40 If REV\_REQCH\_PARMS\_INCL, is not included or is included and is set to ‘0’, the base  
41 station shall omit the following fields; otherwise, the base station shall include the  
42 following subrecord as described hereafter;

- 43 • The base station shall include an occurrence of the following subrecord for each bit  
44 set to ‘1’ in REV\_PDCH\_SR\_ID\_MAP,

- The base station shall include an additional subrecord for the aggregate traffic across all SR\_ID's, and,
- The base station shall set REV\_REQCH\_USE\_POWER\_REPORTS, REV\_REQCH\_USE\_BUFFER\_REPORTS, or REV\_REQCH\_USE\_WATERMARKS to '1' in at least one of these subrecords.

#### REV\_REQCH\_MIN\_DURATION - Reverse Request Channel Minimum Duration.

The base station shall set this field to the minimum duration between REQCH messages for this sr\_id(see [3]).

The base station shall set this field to a value in the range 0 to 5.10 seconds inclusive in units of 20 ms.

#### REV\_REQCH\_USE\_POWER\_REPORTS - Reverse Request Channel Use of Power Status Reports indicator.

If REV\_REQCH\_POWER\_REPORTS\_PARMs\_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to '1' if power status reports are allowed; otherwise, the base station shall set this field to '0'.

#### REV\_REQCH\_USE\_BUFFER\_REPORTS - Reverse Request Channel Use of Buffer Status Reports indicator.

The base station shall set this field to '1' if buffer status reports are allowed; otherwise, the base station shall set this field to '0'.

#### REV\_REQCH\_USE\_WATERMARKS - Reverse Request Channel Use of Watermark Reports indicator.

The base station shall set this field to '1' if watermark reports are allowed; otherwise, the base station shall set this field to '0'.

#### REV\_REQCH\_USE\_DEFAULT\_TAB - Reverse Packet Data Channel use default buffer size table indicator.

If REV\_REQCH\_USE\_POWER\_REPORTS is included and set to '1', or if REV\_REQCH\_USE\_BUFFER\_REPORTS is set to '1', or if REV\_REQCH\_USE\_WATERMARKS is set to '1', the base station shall include this field and set it according to Table 3.7.5.20.7; otherwise, the base station shall omit this field.

**Table 3.7.5.20.7. Encoding of REV\_REQCH\_USE\_DEFAULT\_TAB**

REV_REQCH_USE_DEFAULT_TAB	Descriptions
'000'	Use the REV_REQCH_BUF_QUANT_PARM_1 field and REV_REQCH_BUF_QUANT_PARM_2 field to generate a buffer size table

'001'	Use the default buffer size table as shown in Table Table 3.7.5.20.8
'010'	Use the default buffer size table as shown in Table Table 3.7.5.20.9
'011' – '111'	Reserved

1

2 **Table 3.7.5.20.8. Default Buffer Size Table (REV\_REQCH\_USE\_DEFAULT\_TAB = '001')**

3

Row	Buffer Size (in units of 96 bytes)
1	1
2	2
3	4
4	6
5	8
6	12
7	16
8	24
9	32
10	64
11	80
12	96
13	128

4

5 **Table 3.7.5.20.9. Default Buffer Size Table (REV\_REQCH\_USE\_DEFAULT\_TAB = '010')**

6

Row	Buffer Size (in units of 512 bytes)
1	1
2	2
3	4
4	6
5	8
6	12

7	16
8	24
9	32
10	64
11	80
12	96
13	128

1  
2 REV\_REQCH\_BUF\_QUANT\_PARM\_1- Reverse Request Channel First Buffer  
3 Quantization Parameter.

4 If REV\_REQCH\_USE\_DEFAULT\_TAB is omitted, or if it is  
5 included and not set to '000', the base station shall omit this  
6 field; otherwise, the base station shall include this field and  
7 set it as follows.

8 The base station shall set this field to the first Reverse Packet  
9 Data Channel buffer size quantization parameter.

10 The base station shall not set this field to '0000000' if  
11 REV\_REQCH\_BUF\_QUANT\_PARM\_2 is equal to '00000000'  
12 (see [3]).

13 REV\_REQCH\_BUF\_QUANT\_PARM\_2- Reverse Request Channel Second Buffer  
14 Quantization Parameter.

15 If REV\_REQCH\_USE\_DEFAULT\_TAB is omitted, or if it is  
16 included and not set to '000', the base station shall omit this  
17 field; otherwise, the base station shall include this field and  
18 set it as follows.

19 The base station shall set this field to the second Reverse  
20 Packet Data Channel buffer size quantization parameter.

21 The base station shall not set this field to '0000000' if  
22 REV\_REQCH\_BUF\_QUANT\_PARM\_1 is equal to '00000000'  
23 (see [3]).

24 REV\_REQCH\_HIGH\_WATERMARK\_1- Reverse Request Channel First High Watermark  
25 Parameter.

26 If REV\_REQCH\_USE\_WATERMARKS is equal to '0', the base  
27 station shall omit this field; otherwise, the base station shall  
28 include this field and set it to the first high watermark  
29 parameter (for high priority reports) for this sr\_id:

30 REV\_REQCH\_HIGH\_WATERMARK\_2 - Reverse Request Channel Second High Watermark  
31 Parameter.

32 If REV\_REQCH\_USE\_WATERMARKS is equal to '0', the base  
33 station shall omit this field; otherwise, the base station shall  
34 include this field and set it to the second high watermark  
35 parameter (for high priority report) for this sr\_id.

1 REV\_REQCH\_LOW\_WATERMARK\_1 - Reverse Request Channel First Low Watermark  
2 Parameter .  
3 If REV\_REQCH\_USE\_WATERMARKS is equal to '0', the base  
4 station shall omit this field; otherwise, the base station shall  
5 include this field and set it to the first low watermark  
6 parameter (for high priority reports) for this sr\_id.

7 REV\_REQCH\_LOW\_WATERMARK\_2 - Reverse Request Channel Second Low  
8 WatermarkParameter.  
9 If REV\_REQCH\_USE\_WATERMARKS is equal to '0', the base  
10 station shall omit this field; otherwise, the base station shall  
11 include this field and set it to the second low watermark  
12 parameter (for high priority reports) for this sr\_id.

13 REV\_REQCH\_CEILING\_1 - Reverse Request Channel Ceiling first parameter.  
14 If REV\_REQCH\_USE\_WATERMARKS is equal to '0', the base  
15 station shall omit this field; otherwise, the base station shall  
16 include this field and set it to the first high ceiling level  
17 parameter for this sr\_id .

18 REV\_REQCH\_CEILING\_2 - Reverse Request Channel Ceiling second parameter.  
19 If REV\_REQCH\_USE\_WATERMARKS is equal to '0', the base  
20 station shall omit this field; otherwise, the base station shall  
21 include this field and set it to the second high ceiling level  
22 parameter for this sr\_id.

23 REV\_REQCH\_FLOOR\_1 - Reverse Request Channel Floor first parameter.  
24 If REV\_REQCH\_USE\_WATERMARKS is equal to '0',the base  
25 station shall omit this field; otherwise, the base station shall  
26 include this field and set it to the first low floor level  
27 parameters for this sr\_id.

28 REV\_REQCH\_FLOOR\_2 - Reverse Request Channel Floor second parameter.  
29 If REV\_REQCH\_USE\_WATERMARKS is equal to '0', the base  
30 station shall omit this field; otherwise, the base station shall  
31 include this field and set it to the second low floor level  
32 parameter for this sr\_id.

33 RESERVED - Reserved bits.  
34 The base station shall add reserved bits as needed in order to  
35 make the length of the entire record equal to an integer  
36 number of octets. The base station shall set these bits to '0'.  
37

## 3.7.5.21 Multiple Character Extended Display

If P\_REV\_IN\_USE is equal to or greater than nine, the base station shall not transmit this information record to the mobile station.

This information record allows the network to supply supplementary service multiple character display information that may be displayed by the mobile station.

Type-Specific Field	Length (bits)
MC_EXT_DISPLAY_IND	1
DISPLAY_TYPE	7

One or more occurrences of the following record:

{

DISPLAY_TAG	8
NUM_RECORD	8

NUM\_RECORD occurrences of the following record

{ (NUM\_RECORD)

DISPLAY_ENCODING	8
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	Variable
-------------------	----------

} (NUM\_FIELDS)

} (NUM\_RECORDS)

}

RESERVED	0 - 7 (as needed)
----------	-------------------

MC\_EXT\_DISPLAY\_IND - The indicator of Multiple Character Extended Display information record.

The base station shall set this field to '1'.

DISPLAY\_TYPE - The type of display.

The base station shall set this field to the DISPLAY\_TYPE value shown in Table 3.7.5.16-1 corresponding to the type of display, as defined in [8] Annex D.

DISPLAY\_TAG - The indicator of the display information.

There are three types of display tags: mandatory control tags (Blank and Skip), display text tags, and optional control tags, see [8] Annex D.



1			The base station shall set this field to the DISPLAY_TAG
2			value shown in Table 3.7.5.16-2 corresponding to the type of
3			information contained in the following CHARi field, as defined
4			in [8] Annex D.
5	NUM_RECORD	-	The number of records displaying.
6			The base station shall set this field to the number of records
7			of display text.
8			If the DISPLAY_TAG field is equal to '10000000' or
9			'10000001', the base station shall set this field to '00000000'.
10	The base station shall include NUM_RECORD occurrences of the following record.		
11	DISPLAY_ENCODING	-	Display encoding.
12			The three most significant bits of this field shall be set to
13			'000' and the five least significant bit of this field shall be set
14			to a value as specified in [30] to indicate the display encoding
15			type used.
16			Support of an encoding method does not imply that the entire
17			encodable character set must be supported. In general, once
18			the supported character set is determined, various subsets of
19			the character set can be supported. If a message is
20			comprised entirely of characters from a supported subset of a
21			character set, it can be displayed. If a message contains an
22			unsupported character of a character set, it can be discarded.
23	NUM_FIELDS	-	Number of occurrences of the CHARi field.
24			The base station shall set this field to the number of
25			characters included in this record.
26	CHARi	-	Character.
27			The base station shall include NUM_FIELDS occurrences of
28			this field, one for each character to be displayed.
29	RESERVED	-	Reserved bits.
30			The base station shall add reserved bits as needed in order to
31			make the length of the entire record equal to an integer
32			number of octets. The base station shall set these bits to '0'.
33			

## 1 3.7.5.22 Call Waiting Indicator

2 This information record allows the base station to inform the mobile station that a call  
3 waiting call is available. This indicator may be used to suppress the generation of the  
4 local dial tone in mobile stations that provide locally generated dial tone.

5

Type-Specific Field	Length (bits)
CALL_WAITING_INDICATOR	1
RESERVED	7

6

7 CALL\_WAITING\_INDICATOR - Call waiting indicator.

8 The base station shall set this field to a '1' to indicate to the  
9 mobile station that a call is waiting. The base station shall  
10 set this field to a '0' if the call waiting call is not answered by  
11 the mobile station and the call waiting call goes away.

12 RESERVED - Reserved bits.

13 The base station shall set this field to '0000000'.

14

### 3.7.5.23 Enhanced Multiple Character Extended Display

This information record allows the network to supply supplementary service multiple character display information that may be displayed by the mobile station.

Type-Specific Field	Length (bits)
DISPLAY_TYPE	7
NUM_DISPLAYS	8

NUM\_DISPLAYS+1 occurrences of the following variable length record:

{ (NUM\_DISPLAYS)+1

DISPLAY_TAG	8
NUM_RECORD	8

NUM\_RECORD occurrences of the following record

{ (NUM\_RECORD)

RECORD_LENGTH	8
DISPLAY_ENCODING	8
NUM_FIELDS	8

NUM\_FIELDS occurrences of the following field:

{ (NUM\_FIELDS)

CHAR <sub>i</sub>	Variable
-------------------	----------

} (NUM\_FIELDS)

RESERVED	0 - 7 (as needed)
----------	-------------------

} (NUM\_RECORD)

} (NUM\_DISPLAYS)+1

RESERVED_1	0 - 7 (as needed)
------------	-------------------

- 5        DISPLAY\_TYPE    -    The type of display.
- 6                           The base station shall set this field to the DISPLAY\_TYPE
- 7                           value shown in Table 3.7.5.16-1 corresponding to the type of
- 8                           display, as defined in [8] Annex D.
- 9        NUM\_DISPLAYS    -    The number of occurrences of display text included.
- 10                          The base station shall set this field to one less than the
- 11                          number of occurrences of display text included.
- 12                          The base station shall include NUM\_DISPLAYS + 1
- 13                          occurrences of the following variable-field record:
- 14       DISPLAY\_TAG     -    The indicator of the display information.

1		There are three types of display tags: mandatory control tags
2		(Blank and Skip), display text tags, and optional control tags,
3		see [8] Annex D.
4		The base station shall set this field to the DISPLAY_TAG
5		value shown in Table 3.7.5.16-2 corresponding to the type of
6		information contained in the following CHARi field, as defined
7		in [8] Annex D.
8	NUM_RECORD	- The number of records displaying.
9		The base station shall set this field to the number of records
10		of display text.
11		If the DISPLAY_TAG field is equal to '10000000' or
12		'10000001', the base station shall set this field to '00000000'.
13	The base station shall include NUM_RECORD occurrences of the following record.	
14	RECORD_LENGTH	- Display text record length.
15		The base station shall set this field to the number of octets
16		included in this display text record, of specified encoding,
17		including this field.
18	DISPLAY_ENCODING	- Display encoding.
19		The three most significant bits of this field shall be set to
20		'000' and the five least significant bit of this field shall be set
21		to a value as specified in [30] to indicate the display encoding
22		type used.
23		Support of an encoding method does not imply that the entire
24		encodable character set must be supported. In general, once
25		the supported character set is determined, various subsets of
26		the character set can be supported. If a message is
27		comprised entirely of characters from a supported subset of a
28		character set, it can be displayed. If a message contains an
29		unsupported character of a character set, it can be discarded.
30	NUM_FIELDS	- Number of occurrences of the CHARi field.
31		The base station shall set this field to the number of
32		characters included in this record.
33	CHARi	- Character.
34		The base station shall include NUM_FIELDS occurrences of
35		this field, one for each character to be displayed.
36	RESERVED	- Reserved bits.
37		The base station shall add reserved bits as needed in order to
38		make the length of the entire record, of specified encoding,
39		equal to an integer number of octets. The base station shall
40		set these bits to '0'.

1        RESERVED\_1    -    Reserved bits for octet alignment.  
2  
3        The mobile station shall add the minimum number of bits  
4        necessary to make the record length in bits an integral  
5        multiple of 8. The mobile station shall set these bits to '0'.  
6

### 3.7.6 Information Elements

#### 3.7.6.1 Pilot Record Type Specific Fields

If PILOT\_REC\_TYPE is equal to '000', the Pilot Record Type Specific fields include the following fields:

Field	Length (bits)
TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	4

**TD\_POWER\_LEVEL** - TD transmit power level.

The base station or mobile station shall set this field to the TD transmit power level relative to that of the Forward Pilot Channel, as specified in Table 3.7.6.1-1.

**Table 3.7.6.1-1. TD Transmit Power Level**

TD_POWER_LEVEL	Transmit Power Level
00	9 dB below the Forward Pilot Channel transmit power
01	6 dB below the Forward Pilot Channel transmit power
10	3 dB below the Forward Pilot Channel transmit power
11	Same as the Forward Pilot Channel transmit power

**TD\_MODE** - Transmit Diversity mode.

The base station or mobile station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.6.1-2.

1

**Table 3.7.6.1-2. TD Mode**

<b>TD_MODE</b>	<b>Descriptions</b>
00	OTD (Orthogonal Transmit Diversity) mode
01	STS (Space Time Spreading) mode
10-11	Reserved

2

3

RESERVED - Reserved bits.

4

The base station or mobile station shall set this field to '000000'.

5

6

7

If PILOT\_REC\_TYPE is equal to '001', the base station or mobile station shall include the following fields:

8

<b>Field</b>	<b>Length (bits)</b>
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

9

10

QOF - Quasi-orthogonal function index.

11

The base station or mobile station shall set this field to the index of the Quasi-orthogonal function (see [2]).

12

13

WALSH\_LENGTH - Length of the Walsh Code.

14

The base station or mobile station shall set this field to the WALSH\_LENGTH value shown in Table 3.7.6.1-3 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot.

15

16

17

**Table 3.7.6.1-3. Walsh Code Length**

<b>WALSH_LENGTH (binary)</b>	<b>Length of the Walsh Code</b>
'000'	64
'001'	128
'010'	256
'011'	512
'100' – '111'	Reserved

AUX\_PILOT\_WALSH - Walsh Code for the Auxiliary Pilot.

The base station or mobile station shall set this field to the Walsh code corresponding to the Auxiliary pilot.

RESERVED - Reserved bits.

The base station or mobile station shall set all the bits of this field to '0' to make the entire record octet-aligned.

If PILOT\_REC\_TYPE is equal to '010', the base station or mobile station shall include the following fields:

<b>Field</b>	<b>Length (bits)</b>
QOF	2
WALSH_LENGTH	3
AUX_WALSH	WALSH_LENGTH+6
AUX_TD_POWER_LEVEL	2
TD_MODE	2
RESERVED	0 to 7 (as needed)

QOF - Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot.

The base station or mobile station shall set this field to the index of the Quasi-orthogonal function (see [2]).

WALSH\_LENGTH - Length of the Walsh code.

The base station or mobile station shall set this field to the WALSH\_LENGTH value shown in 3.7.6.1-3 corresponding to the length of the Walsh code for the pilots that are used as Auxiliary pilot in the transmit diversity mode.

AUX\_WALSH - Walsh Code for the Auxiliary Pilot.

The base station or mobile station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.



- 1    **AUX\_TD\_POWER\_LEVEL** - Auxiliary Transmit Diversity Pilot Power Level.  
 2    The base station or mobile station shall set this field to the  
 3    Auxiliary Transmit Diversity Pilot transmit power level  
 4    relative to that of the Auxiliary Pilot as specified in Table  
 5    3.7.6.1-4.

6                                    **Table 3.7.6.1-4. Auxiliary Transmit Diversity Pilot**  
 7                                    **Transmit Power Level**

<b>AUX_TD_POWER_LEVEL</b>	<b>Transmit Power Level</b>
00	9 dB below the Auxiliary Pilot Channel transmit power
01	6 dB below the Auxiliary Pilot Channel transmit power
10	3 dB below the Auxiliary Pilot Channel transmit power
11	Same as the Auxiliary Pilot Channel transmit power

- 8  
 9                    **TD\_MODE** - Transmit Diversity mode.  
 10    The base station or mobile station shall set this field to the  
 11    Transmit Diversity mode, as specified in Table 3.7.6.1-2.  
 12                    **RESERVED** - Reserved bits.  
 13    The base station or mobile station shall set all the bits of this  
 14    field to '0' to make the entire record octet-aligned.

- 15  
 16    If **PILOT\_REC\_TYPE** is equal to '011', the base station or mobile station shall include the  
 17    following fields:

<b>Field</b>	<b>Length (bits)</b>
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

- 19  
 20    **SR3\_PRIMARY\_PILOT** - Primary SR3 pilot.  
 21    The base station or mobile station shall set this field to the  
 22    value shown in Table 3.7.6.1-5 corresponding to the position  
 23    of the primary SR3 pilot.

**Table 3.7.6.1-5. The Position of the Primary SR3 Pilot**

<b>SR3_PRIMARY_PILOT (Binary)</b>	<b>Position</b>
00	The primary pilot is on the lowest SR3 frequency
01	The primary pilot is on the center SR3 frequency
10	The primary pilot is on the highest SR3 frequency
11	Reserved

- SR3\_PILOT\_POWER1 – The primary SR3 pilot power level relative to that of the pilot on the lower frequency of the two remaining SR3 frequencies.
- The base station or mobile station shall set this field to the value shown in Table 3.7.6.1-6 corresponding to the power level of the primary pilot with respect to the pilot on the lower frequency of the two remaining SR3 frequencies.

**Table 3.7.6.1-6. Pilot Transmission Power**

<b>SR3_PILOT_POWER1, SR3_PILOT_POWER2 (Binary)</b>	<b>Relative Transmission Power</b>
000	0dB
001	1dB
010	2dB
011	3dB
100	4dB
101	5dB
110	6dB
111	7dB

- SR3\_PILOT\_POWER2 – The primary SR3 pilot power level relative to that of the pilot on the higher frequency of the two remaining SR3 frequencies.

1 The base station or mobile station shall set this field to the  
 2 value shown in Table 3.7.6.1-6 corresponding to the power  
 3 level of the primary pilot with respect to the pilot on the  
 4 higher frequency of the two remaining SR3 frequencies.

5

6 If PILOT\_REC\_TYPE is equal to '100', the base station or mobile station shall include the  
 7 following fields:

8

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
ADD_INFO_INCL1	1
QOF1	0 or 2
WALSH_LENGTH1	0 or 3
AUX_PILOT_WALSH1	0 or WALSH_LENGTH1+6
ADD_INFO_INCL2	1
QOF2	0 or 2
WALSH_LENGTH2	0 or 3
AUX_PILOT_WALSH2	0 or WALSH_LENGTH2+6
RESERVED	0 – 7 (as needed)

9

10 SR3\_PRIMARY\_PILOT – Primary SR3 pilot.

11 The base station or mobile station shall set this field to the  
 12 value shown in Table 3.7.6.1-5 corresponding to the position  
 13 of the primary SR3 pilot.

14 SR3\_PILOT\_POWER1 – The primary SR3 pilot power level relative to that of the pilot  
 15 on the lower frequency of the two remaining SR3 frequencies.

16 The base station or mobile station shall set this field to the  
 17 value shown in Table 3.7.6.1-6 corresponding to the power  
 18 level of the primary pilot with respect to the pilot on the lower  
 19 frequency of the two remaining SR3 frequencies.

1	SR3_PILOT_POWER2	-	The primary SR3 pilot power level relative to that of the pilot on the higher frequency of the two remaining SR3 frequencies.
2			
3			
4			The base station or mobile station shall set this field to the value shown in Table 3.7.6.1-6 corresponding to the power level of the primary pilot with respect to the pilot on the higher frequency of the two remaining SR3 frequencies.
5			
6			
7			
8	QOF	-	Quasi-orthogonal function index.
9			The base station or mobile station shall set this field to the index of the Quasi-orthogonal function (see [2]) on the frequency of the primary pilot.
10			
11			
12	WALSH_LENGTH	-	Length of the Walsh Code.
13			The base station or mobile station shall set this field to the WALSH_LENGTH value shown in Table 3.7.6.1-3 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot on the frequency of the primary pilot.
14			
15			
16			
17			
18	AUX_PILOT_WALSH	-	Walsh Code for the Auxiliary Pilot.
19			The base station or mobile station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the frequency of the primary pilot.
20			
21			
22	ADD_INFO_INCL1	-	Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.
23			
24			If the additional information for the pilot on the lower frequencies of the two remaining SR3 frequencies is the same as pilot on the primary frequency, the base station or mobile station shall set this field to '0'; otherwise, the base station or mobile station shall set this field to '1'.
25			
26			
27			
28			
29	QOF1	-	Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.
30			
31			If ADD_INFO_INCL1 is set to '0', the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:
32			
33			
34			The base station or mobile station shall set this field to the index of the Quasi-orthogonal function (see [2]) on the lower frequency of the two remaining SR3 frequencies.
35			
36			
37	WALSH_LENGTH1	-	Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.
38			
39			If ADD_INFO_INCL1 is set to '0', the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:
40			
41			
42			The base station or mobile station shall set this field to the WALSH_LENGTH value shown in Table 3.7.6.1-3 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot on the lower frequency of the two remaining SR3 frequencies.
43			
44			
45			
46			

1	AUX_PILOT_WALSH1	-	Walsh Code for the Auxiliary Pilot on the lower frequency of
2			the two remaining SR3 frequencies.
3			If ADD_INFO_INCL1 is set to '0', the base station or mobile
4			station shall omit this field; otherwise, the base station or
5			mobile station shall set this field as follows:
6			The base station or mobile station shall set this field to the
7			Walsh code corresponding to the Auxiliary pilot on the lower
8			frequency of the two remaining SR3 frequencies.
9	ADD_INFO_INCL2	-	Additional information included for the pilot on the higher
10			frequency of the two remaining SR3 frequencies.
11			If the additional information for the pilot on the higher
12			frequencies of the two remaining SR3 frequencies is the same
13			as pilot on the primary frequency, the base station or mobile
14			station shall set this field to '0'; otherwise, the base station or
15			mobile station shall set this field to '1'.
16	QOF2	-	Quasi-orthogonal function index for the pilot on the higher
17			frequency of the two remaining SR3 frequencies.
18			If ADD_INFO_INCL2 is set to '0', the base station or mobile
19			station shall omit this field; otherwise, the base station or
20			mobile station shall set this field as follows:
21			The base station or mobile station shall set this field to the
22			index of the Quasi-orthogonal function (see [2]) on the higher
23			frequency of the two remaining SR3 frequencies.
24	WALSH_LENGTH2	-	Length of the Walsh Code for the pilot on the higher
25			frequency of the two remaining SR3 frequencies.
26			If ADD_INFO_INCL2 is set to '0', the base station or mobile
27			station shall omit this field; otherwise, the base station or
28			mobile station shall set this field as follows:
29			The base station or mobile station shall set this field to the
30			WALSH_LENGTH value shown in Table 3.7.6.1-3
31			corresponding to the length of the Walsh code for the pilot
32			that is used as the Auxiliary pilot on the higher frequency of
33			the two remaining SR3 frequencies.
34	AUX_PILOT_WALSH2	-	Walsh Code for the Auxiliary Pilot on the higher frequency of
35			the two remaining SR3 frequencies.
36			If ADD_INFO_INCL2 is set to '0', the base station or mobile
37			station shall omit this field; otherwise, the base station or
38			mobile station shall set this field as follows:
39			The base station or mobile station shall set this field to the
40			Walsh code corresponding to the Auxiliary pilot on the higher
41			frequency of the two remaining SR3 frequencies.
42	RESERVED	-	Reserved bits.
43			The base station or mobile station shall set all the bits of this
44			field to '0' to make the entire record octet-aligned.
45			

- 1 This page intentionally left blank.

1 ANNEX A RESERVED

2

3

1 This page intentionally left blank.

2



## 1 ANNEX B CDMA CALL FLOW EXAMPLES

2 This is an informative annex which contains examples of call flow. The diagrams follow  
3 these conventions:

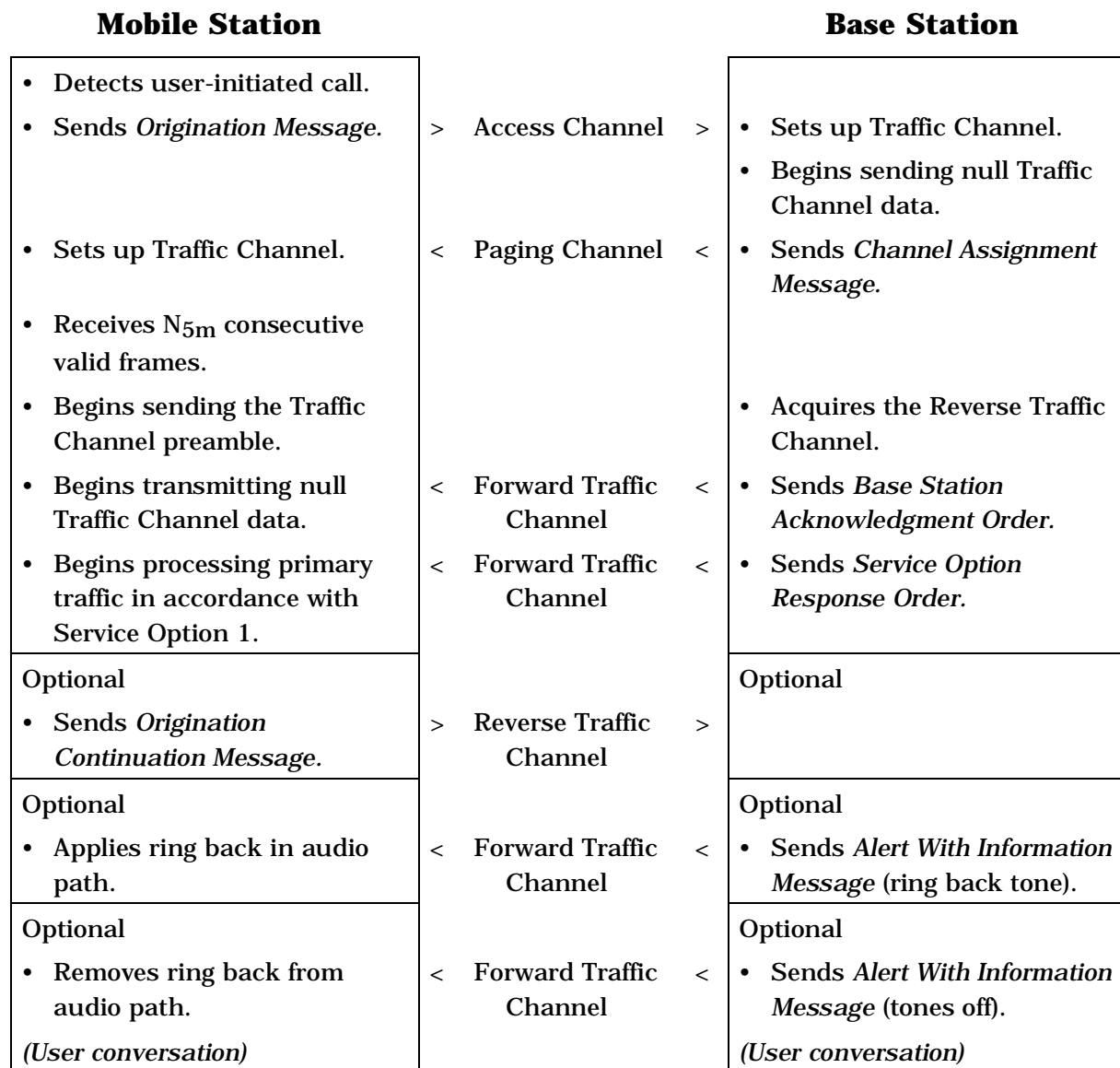
- 4 • All messages are received without error
- 5 • Receipt of messages is not shown except in the handoff examples
- 6 • Acknowledgments are not shown
- 7 • Optional authentication procedures are not shown
- 8 • Optional private long code transitions are not shown

9 For the call flow diagrams B-22 through B-31, the following conventions hold:

- 10 • The following message acronyms are defined:
  - 11 ERRM: Extended Release Response Message
  - 12 ERRMM: Extended Release Response Mini Message
  - 13 RRM: Resource Request Message
  - 14 RRMM: Resource Request Mini Message
  - 15 RRRM: Resource Release Request Message
  - 16 RRRMM: Resource Release Request Mini Message
  - 17 SreqM: Service Request Message
  - 18 SCRM: Supplemental Channel Request Message
  - 19 SCRMM: Supplemental Channel Request Mini Message
  - 20 ERM: Extended Release Message
  - 21 ERMM: Extended Release Mini Message
  - 22 RAM: Resource Allocation Message
  - 23 RAMM: Resource Allocation Mini Message
  - 24 SCM: Service Connect Message
  - 25 GHDM: General Handoff Direction Message
  - 26 UHDM: Universal Handoff Direction Message
  - 27 ESCAM: Extended Supplemental Channel Assignment Message
  - 28 FSCAMM: Forward Supplemental Channel Assignment Mini Message
  - 29 RSCAMM: Reverse Supplemental Channel Assignment Mini Message

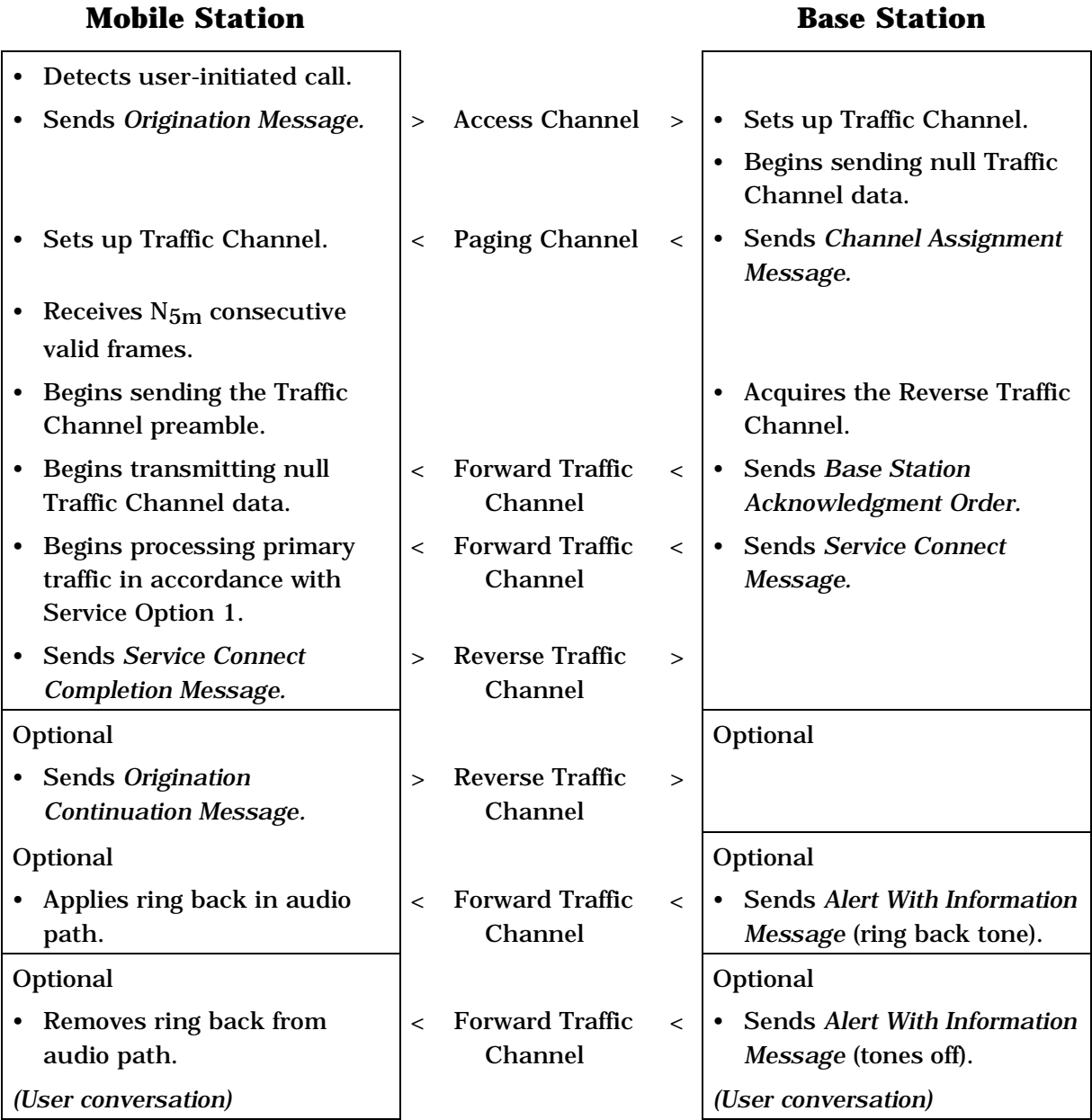
1 HCM: (Extended) Handoff Complete Message

2



3 **Figure B-1A. Simple Call Flow, Mobile Station Origination Example Using**  
 4 **Service Option Negotiation with Service Option 1**  
 5

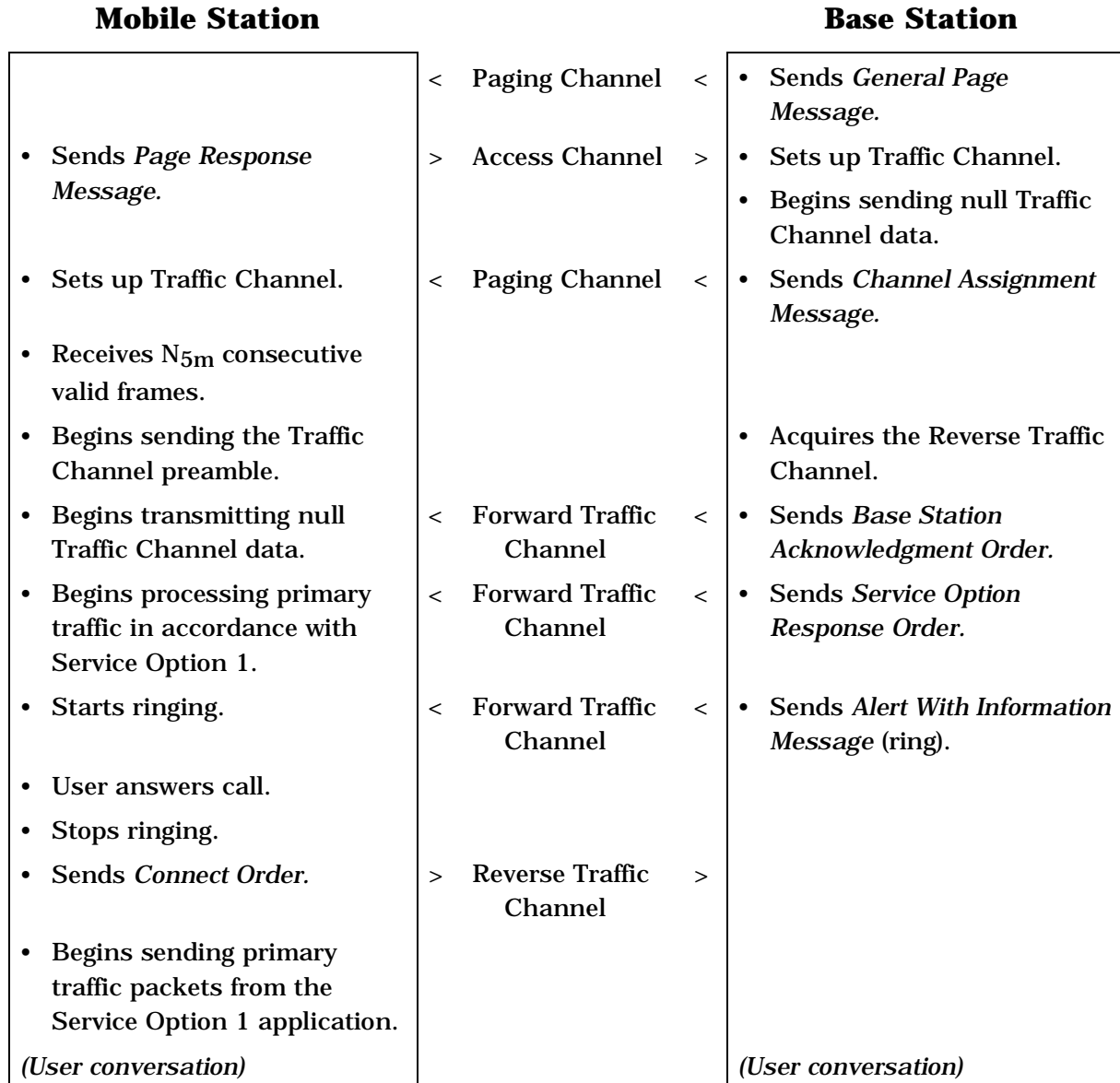
1



2 **Figure B-1B. Simple Call Flow, Mobile Station Origination Example Using Service**  
3 **Negotiation with Service Option 1**

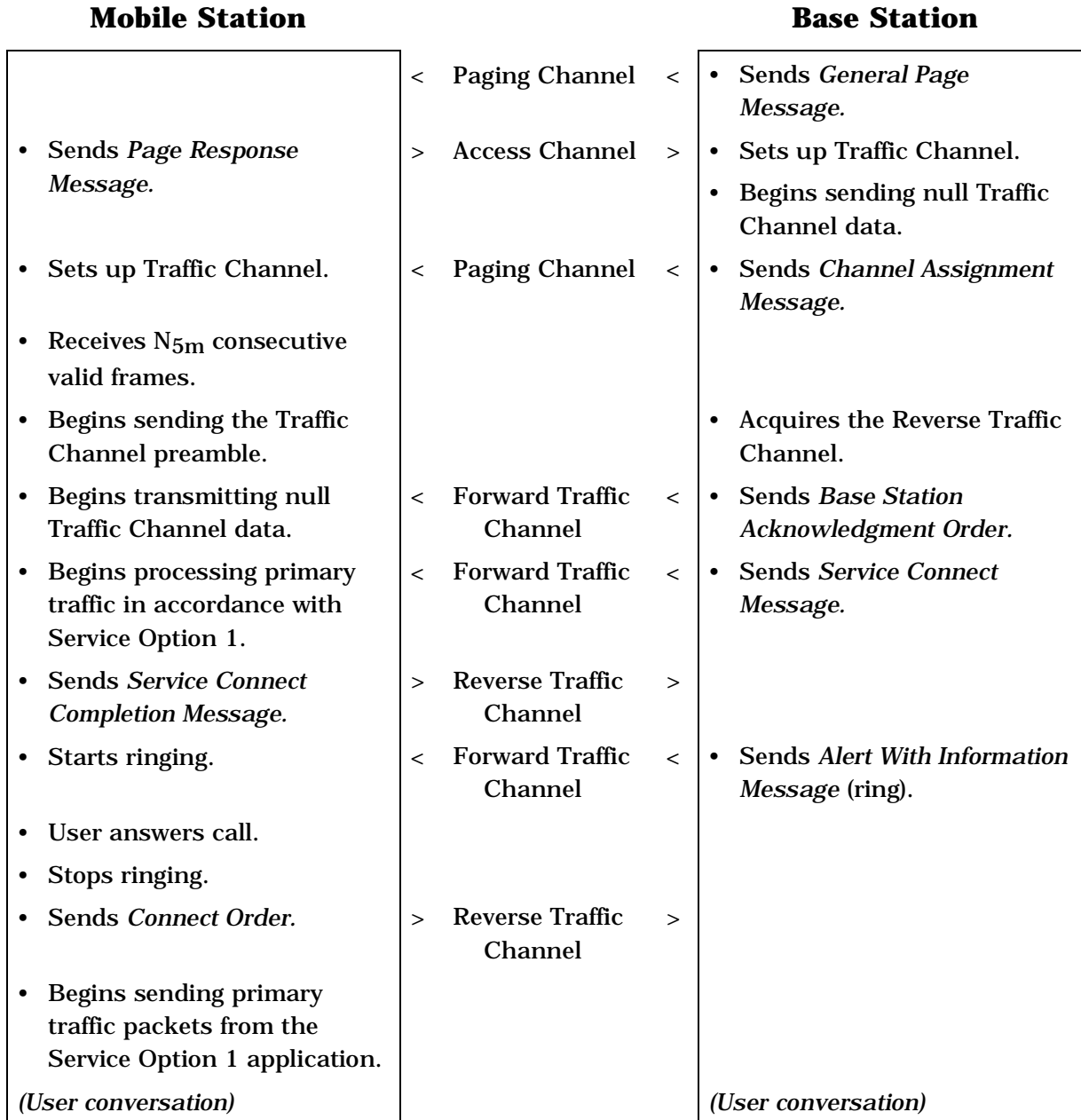
4  
5

1



2 **Figure B-2A. Simple Call Flow, Mobile Station Termination Example Using**  
3 **Service Option Negotiation with Service Option 1**  
4

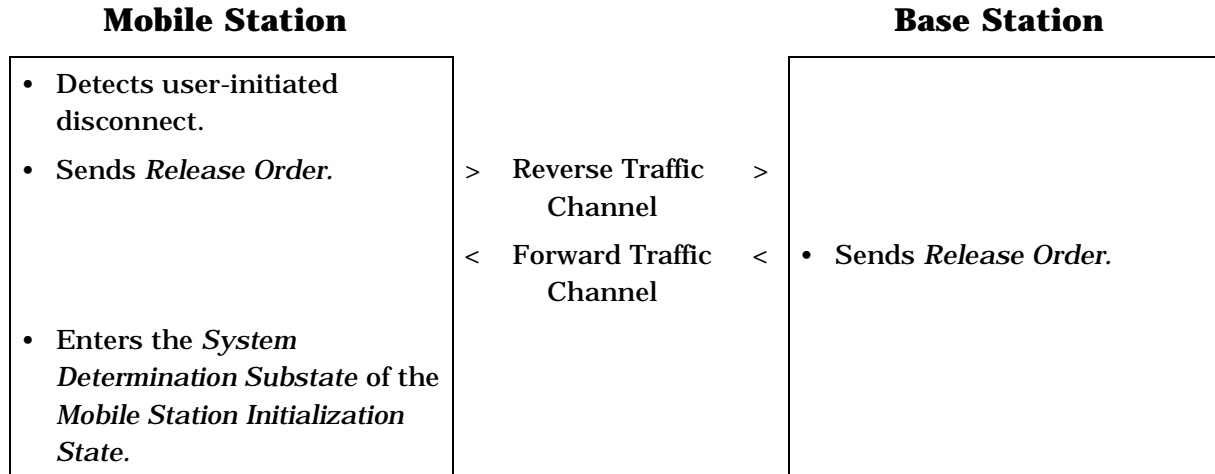
1



2 **Figure B-2B. Simple Call Flow, Mobile Station Termination Example Using Service**  
3 **Negotiation with Service Option 1**

4

1



2

**Figure B-3. Simple Call Flow, Mobile Station Initiated Call Disconnect Example**

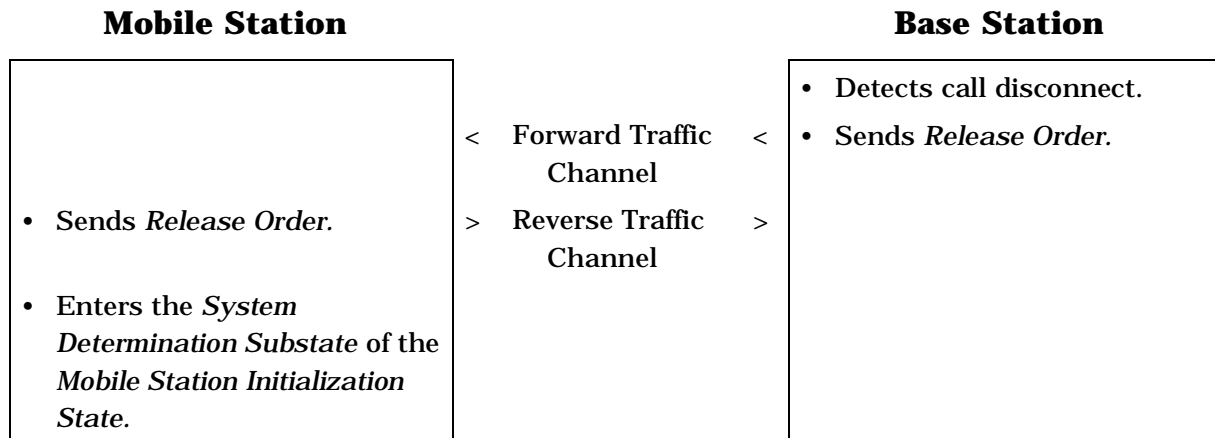
3

4

5

6

7

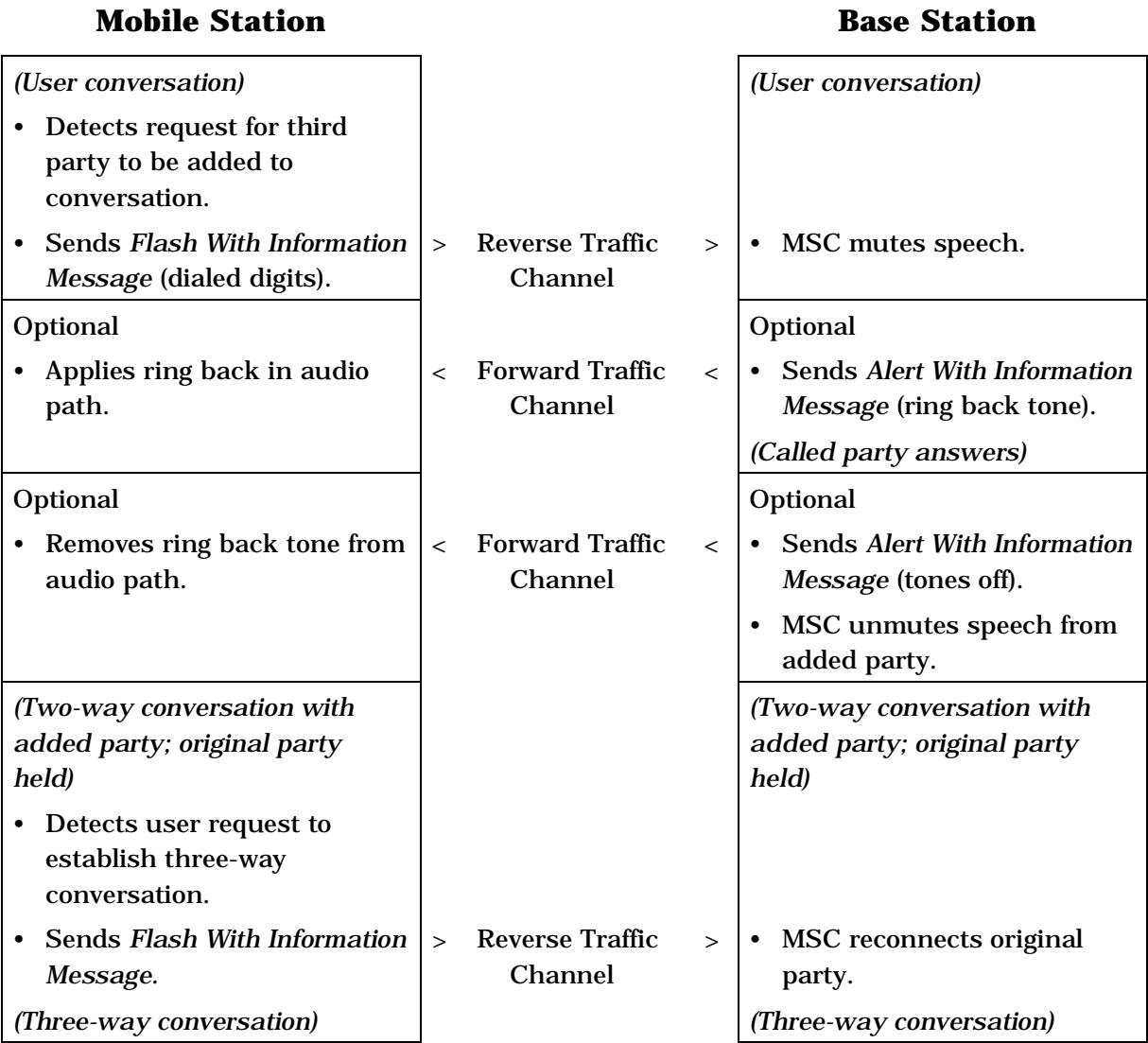


8

**Figure B-4. Simple Call Flow, Base Station Initiated Call Disconnect Example**

9

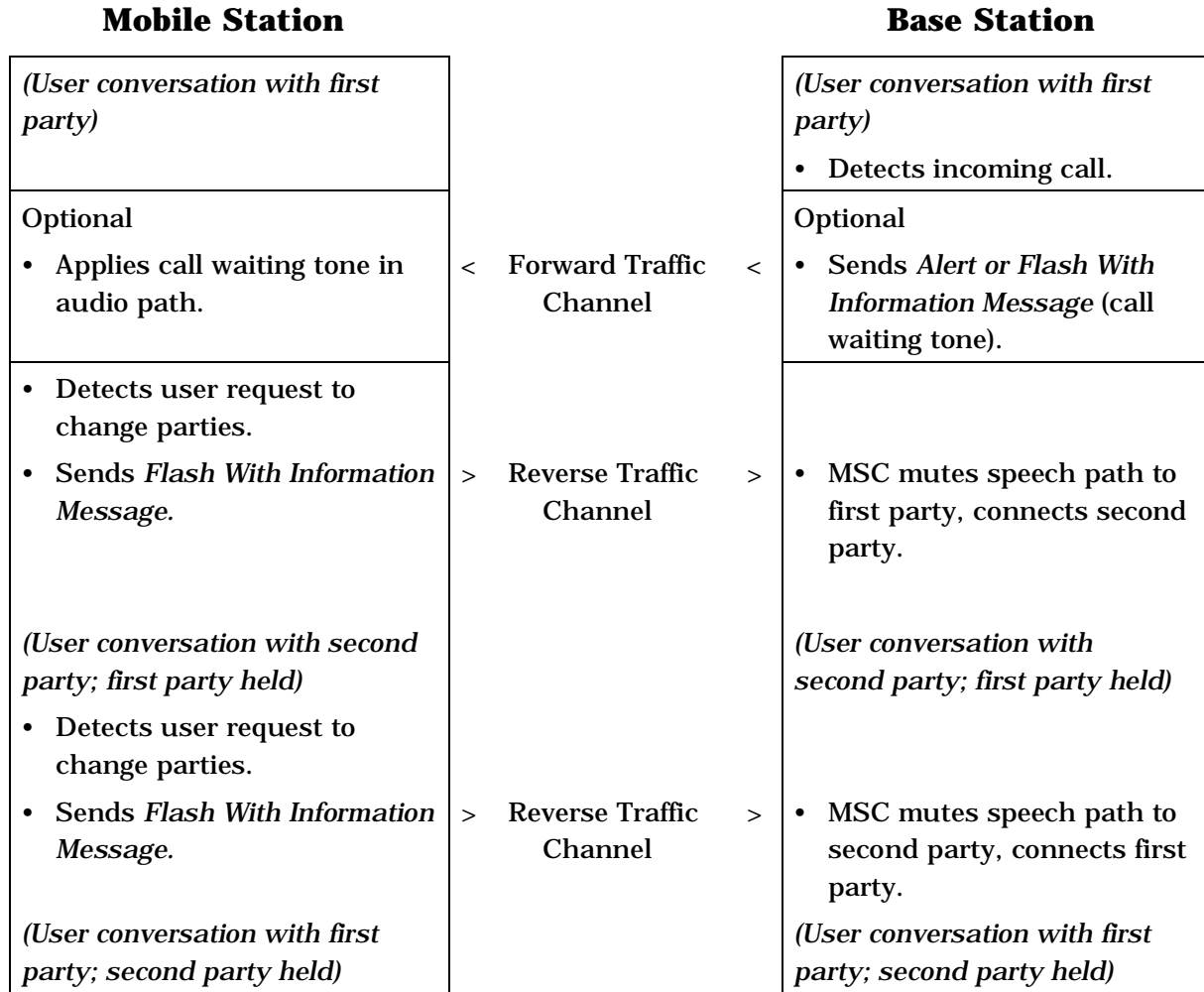
1



2  
3

**Figure B-5. Simple Call Flow, Three-Party Calling Example**

1



**Figure B-6. Simple Call Flow, Call-Waiting Example**

2

3

4

5

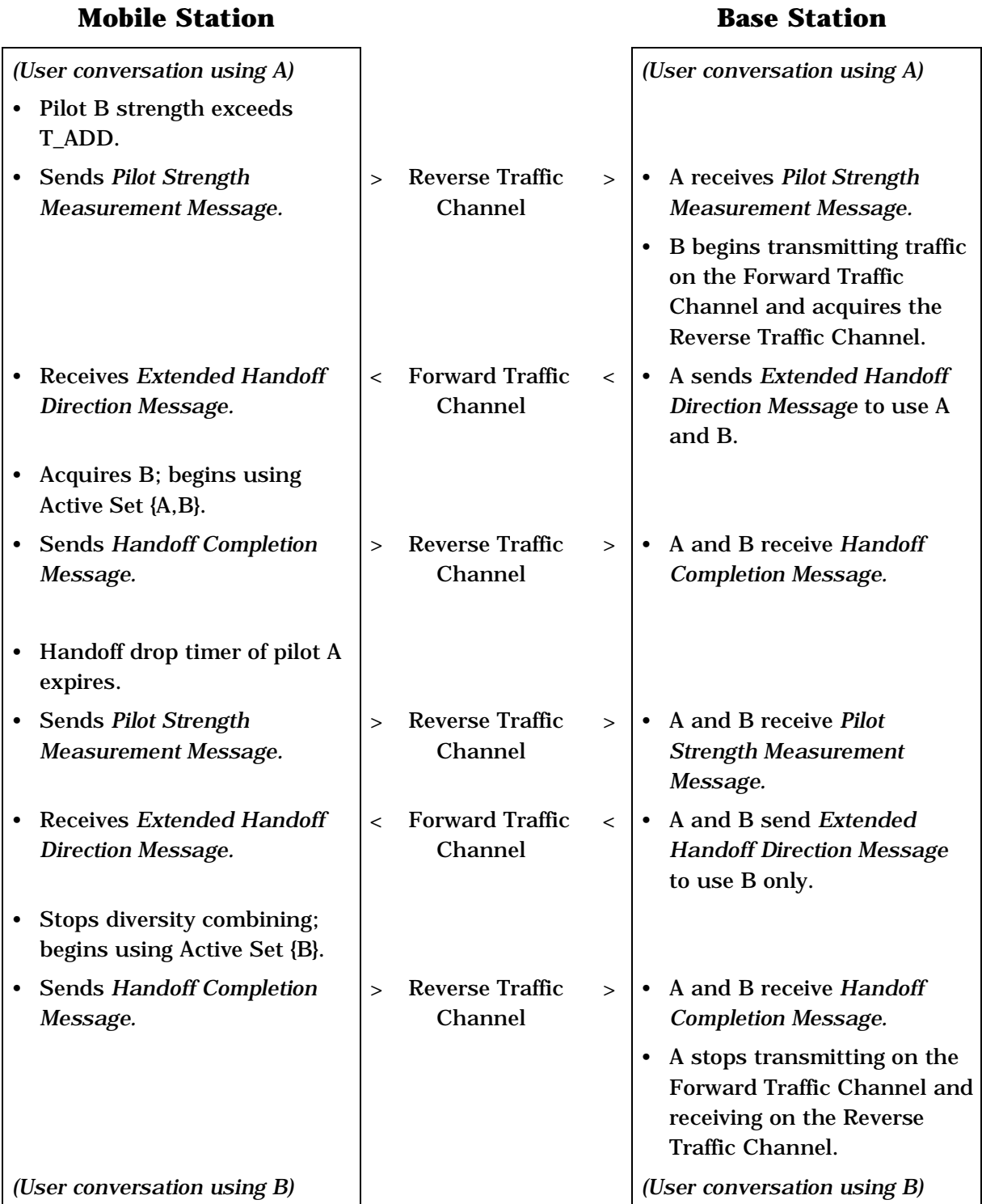
6 Figure B-7 illustrates call processing operations during a soft handoff from base station A  
 7 to base station B. Figure B-8 illustrates call processing operations during a sequential soft  
 8 handoff in which the mobile station is transferred from a pair of base stations A and B  
 9 through a pair of base stations B and C to base station C.

10

11



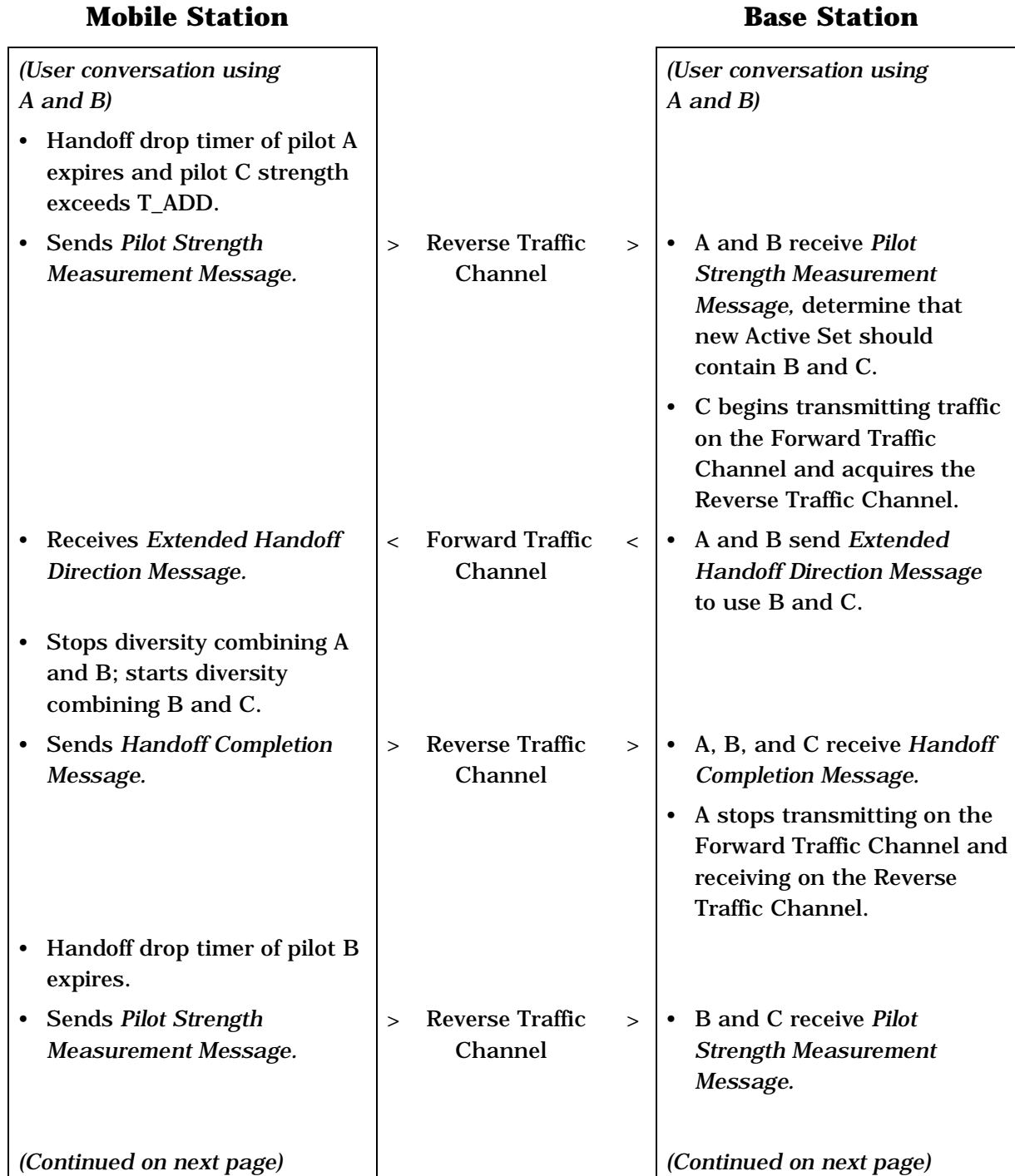
1



2  
3

**Figure B-7. Call Processing During Soft Handoff**

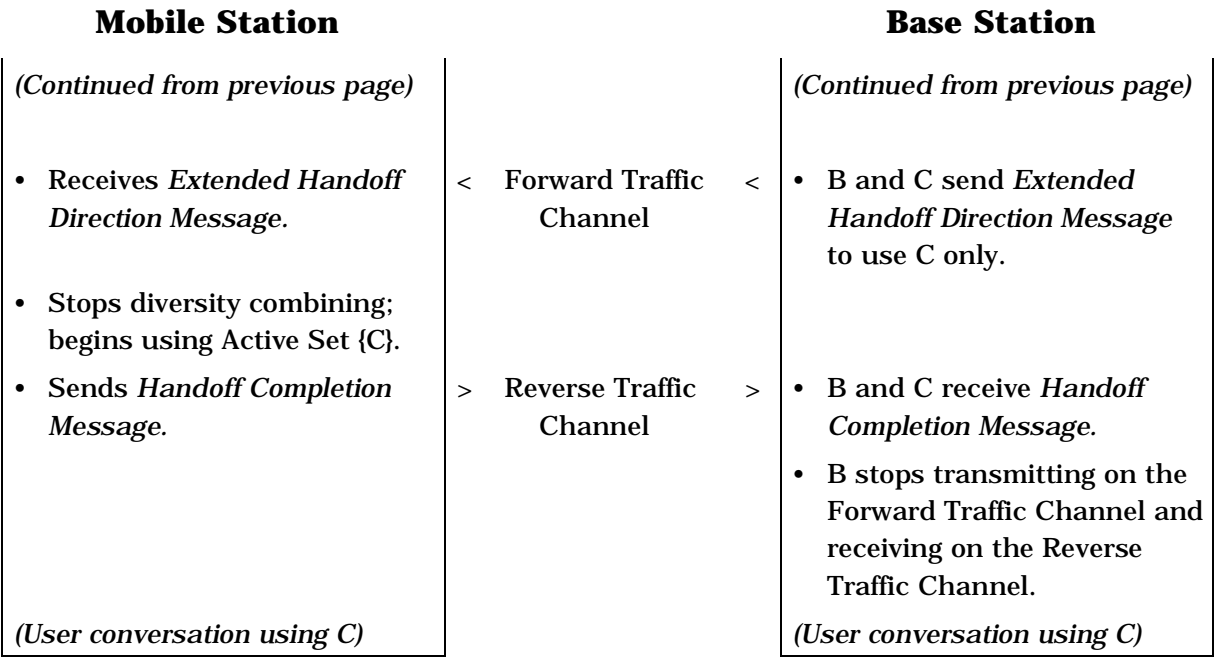
1



**Figure B-8. Call Processing During Sequential Soft Handoff (Part 1 of 2)**

2  
3

1

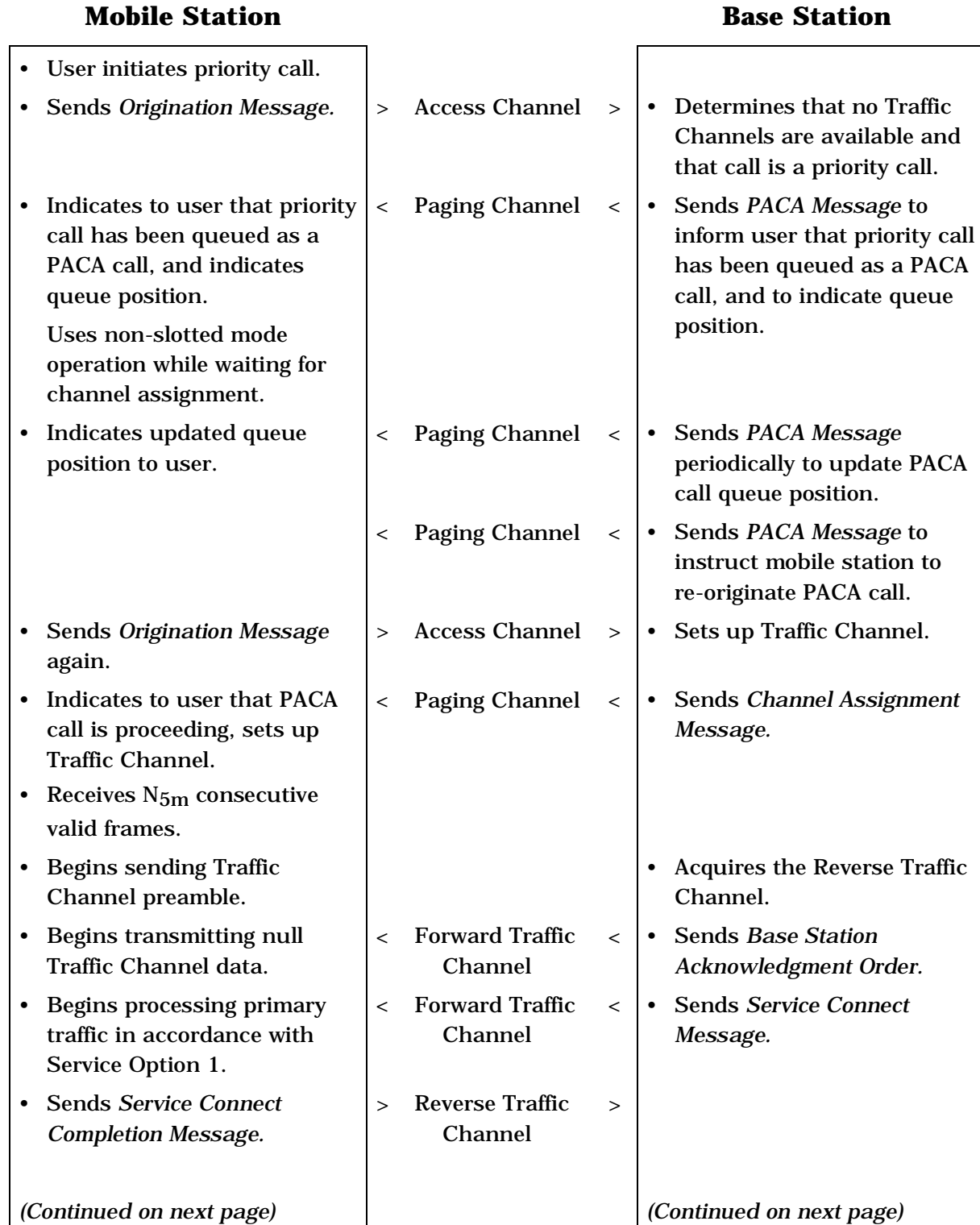


2

**Figure B-8. Call Processing During Sequential Soft Handoff (Part 2 of 2)**

3

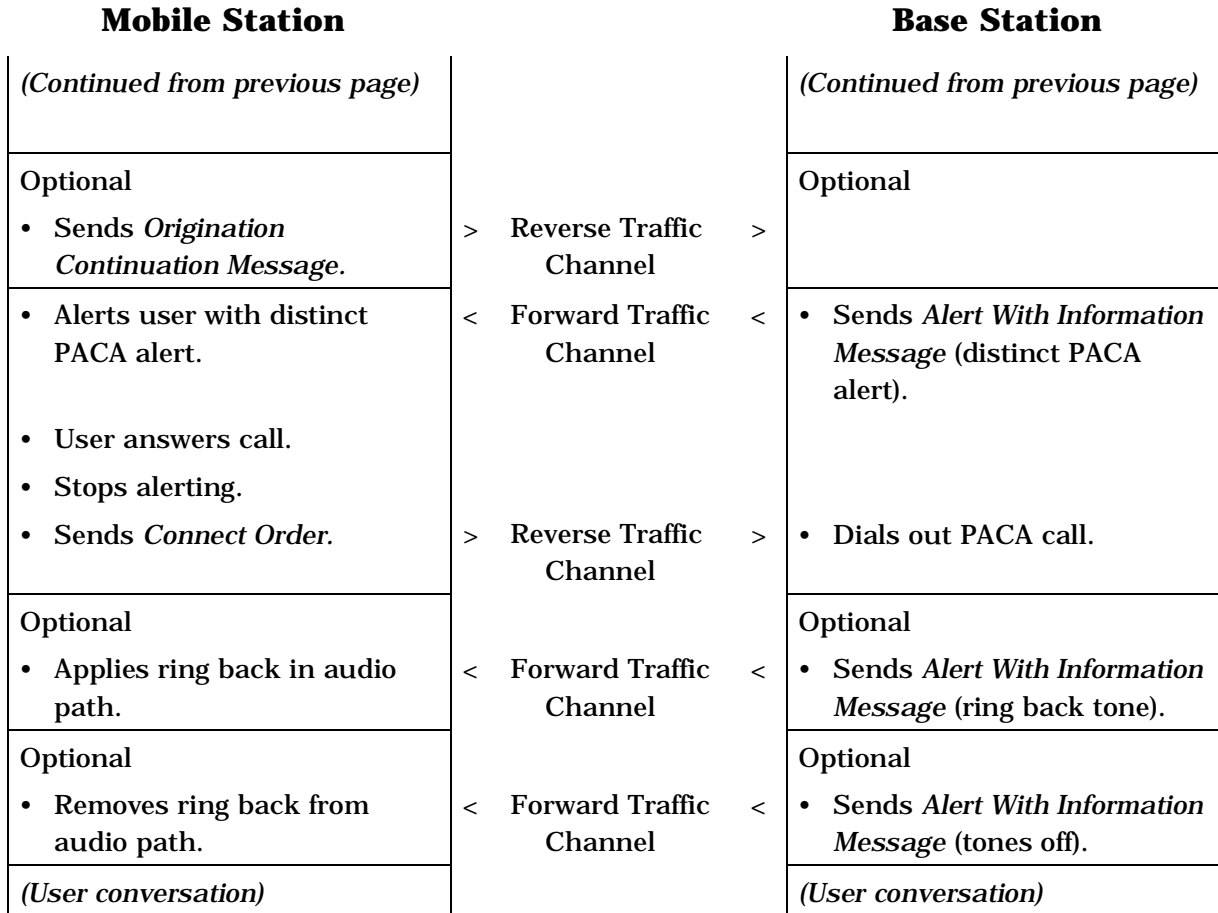
1



**Figure B-9. PACA Call Processing (Part 1 of 2)**

2  
3

1



2

**Figure B-9. PACA Call Processing (Part 2 of 2)**

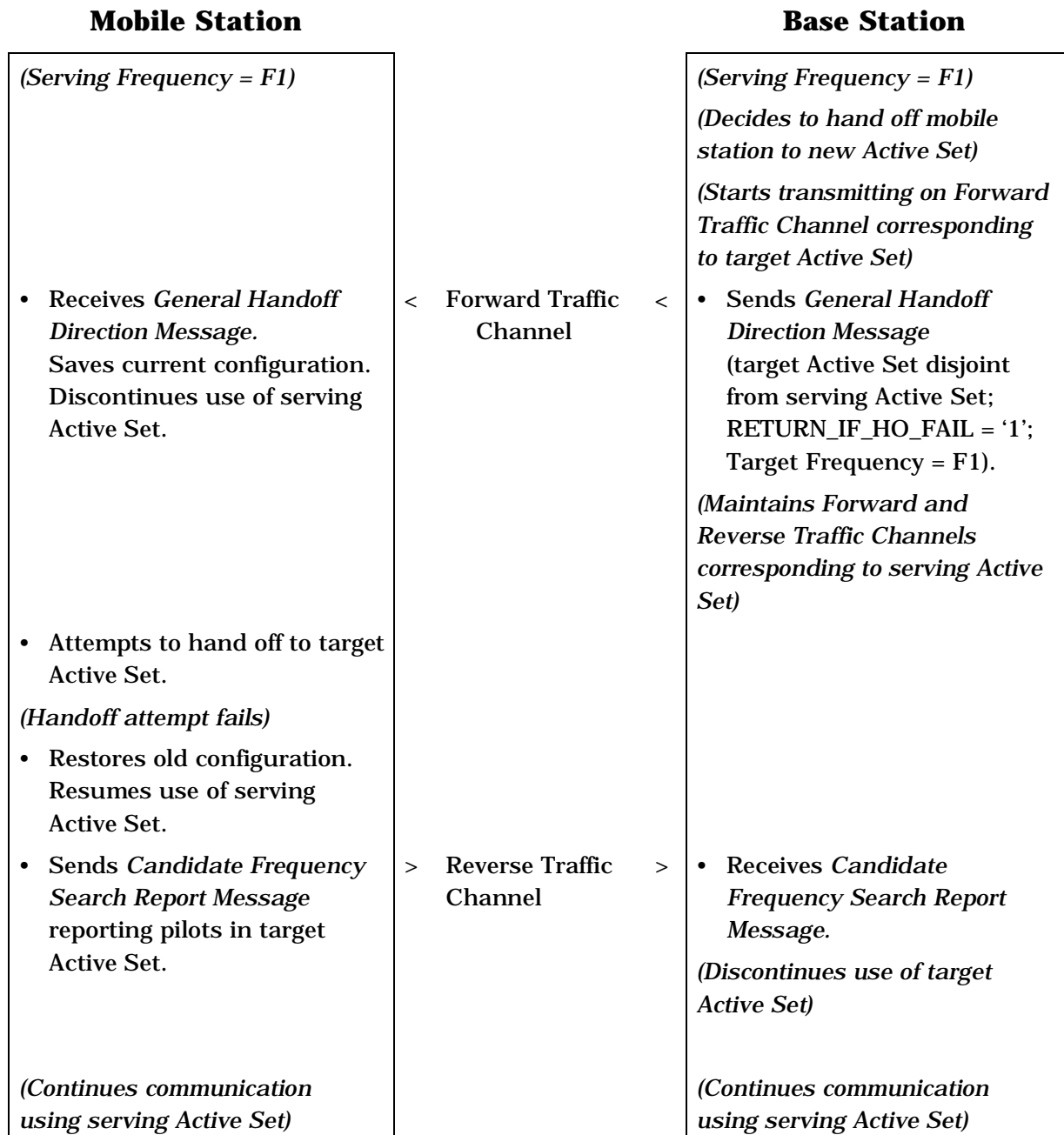
3

4 Figure B-10 illustrates call processing operations for failure recovery for hard handoff on  
5 the same frequency. Figure B-11 illustrates call flow for failure recovery for inter-frequency  
6 handoff when the mobile station does not search the Candidate Frequency. Figures B-12  
7 and B-13 show the call flow for mobile-assisted inter-frequency handoff (handoff preceded  
8 by searching of the Candidate Frequency Search Set by the mobile station), where the  
9 search is started by using the *Candidate Frequency Search Control Message*. Figures B-14  
10 and B-15 illustrate call flow for inter-frequency handoff when failure recovery also includes  
11 searching the Candidate Frequency Search Set. In the periodic search examples (Figures  
12 B-13 and B-15), it is assumed that the mobile station performs a search of the Candidate  
13 Frequency Search Set in a single visit to the Candidate Frequency. Figures B-16 and B-17  
14 illustrate the interaction of inter-frequency handoff operations with an ongoing periodic  
15 search of the Candidate Frequency Search Set.

16

17

# 1

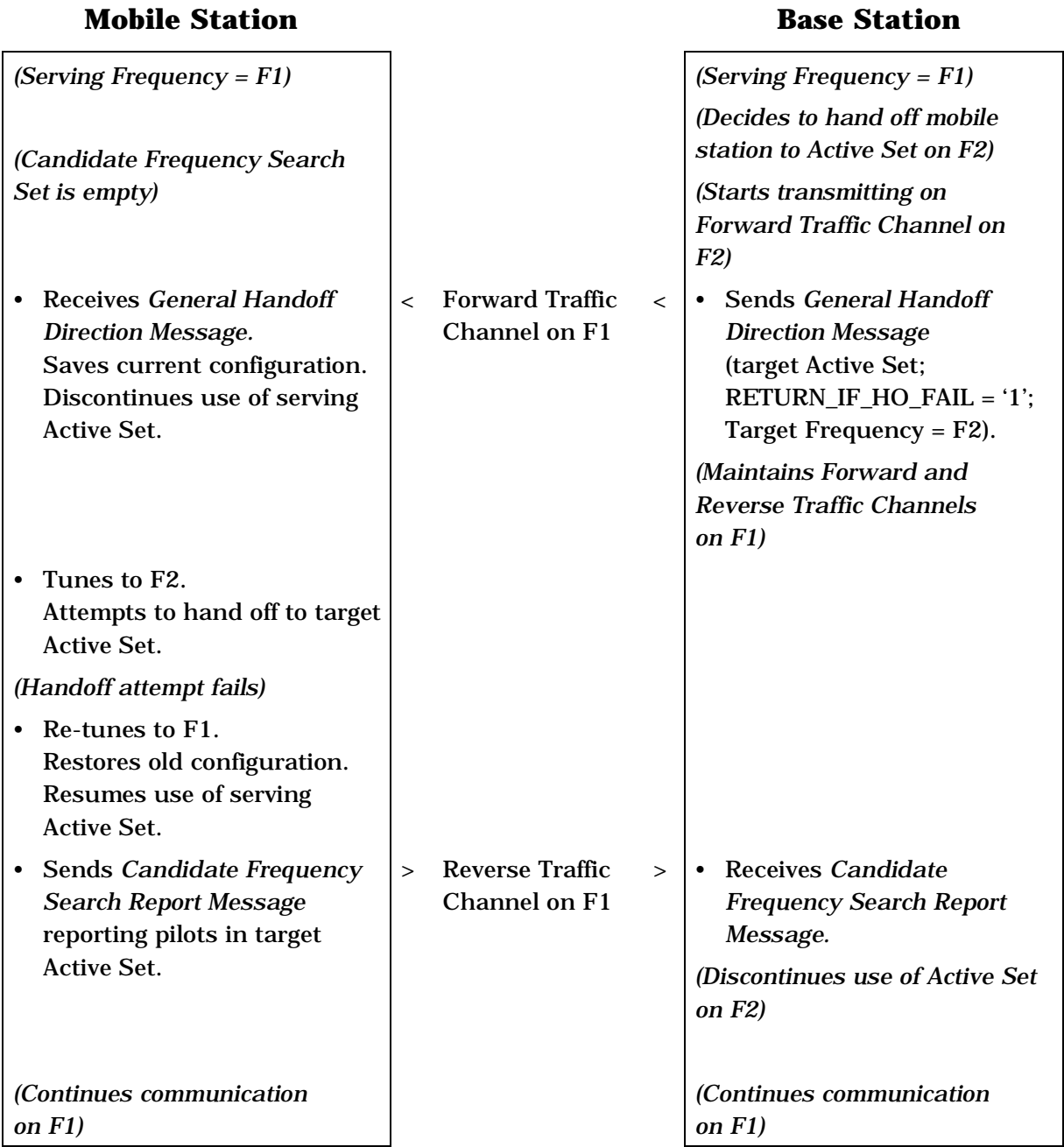


**Figure B-10. Call Flow for Same Frequency Hard Handoff Failure Recovery**

2

3

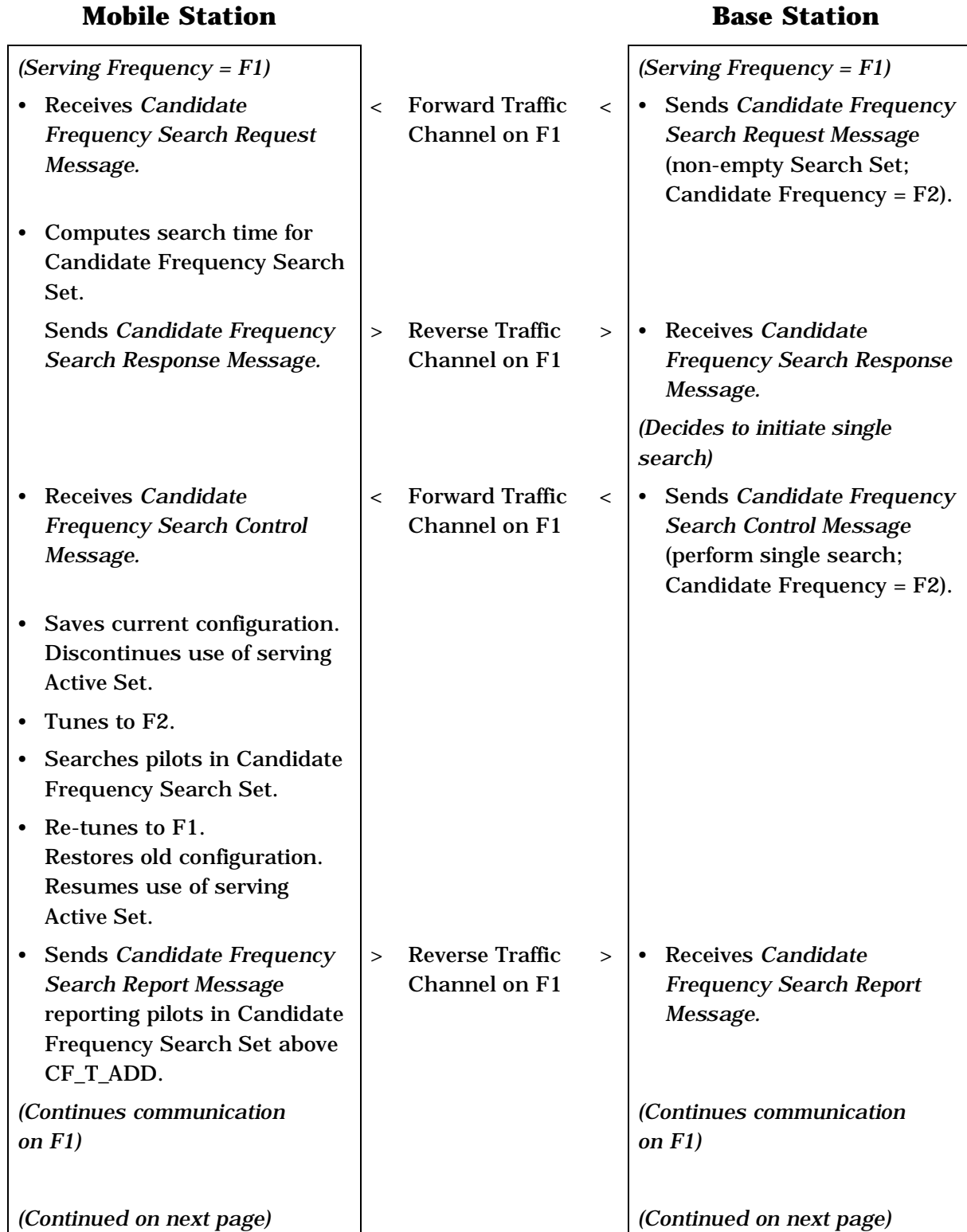
1



2  
3  
4

**Figure B-11. Call Flow for Inter-Frequency Hard Handoff Failure Recovery without Search**

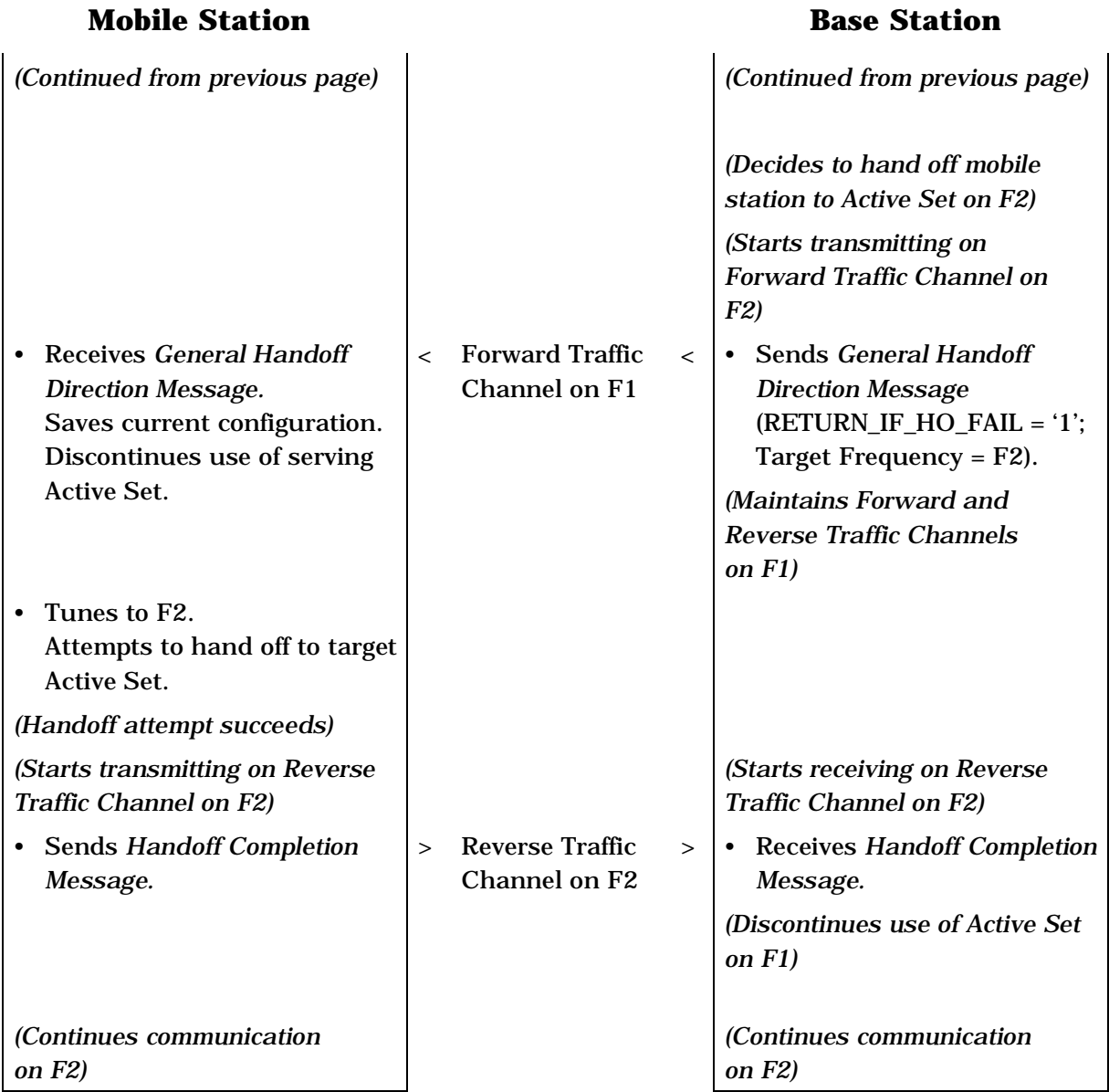
1



**Figure B-12. Call Flow for Inter-Frequency Handoff (Single Search Using Candidate Frequency Search Control Message) (Part 1 of 2)**

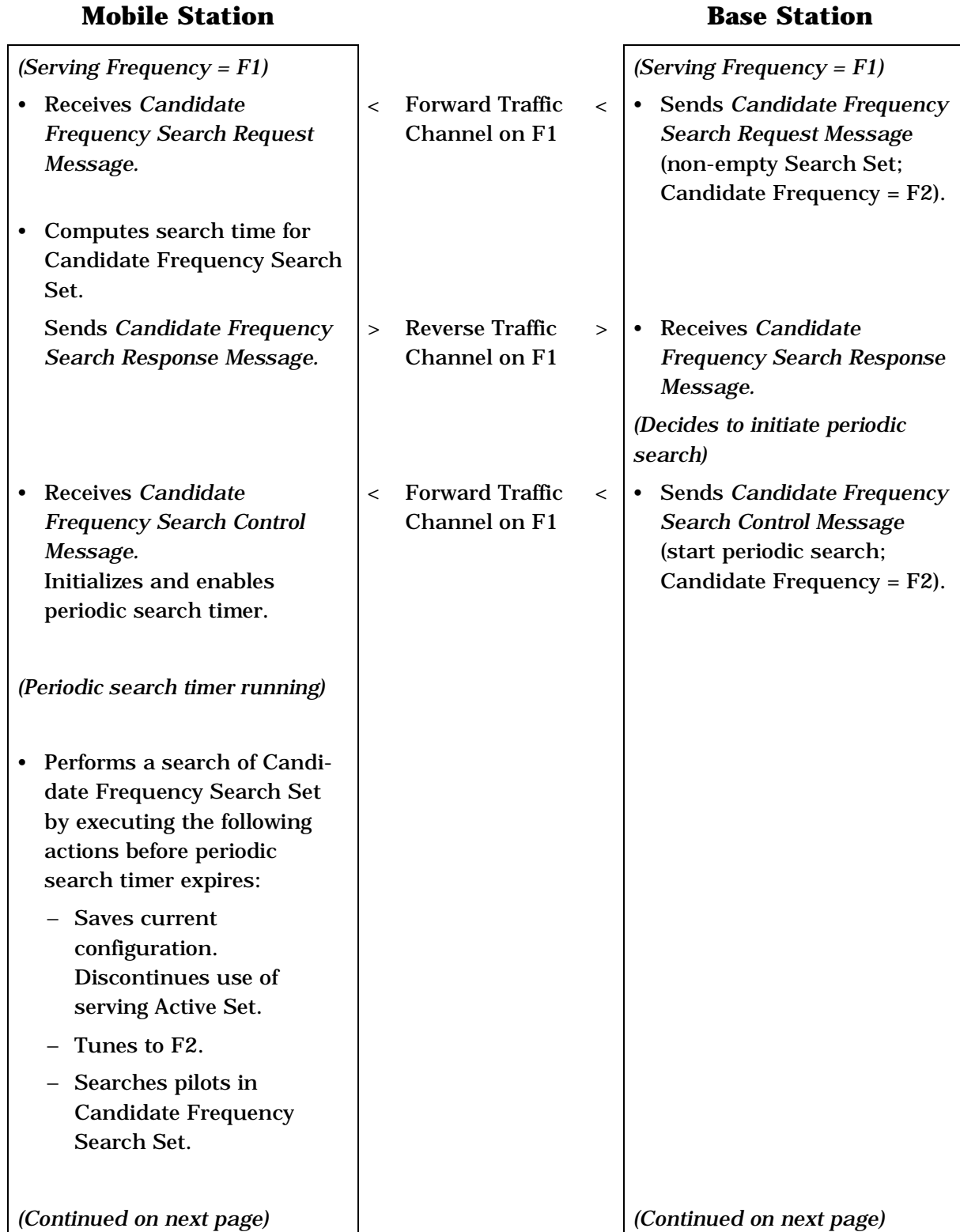


1



2 **Figure B-12. Call Flow for Inter-Frequency Handoff (Single Search Using Candidate**  
3 **Frequency Search Control Message) (Part 2 of 2)**  
4

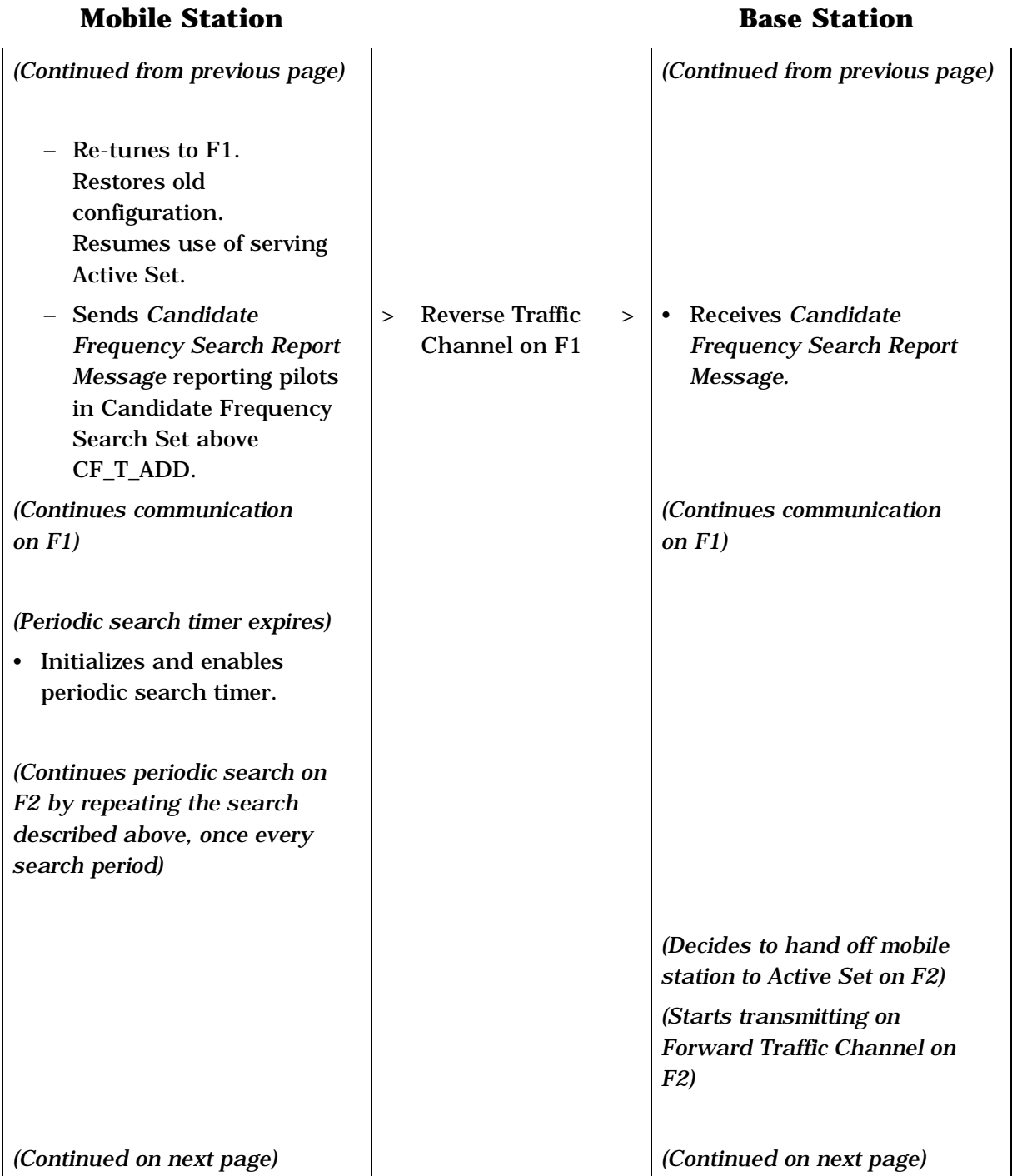
1



2 **Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate**  
 3 **Frequency Search Control Message) (Part 1 of 3)**

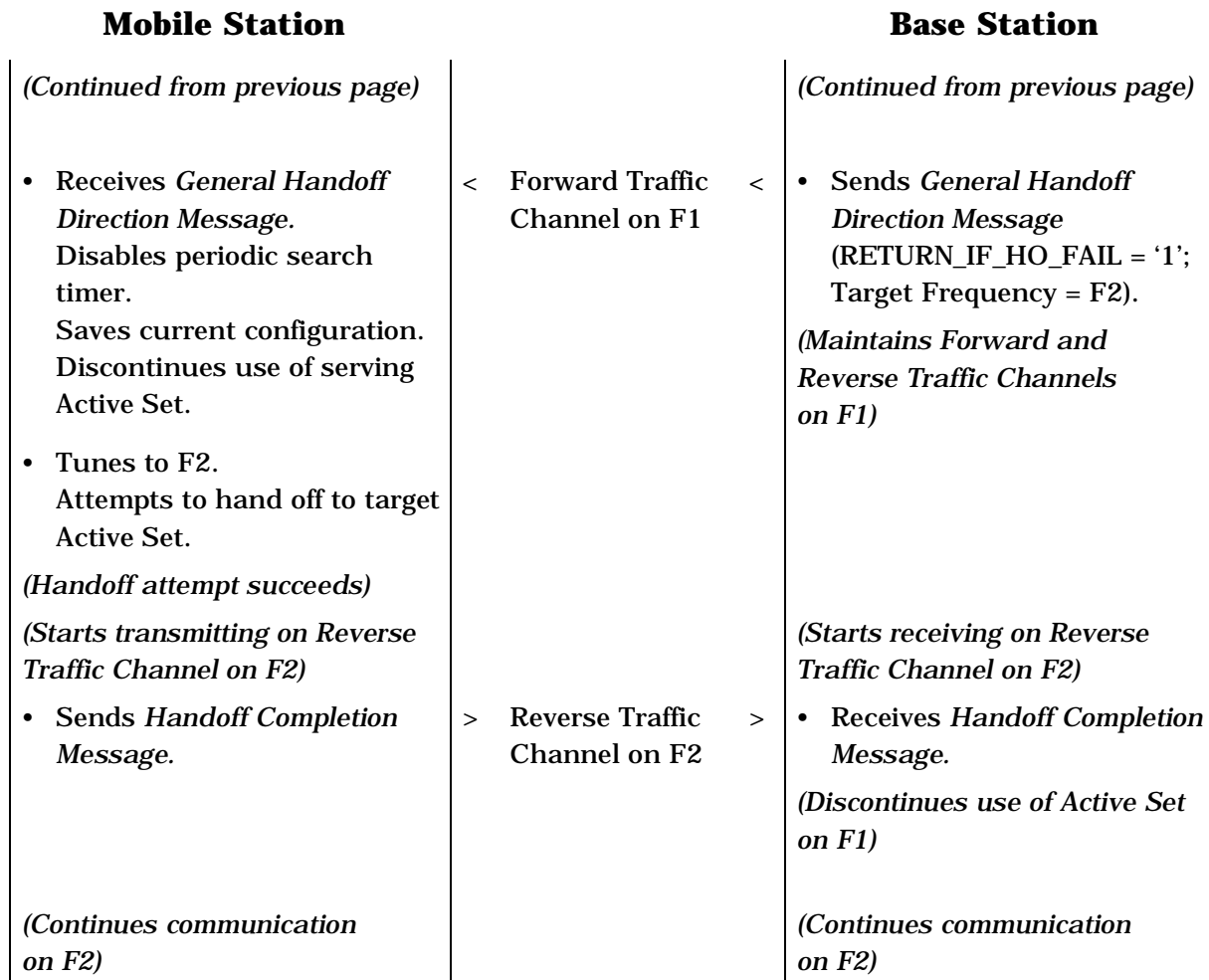
4

1



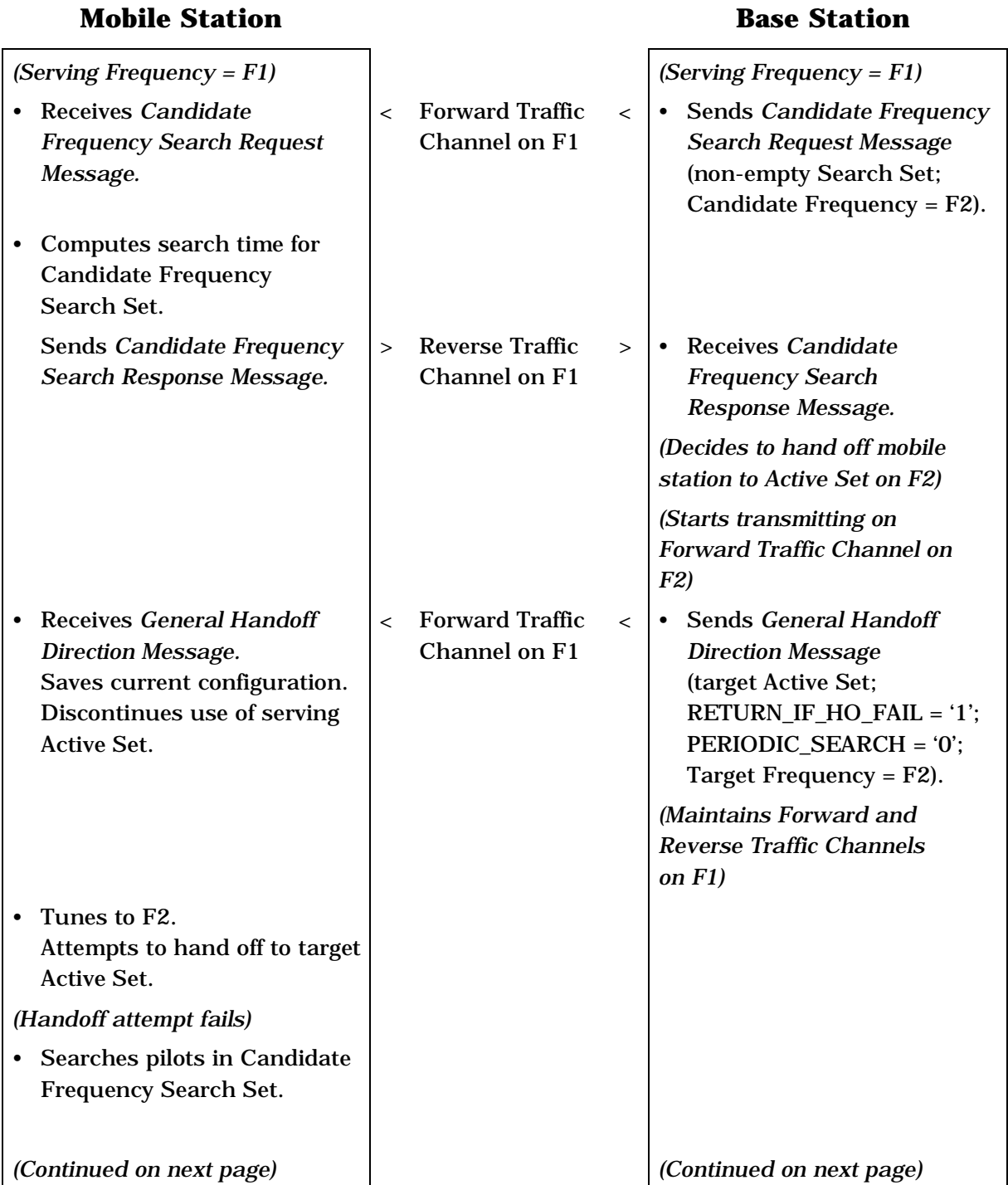
2 **Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate**  
3 **Frequency Search Control Message) (Part 2 of 3)**  
4

**1**



**Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate Frequency Search Control Message) (Part 3 of 3)**

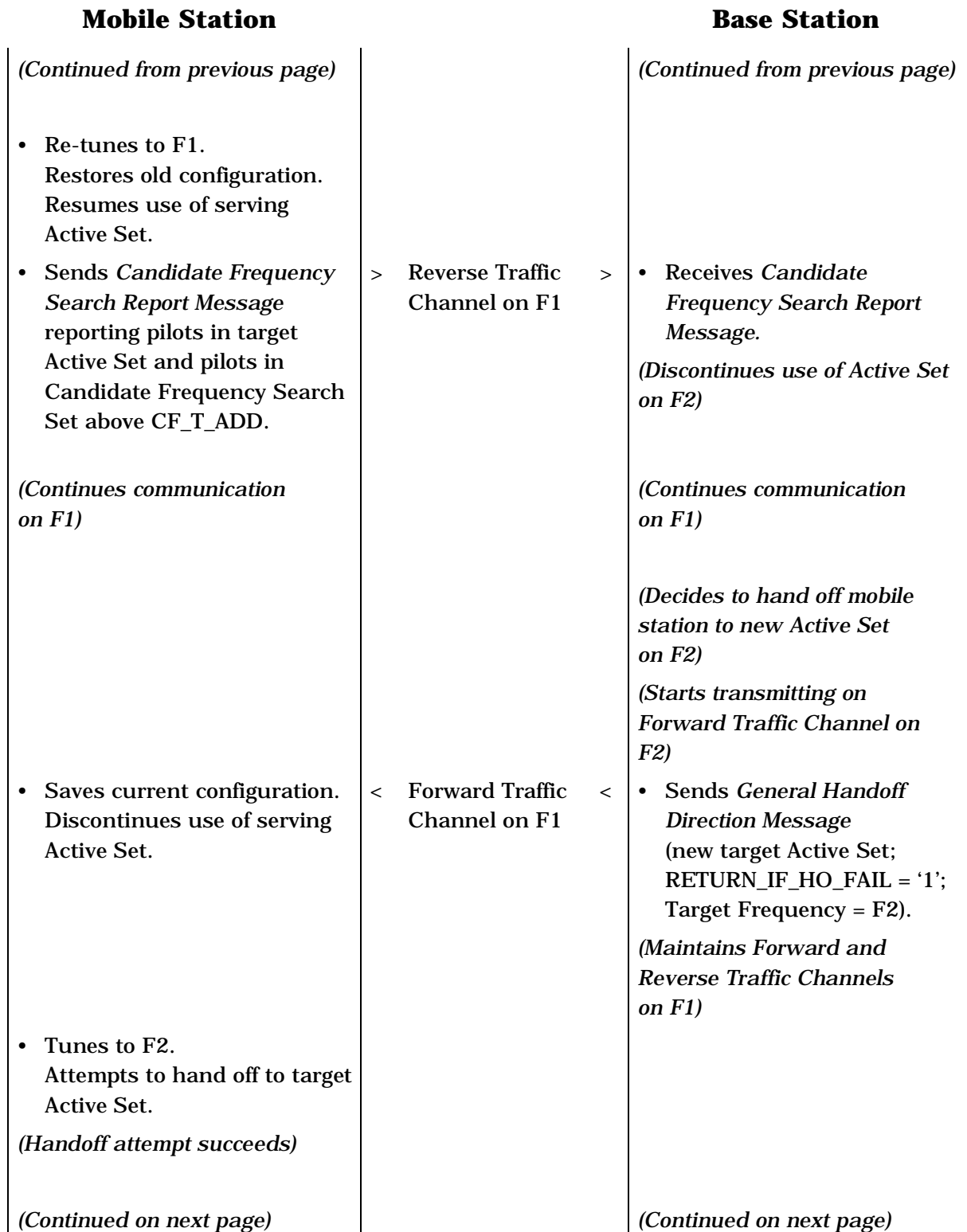
1



2  
3  
4

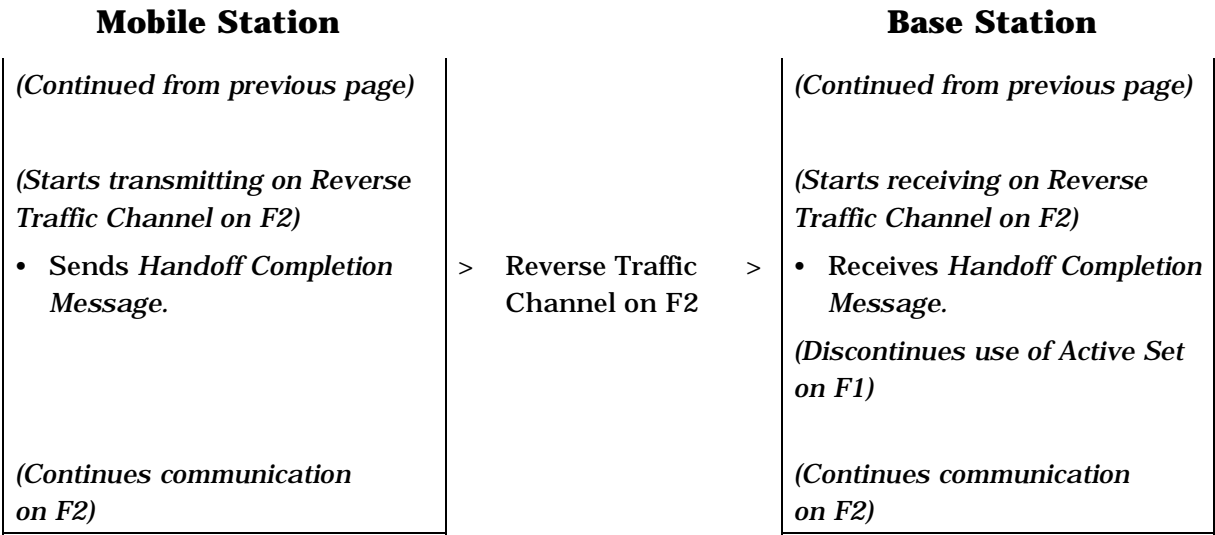
**Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 1 of 3)**

**1**



**Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 2 of 3)**

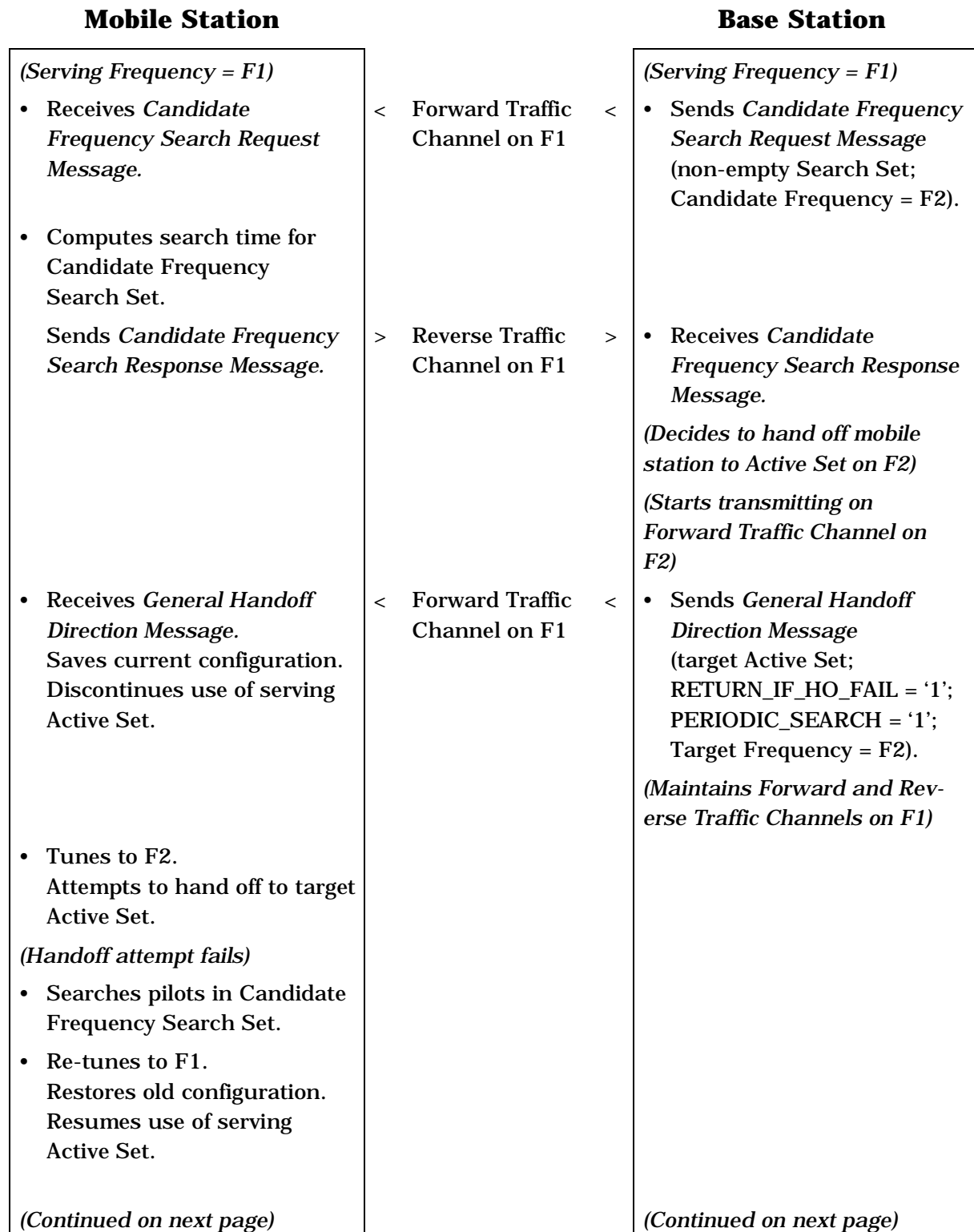
1



2  
3  
4

**Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 3 of 3)**

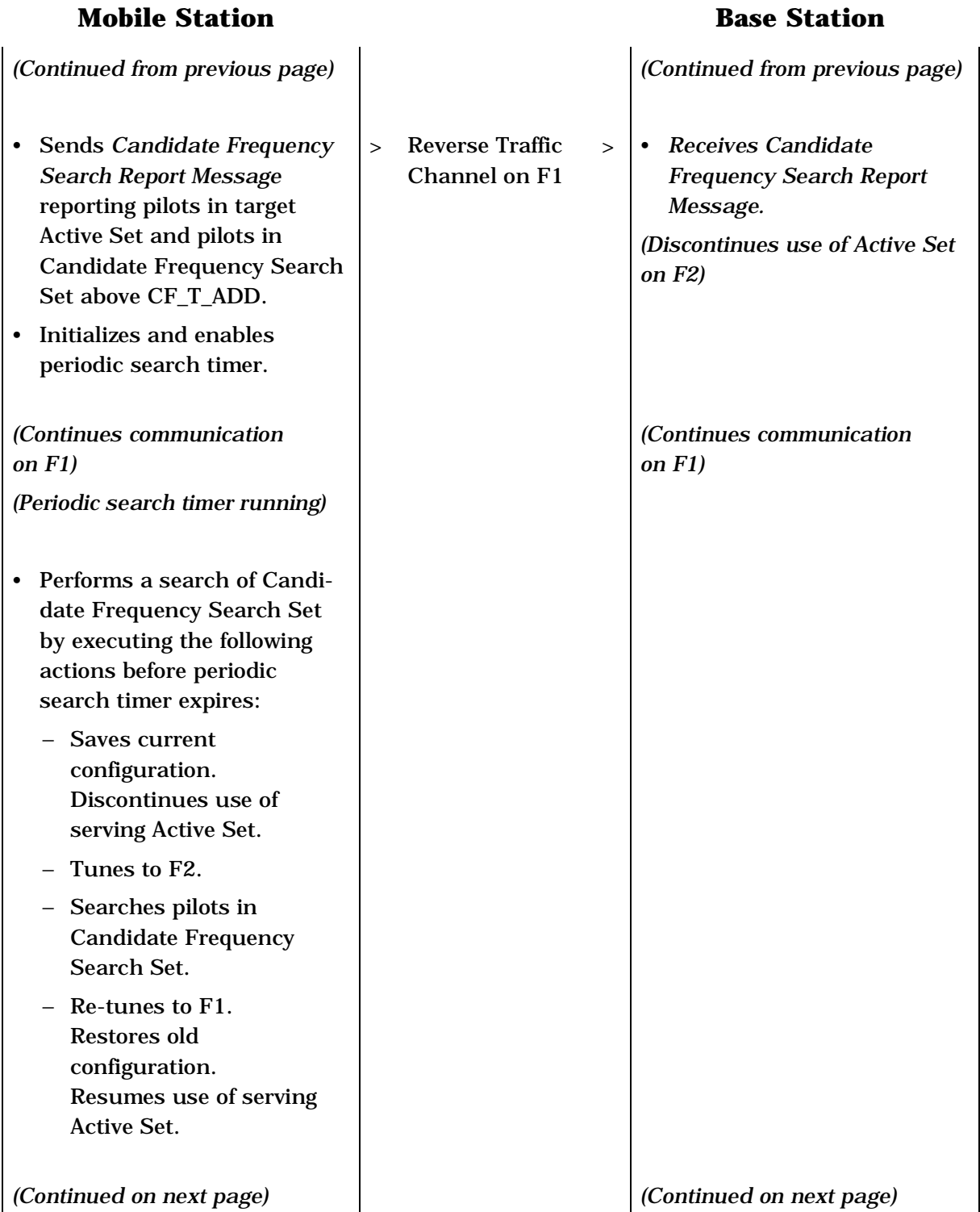
**1**



**Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 1 of 4)**

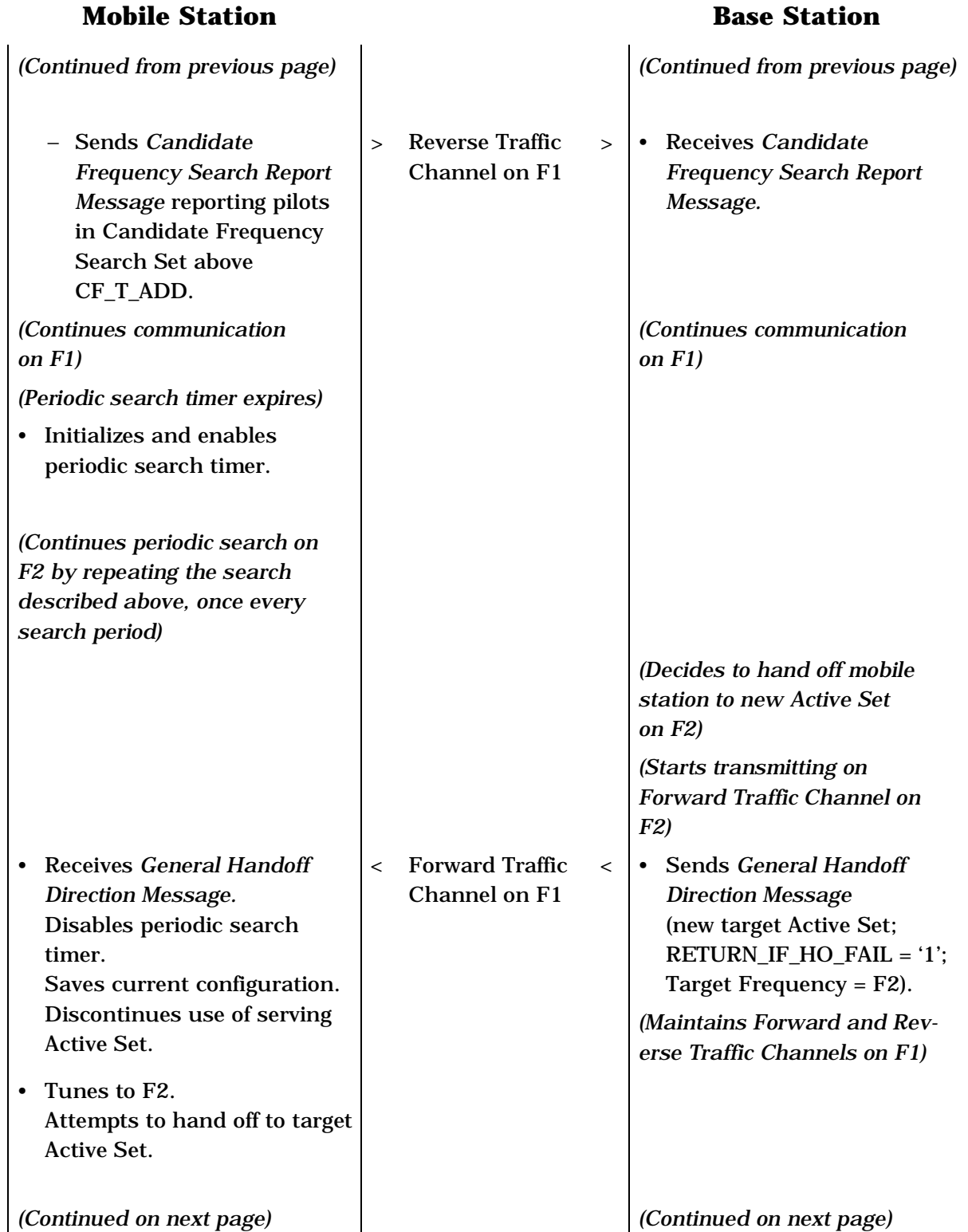


1



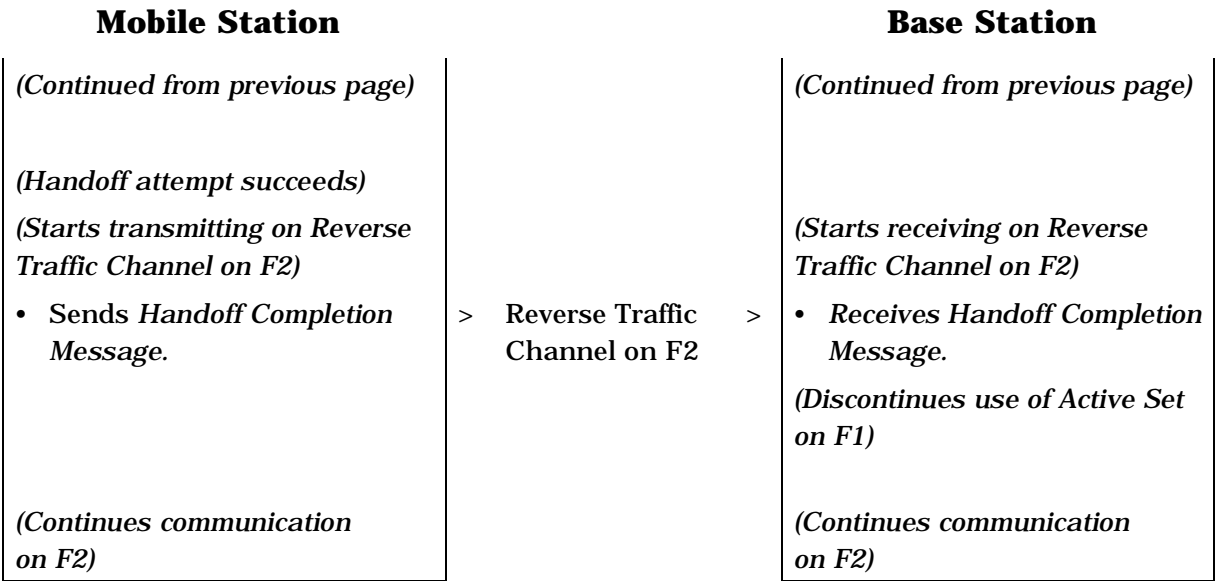
2 **Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General**  
3 **Handoff Direction Message) (Part 2 of 4)**  
4

1



**Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 3 of 4)**

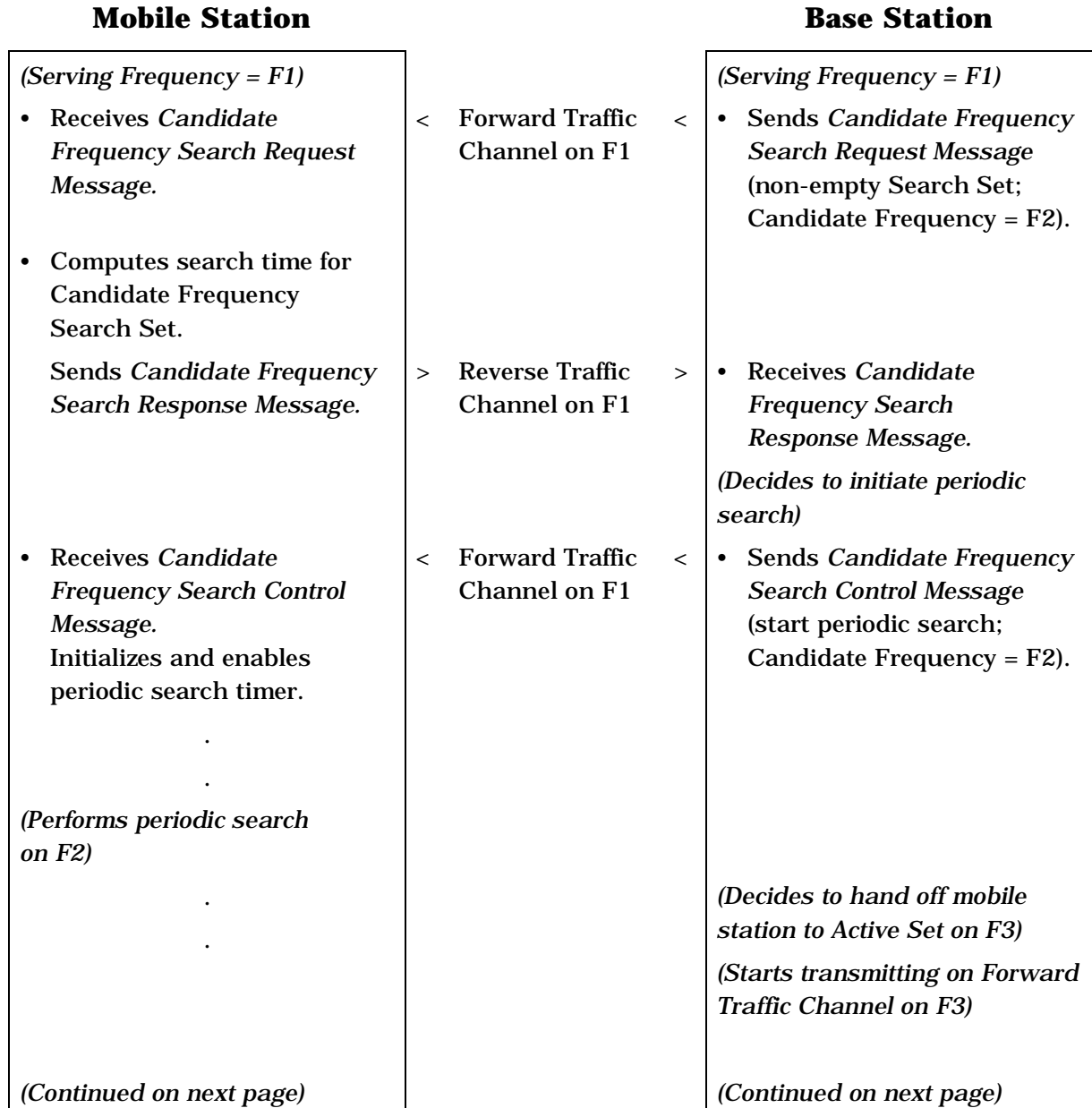
1



2  
3  
4

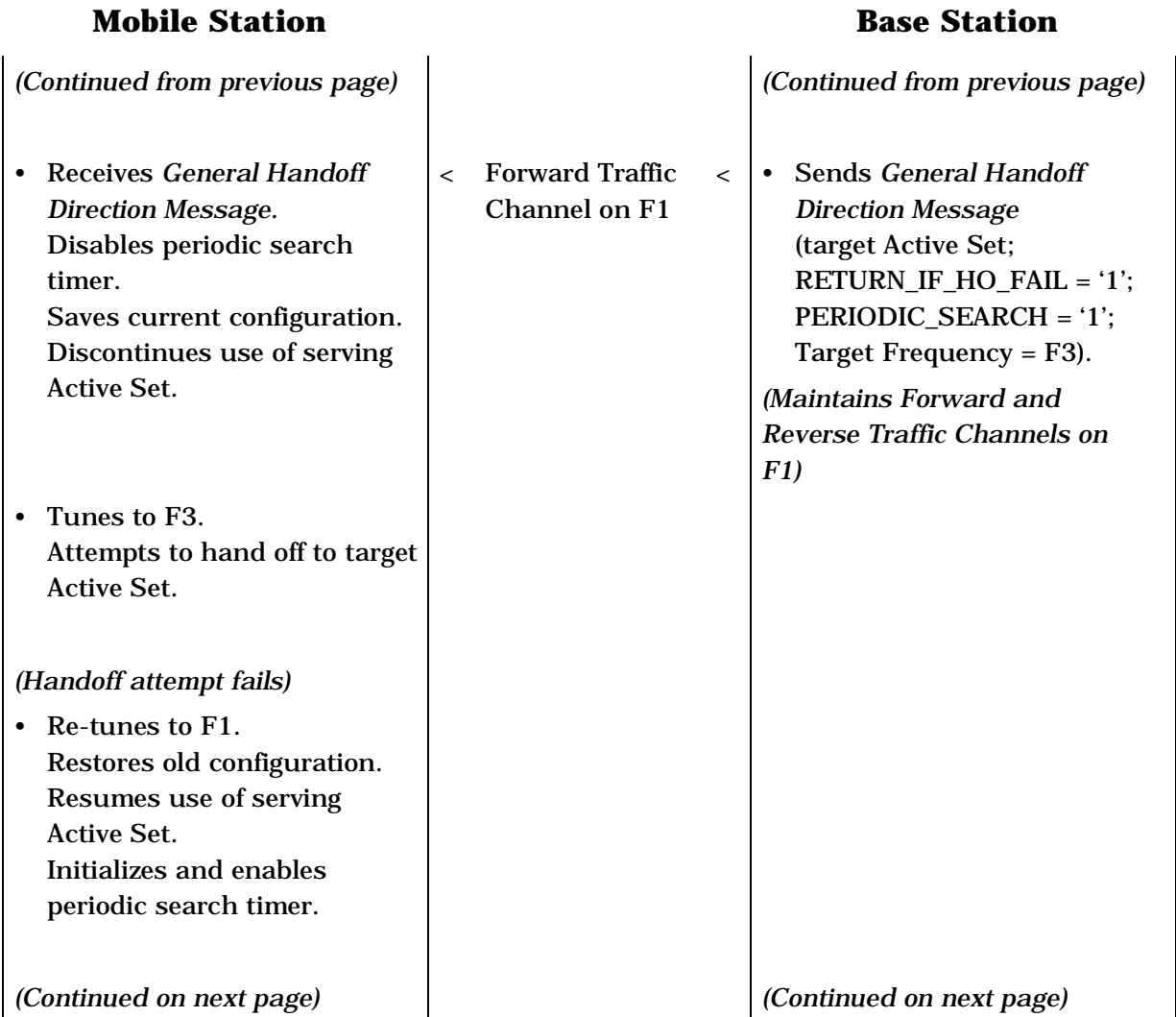
**Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 4 of 4)**

1



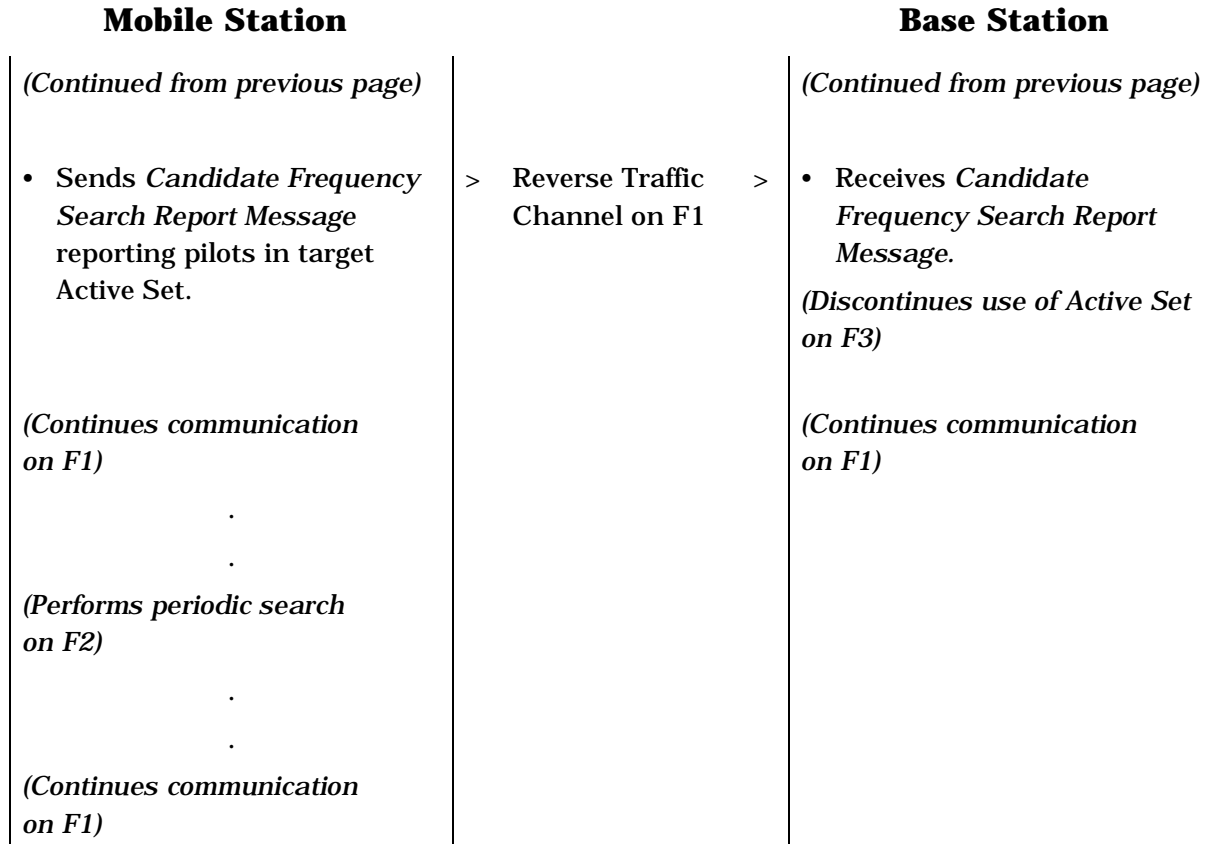
**Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to F3, Continued Periodic Search of F2 from F1 (Part 1 of 3)**

1



2                   **Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff**  
3                   **Attempt to F3, Continued Periodic Search of F2 from F1 (Part 2 of 3)**  
4

1



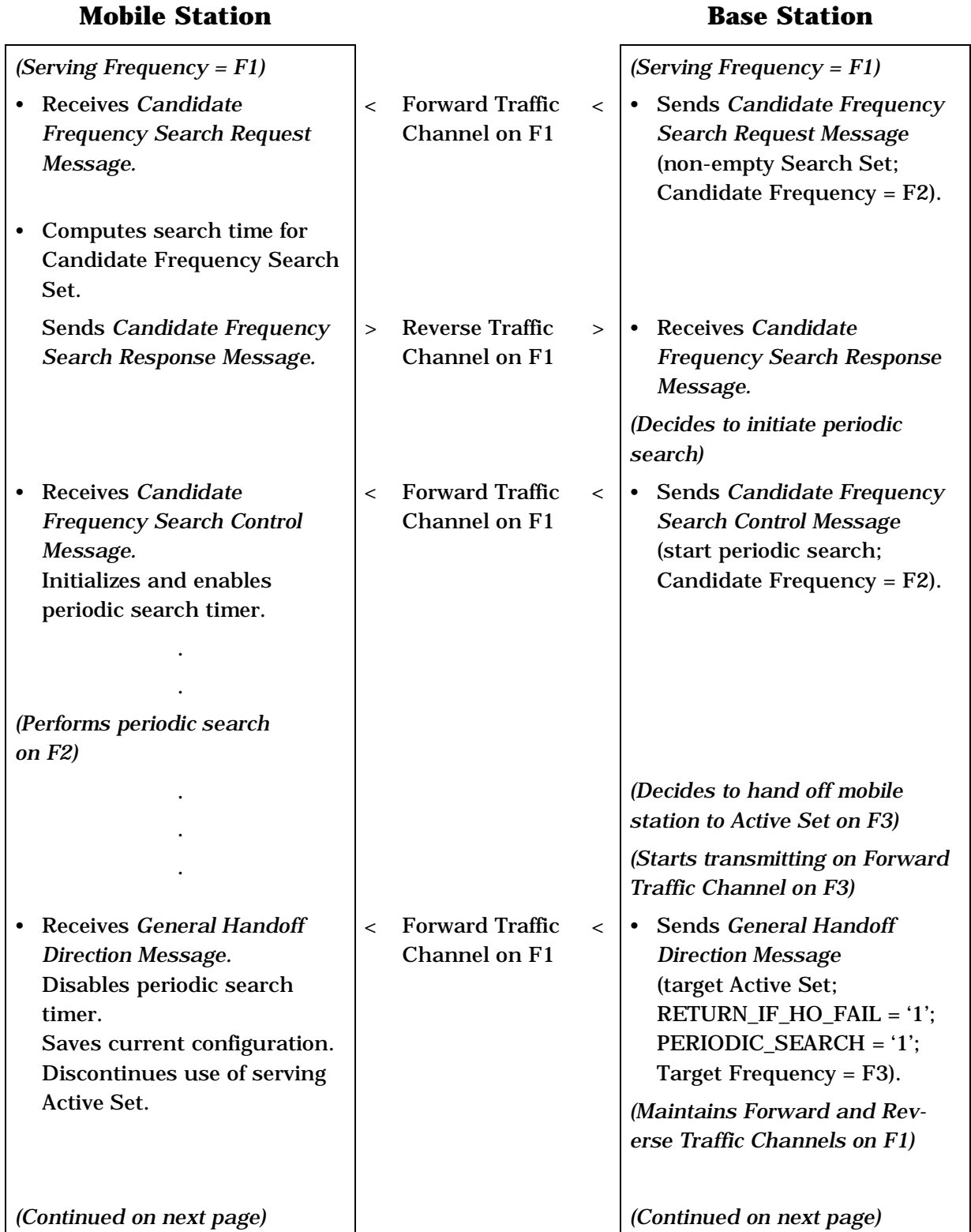
2

**Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to F3, Continued Periodic Search of F2 from F1 (Part 3 of 3)**

3

4

1



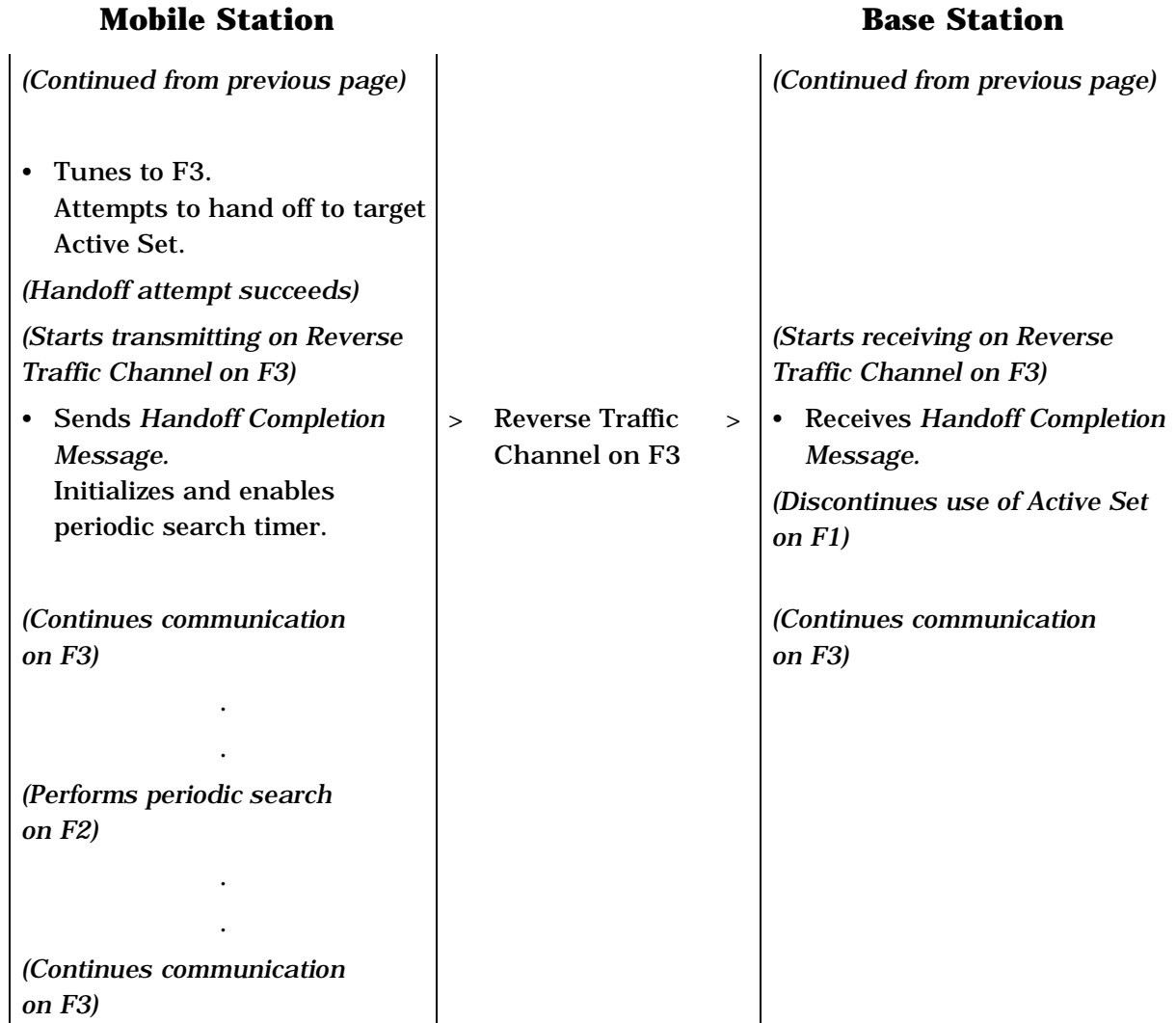
2

3

4

**Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3, Continued Periodic Search on F2 from F3 (Part 1 of 2)**

1



2

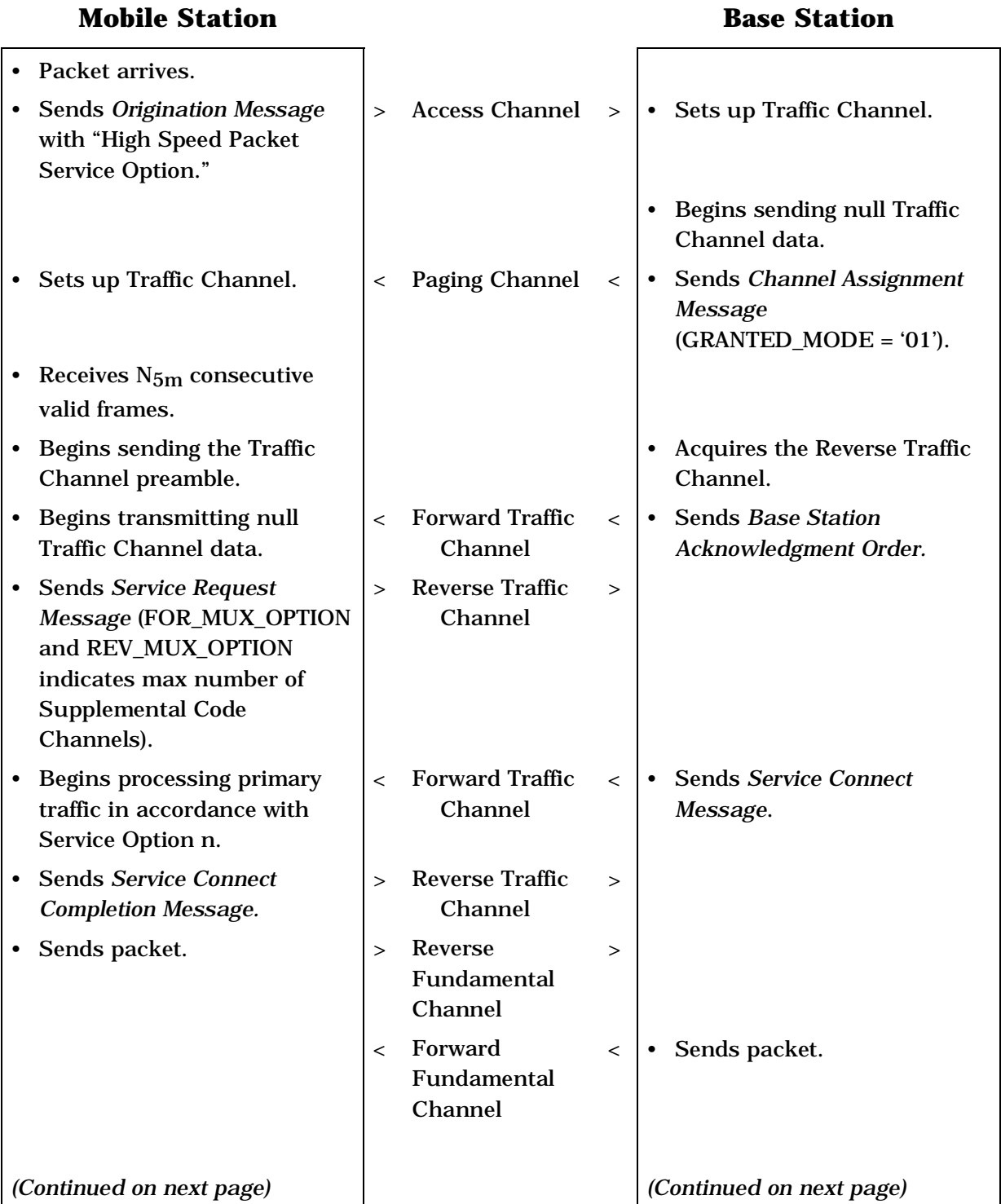
**Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3, Continued Periodic Search on F2 from F3 (Part 2 of 2)**

3

4

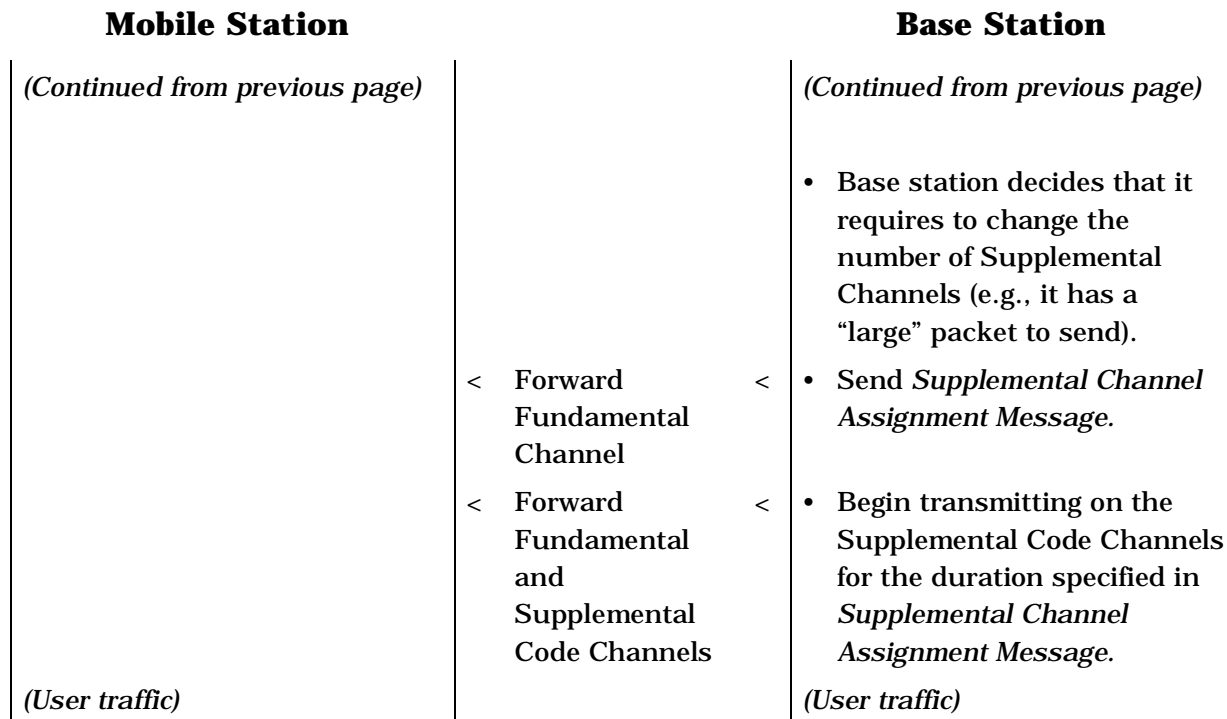


1



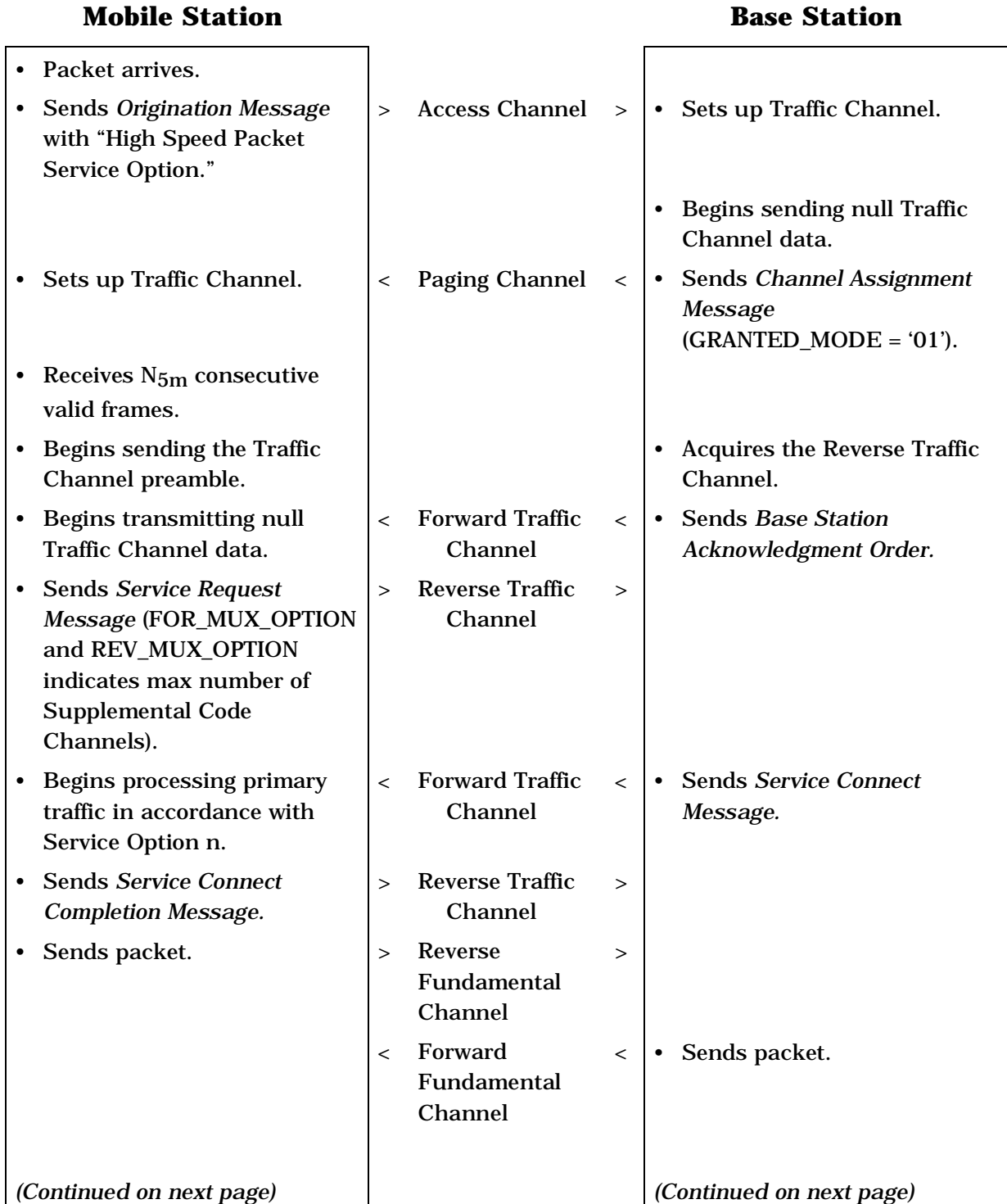
2 **Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission**  
3 **on Forward Supplemental Code Channels (Part 1 of 2)**  
4

# 1



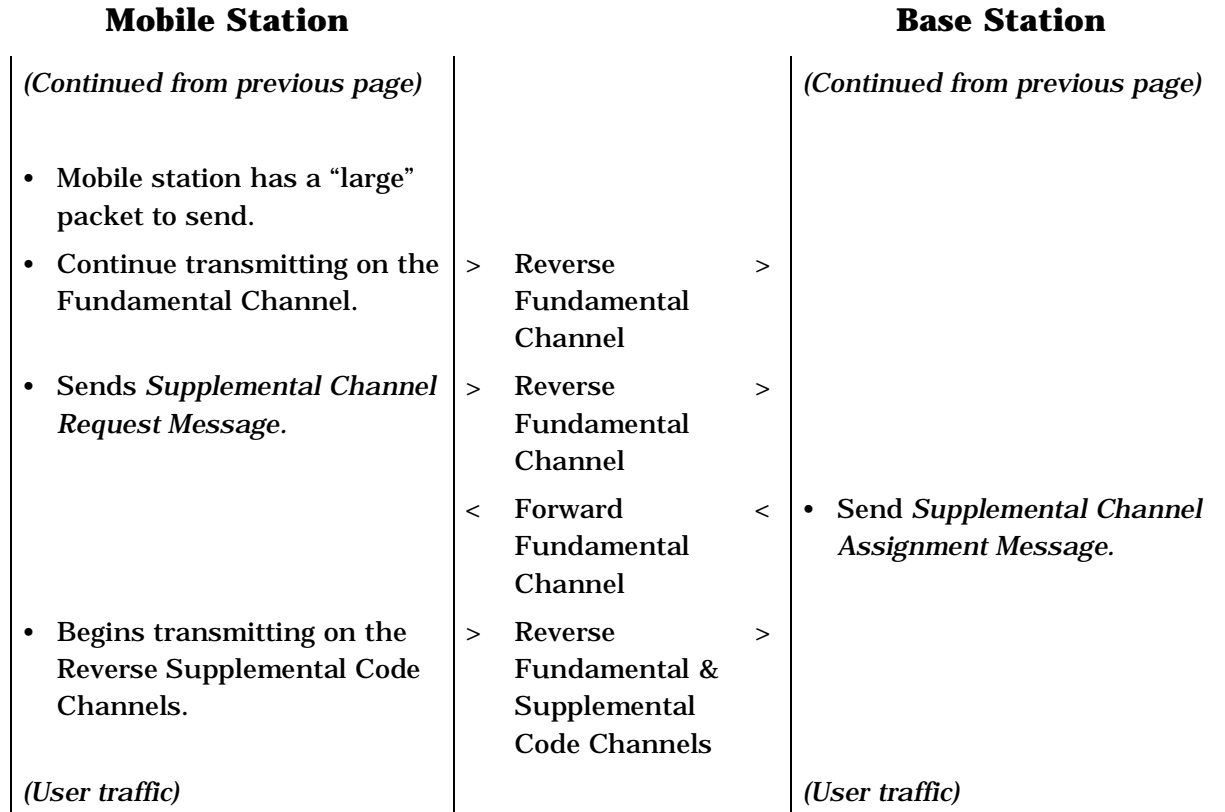
**Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission on Forward Supplemental Code Channels (Part 2 of 2)**

1



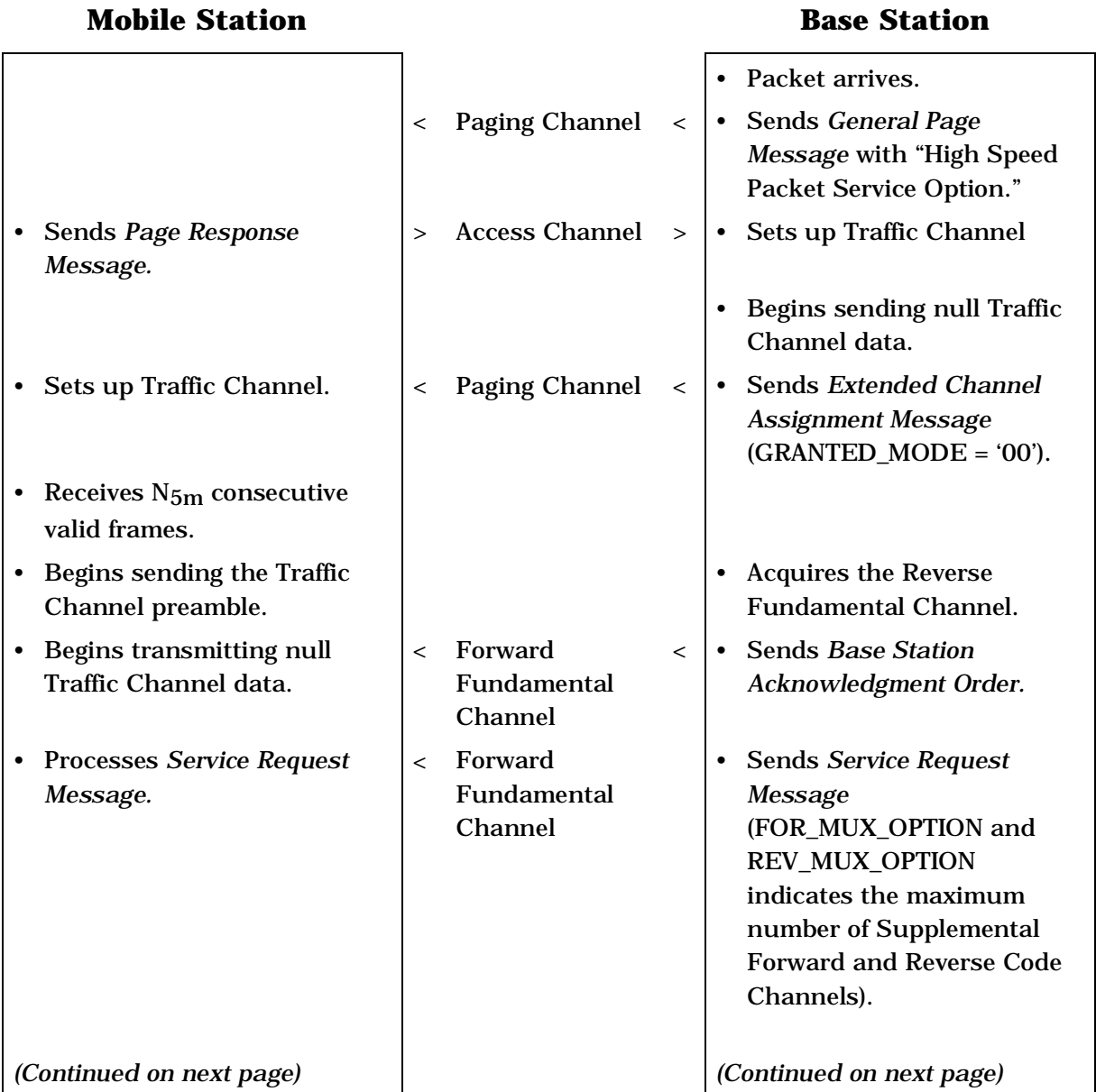
2 **Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission**  
3 **on Reverse Supplemental Code Channels (Part 1 of 2)**  
4

1



2 **Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission**  
 3 **on Reverse Supplemental Code Channels (Part 2 of 2)**  
 4

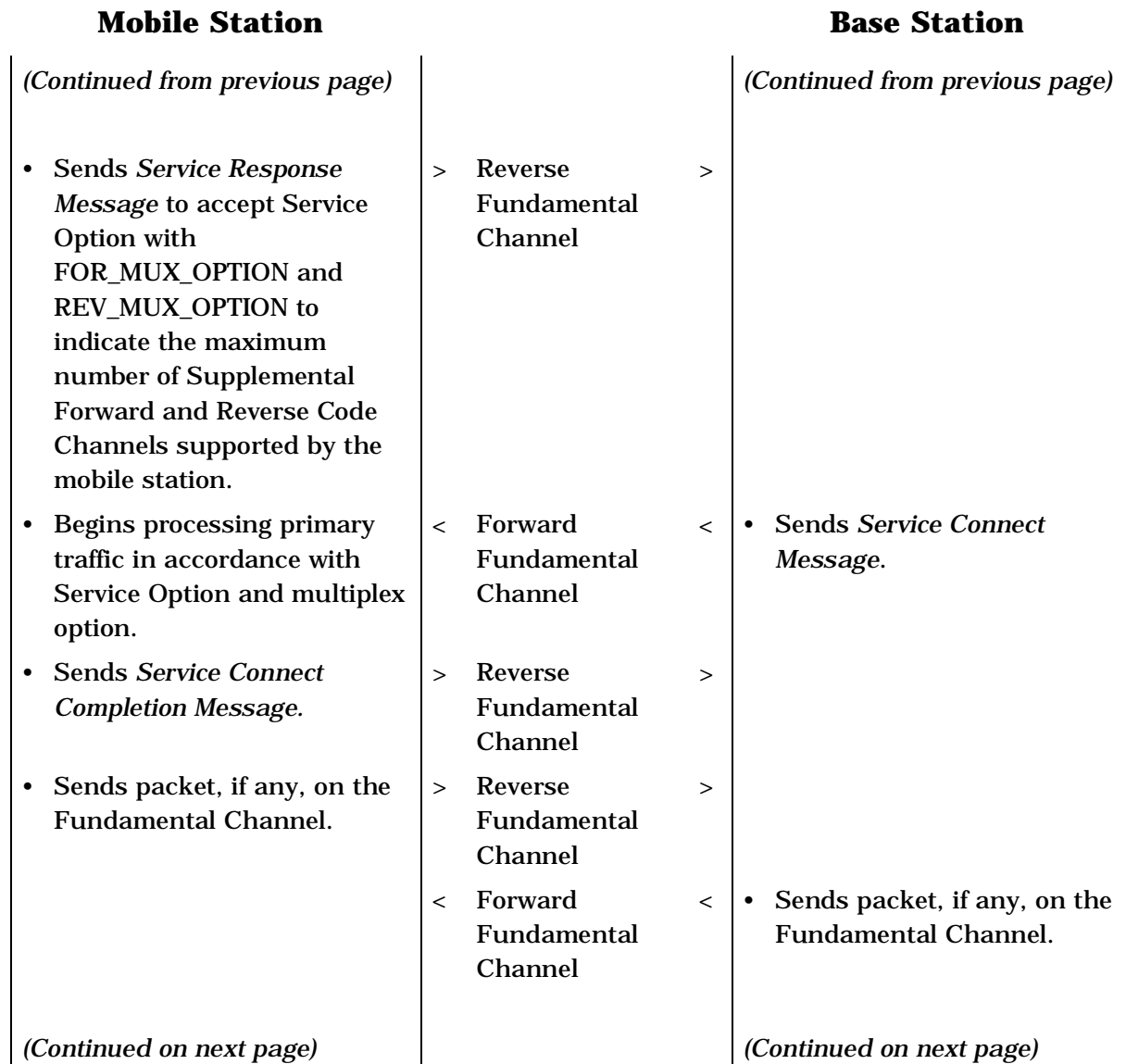
1



2  
3  
4

**Figure B-20. Simple Call Flow, Mobile Station Termination Example with Transmission on Forward Supplemental Code Channel(s) (Part 1 of 3)**

1



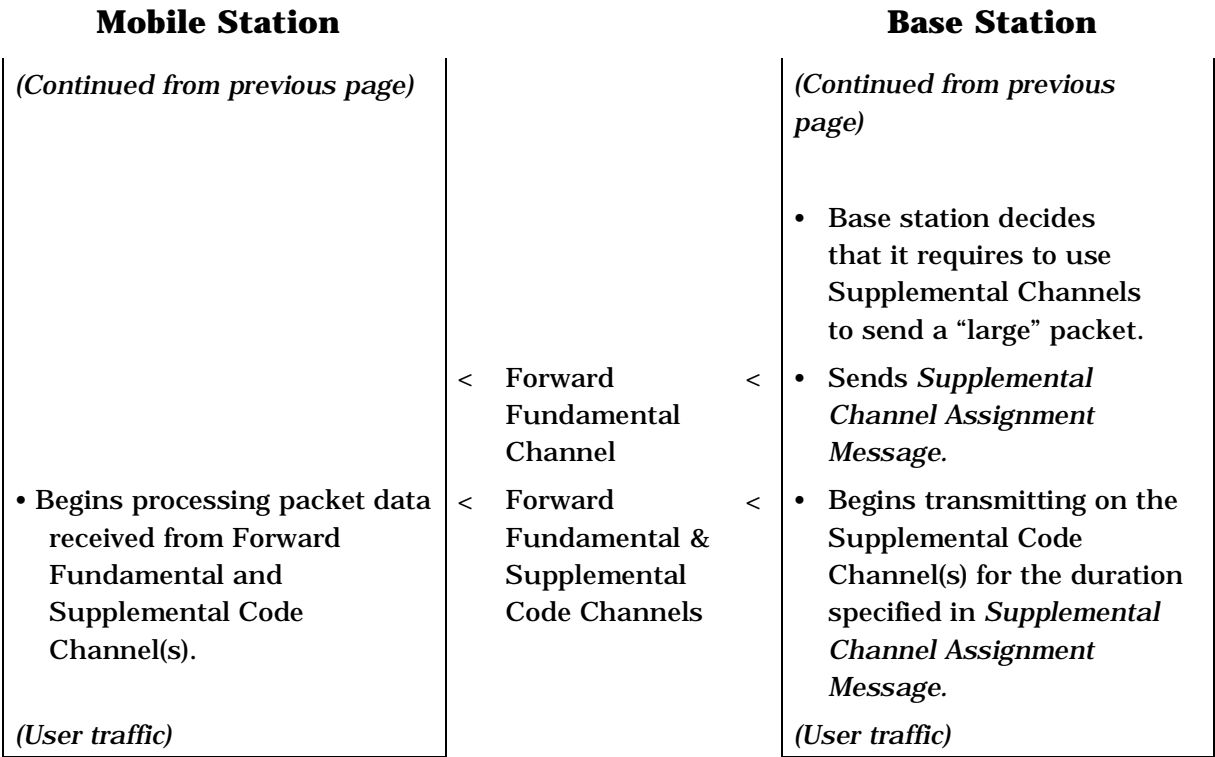
2

3

4

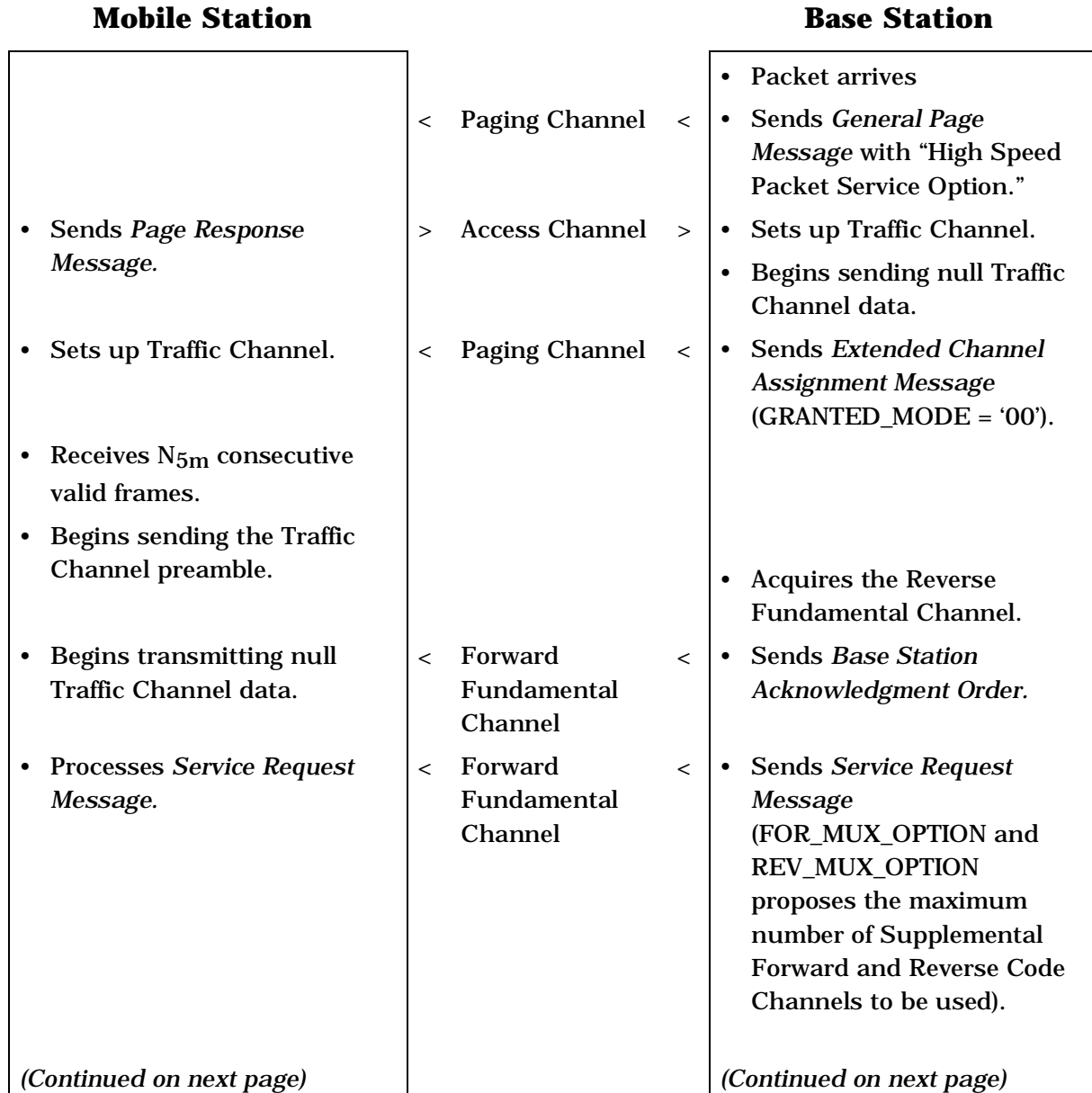
**Figure B-20. Simple Call Flow, Mobile Station Termination Example with Transmission on Forward Supplemental Code Channel(s) (Part 2 of 3)**

1



2 **Figure B-20. Simple Call Flow, Mobile Station Termination Example with**  
3 **Transmission on Forward Supplemental Code Channel(s) (Part 3 of 3)**  
4

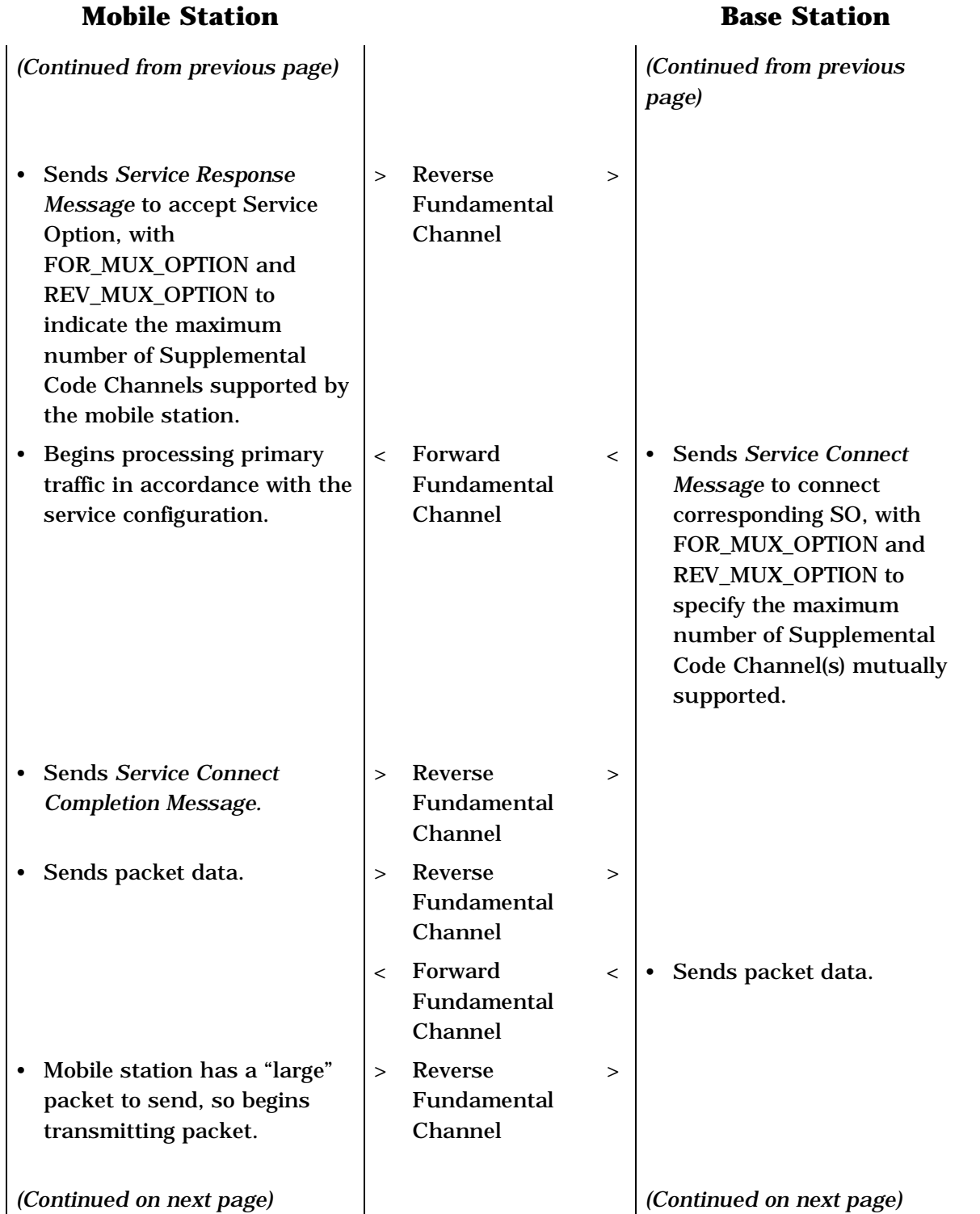
1



**Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 1 of 3)**



1



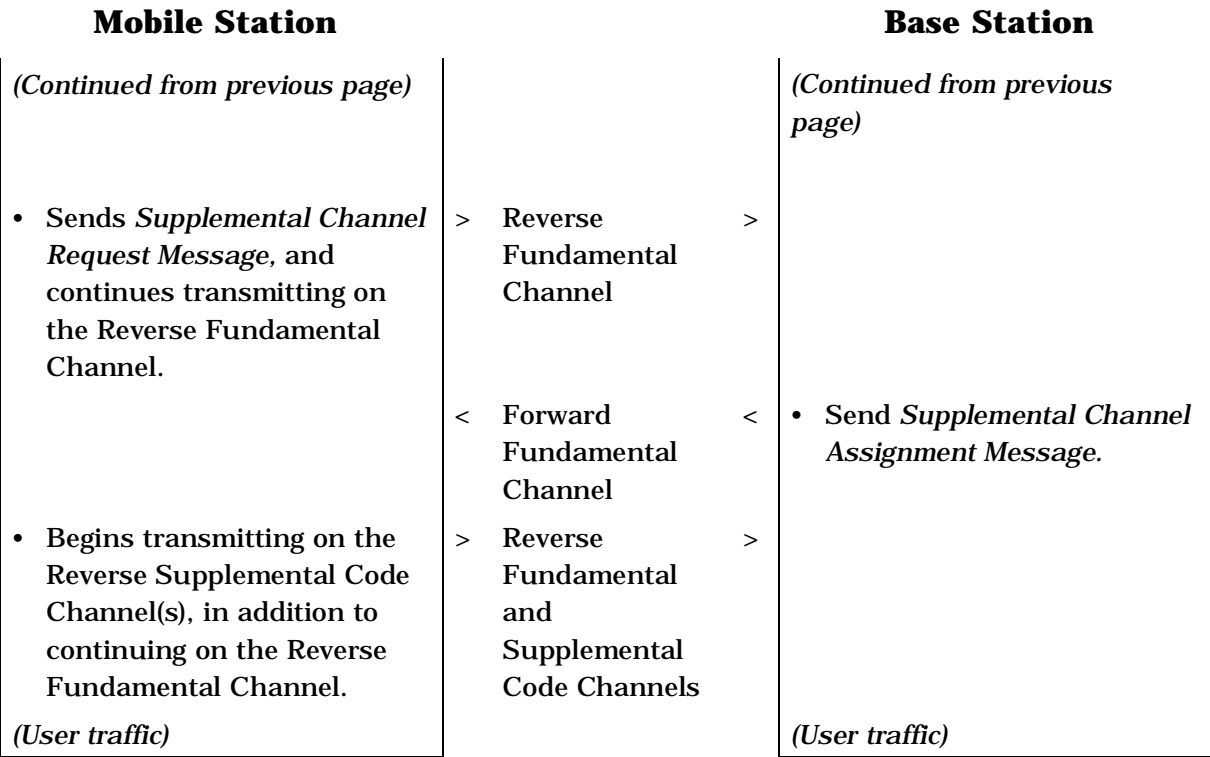
2

3

4

**Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 2 of 3)**

1

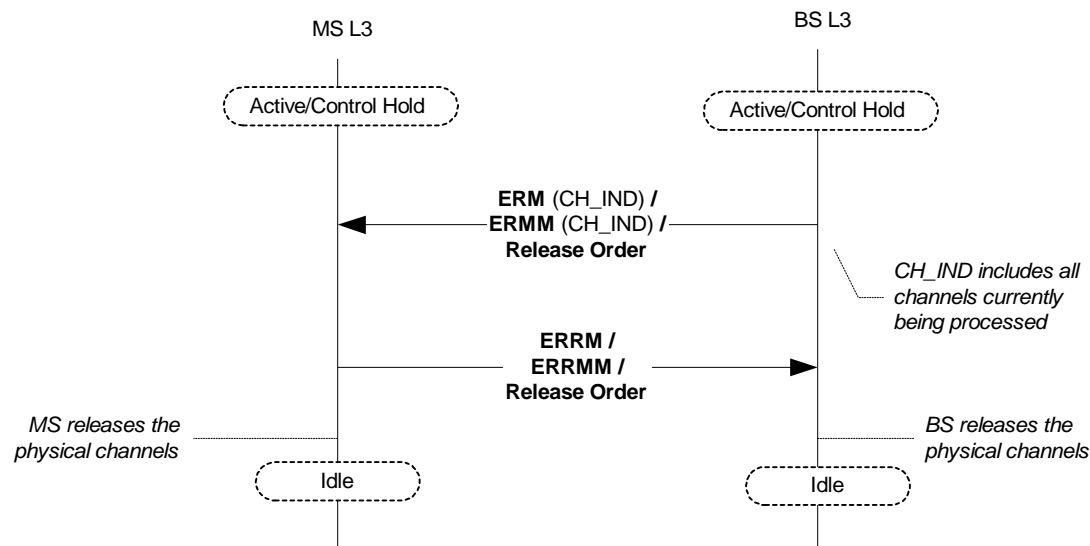


2

3

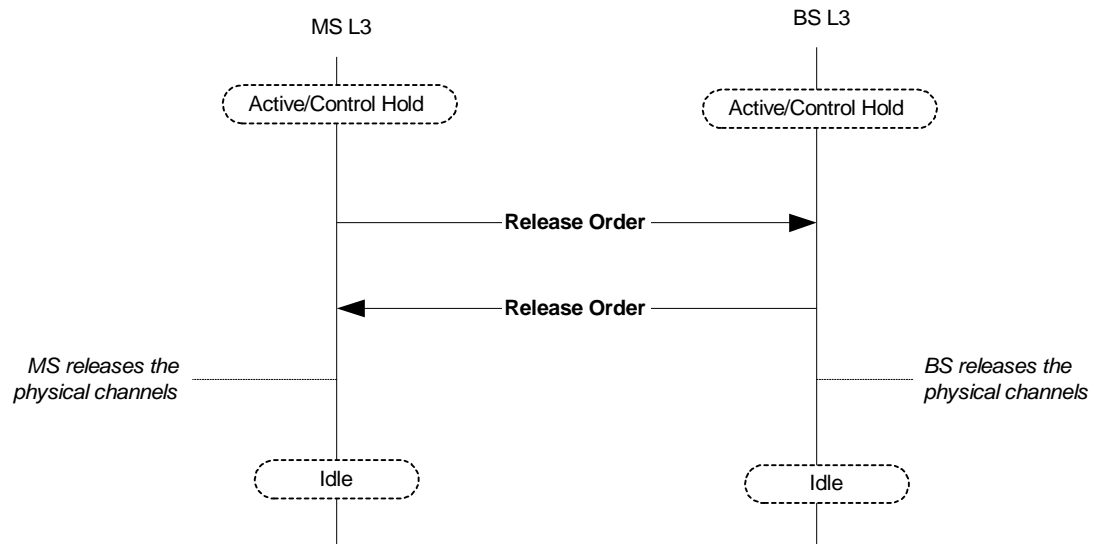
4

**Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 3 of 3)**

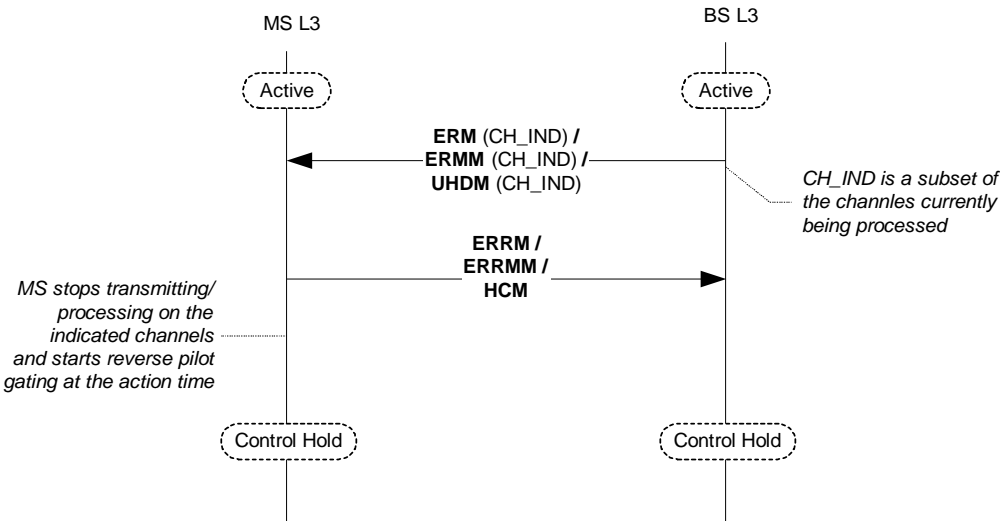


1  
2  
3  
4  
5  
6

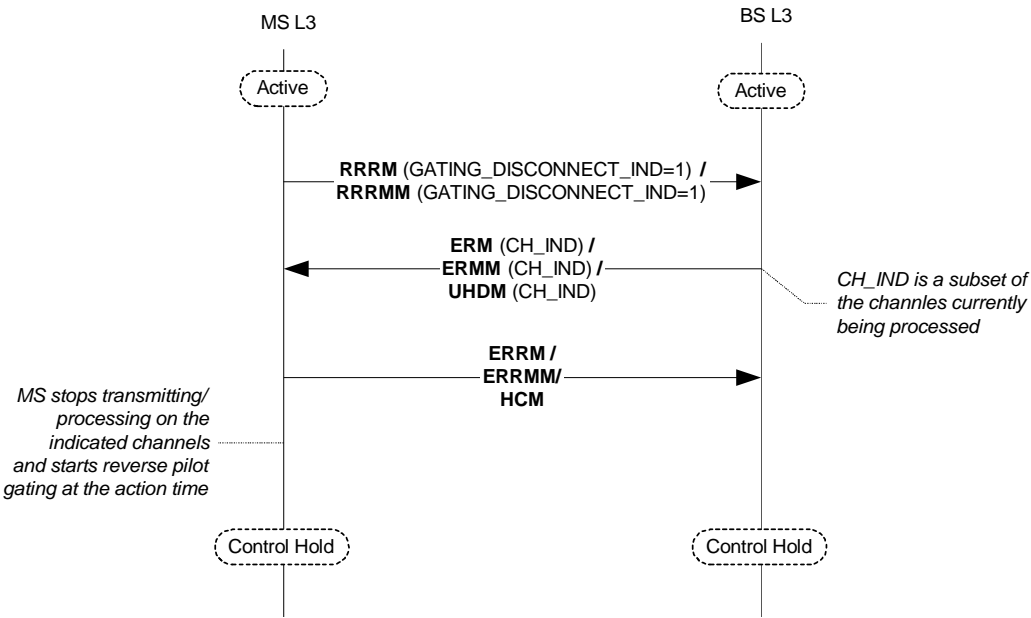
**Figure B-22. Active/Control Hold to Idle State Transition; Release all services (BS Initiated)**



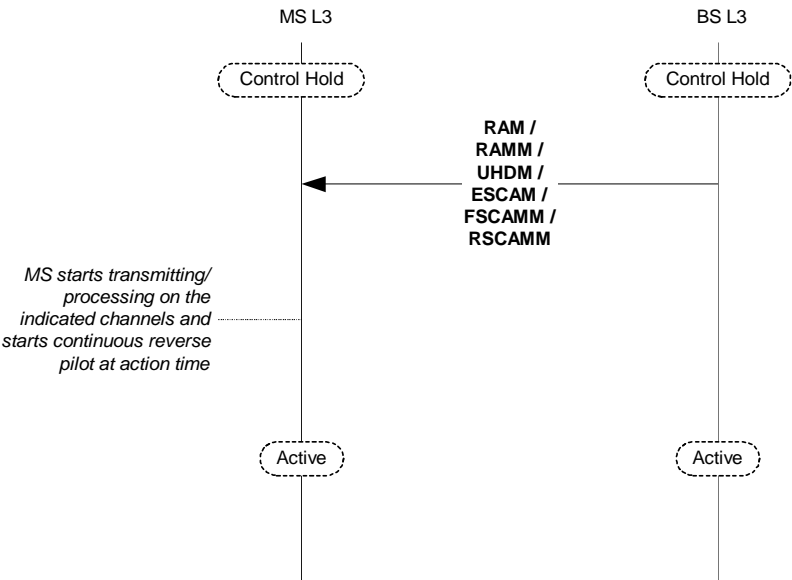
**Figure B-23. Active/Control Hold to Idle State Transition; Release all services (MS Initiated)**



**Figure B-24. Active to Control Hold State Transition (BS Initiated)**



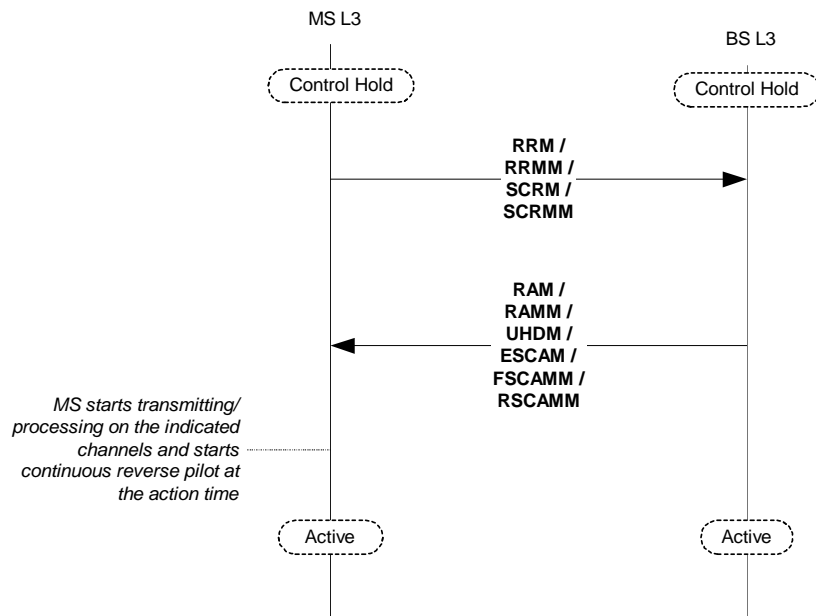
**Figure B-25. Active to Control Hold State Transition (MS Initiated)**



**Figure B-26. Control Hold to Active Transition (BS Initiated)**

1  
2  
3  
4

1



2

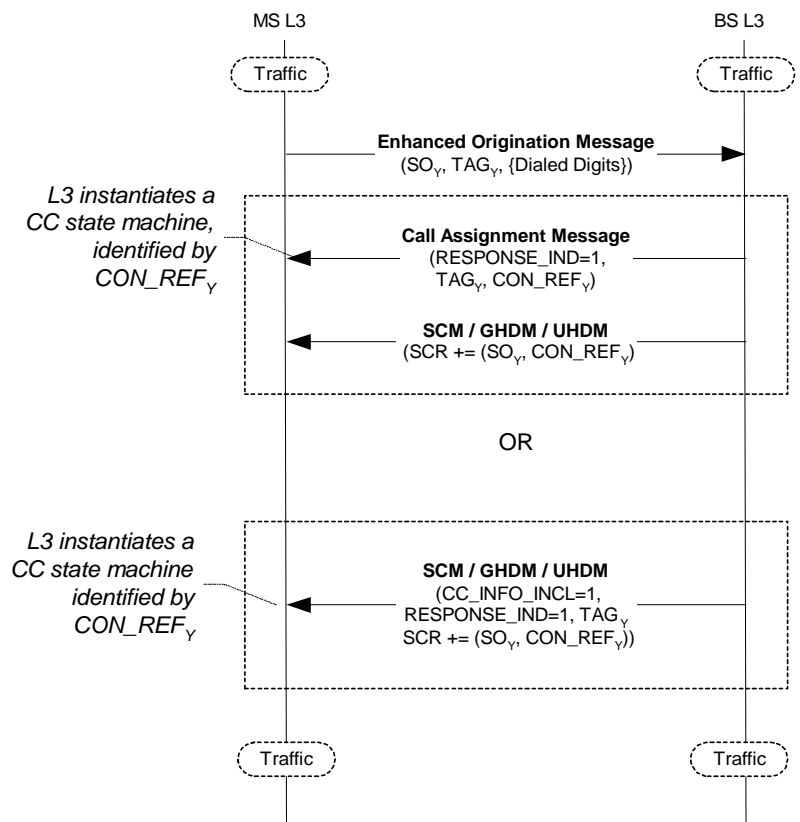
3

4

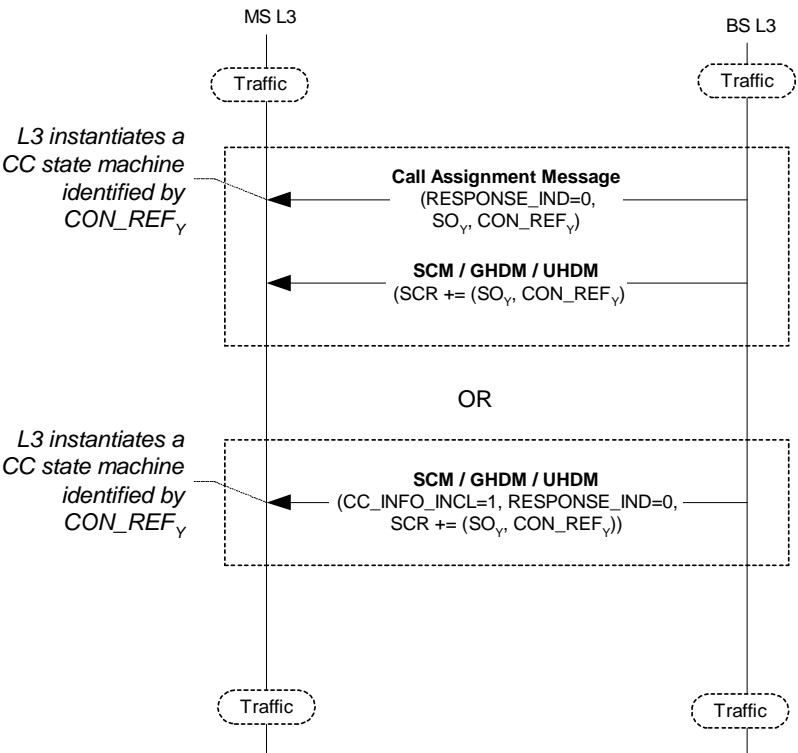
5

**Figure B-27. Control Hold to Active Transition (MS Initiated)**

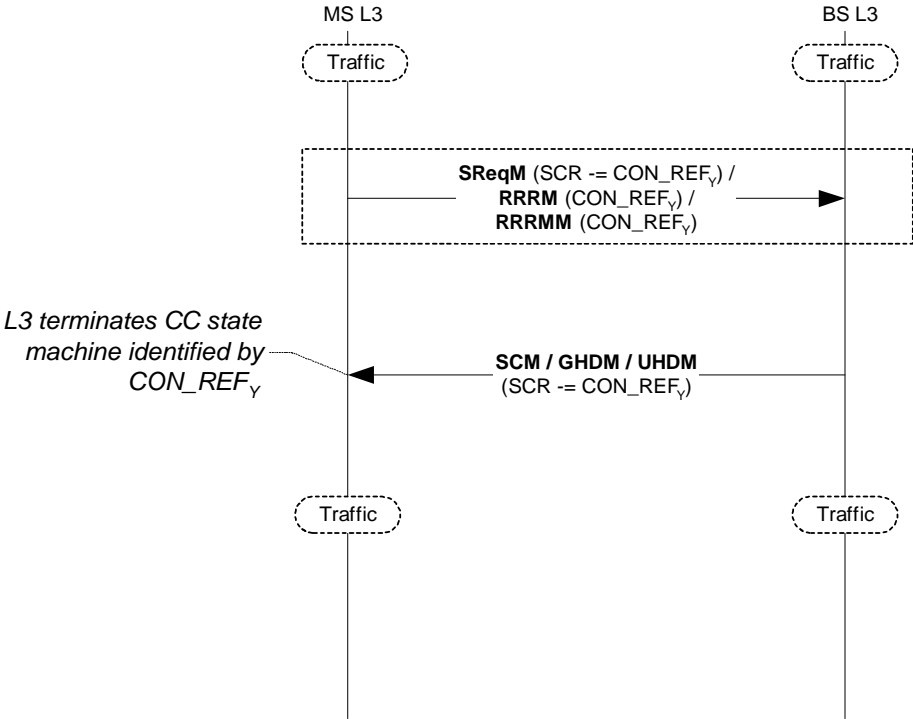




**Figure B-28. Connecting an Additional Service (MS Initiated)**

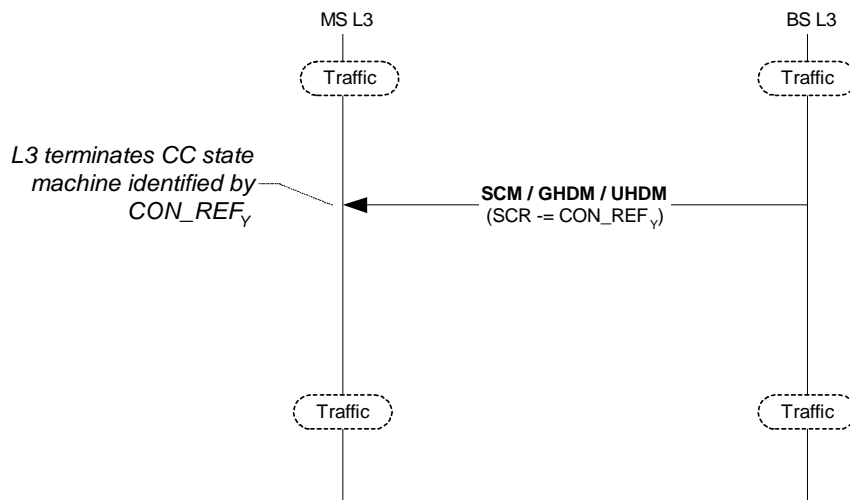


**Figure B-29. Connecting an Additional Service (BS Initiated)**



1  
2  
3  
4

**Figure B-30. Releasing a Service that is not the last one connected (MS Initiated)**



1

2

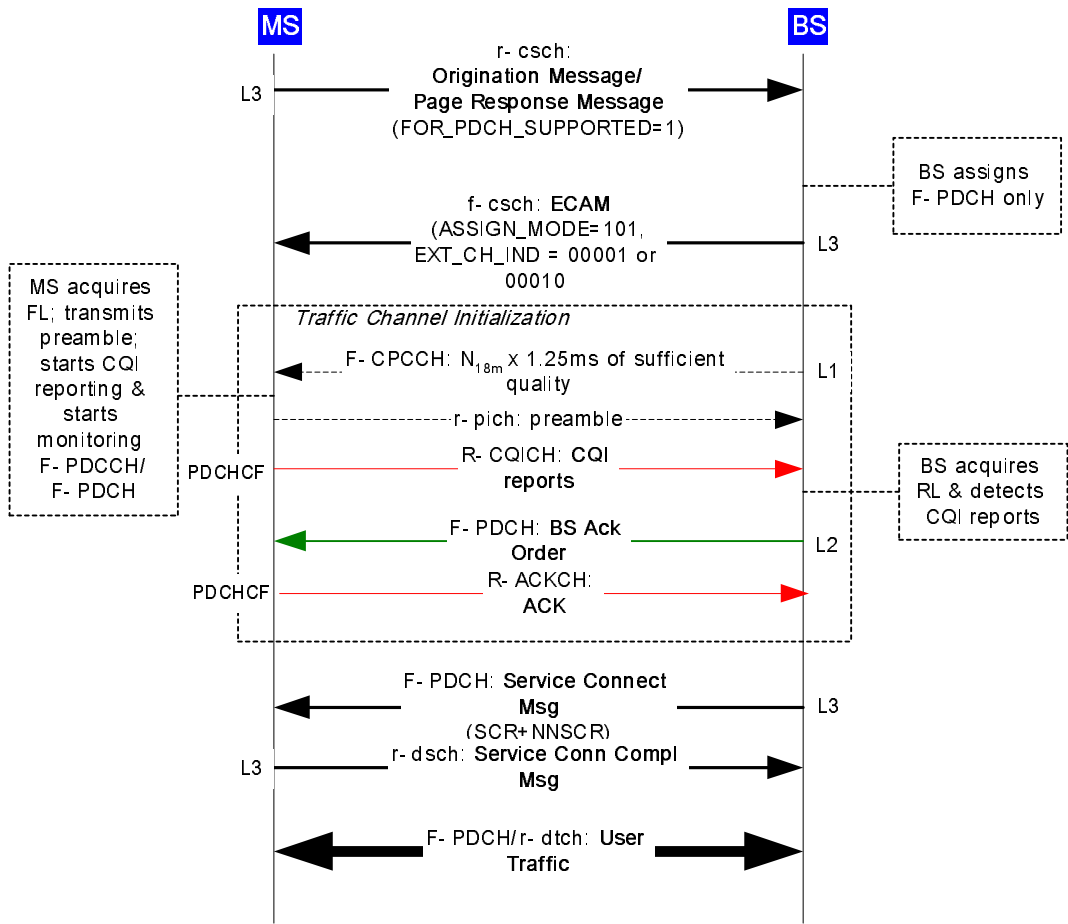
3 **Figure B-31. Releasing a Service that is not the last one connected (BS Initiated)**

1 ANNEX C ADDITONAL CDMA CALL FLOW EXAMPLES

2 C-1 Regular Call Setup

3 C-1.1 Call setup with F-PDCH and no F-Fundicated

4



5

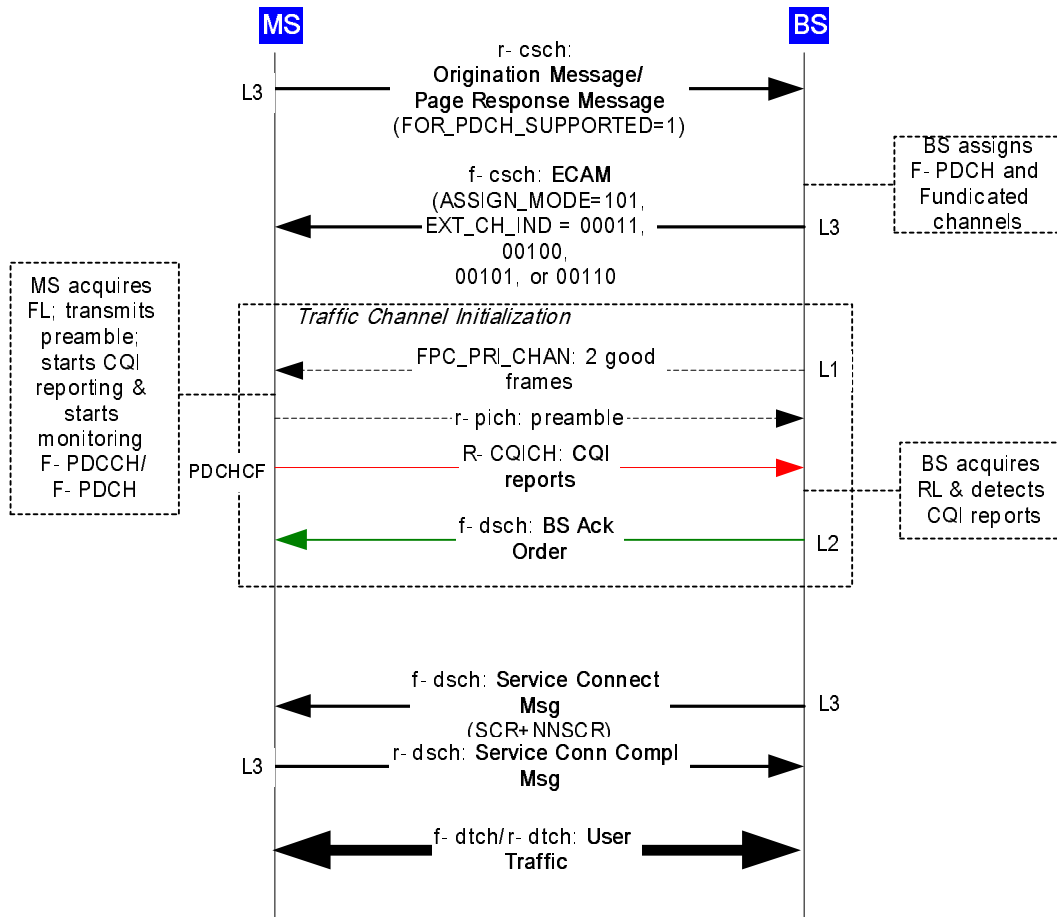
6 **Figure C-1. 1 Call setup with F-PDCH and no F-Fundicated**

7

8

# 1 C-1.2 Call setup with F-PDCH and F-Fundicated

2



3

4

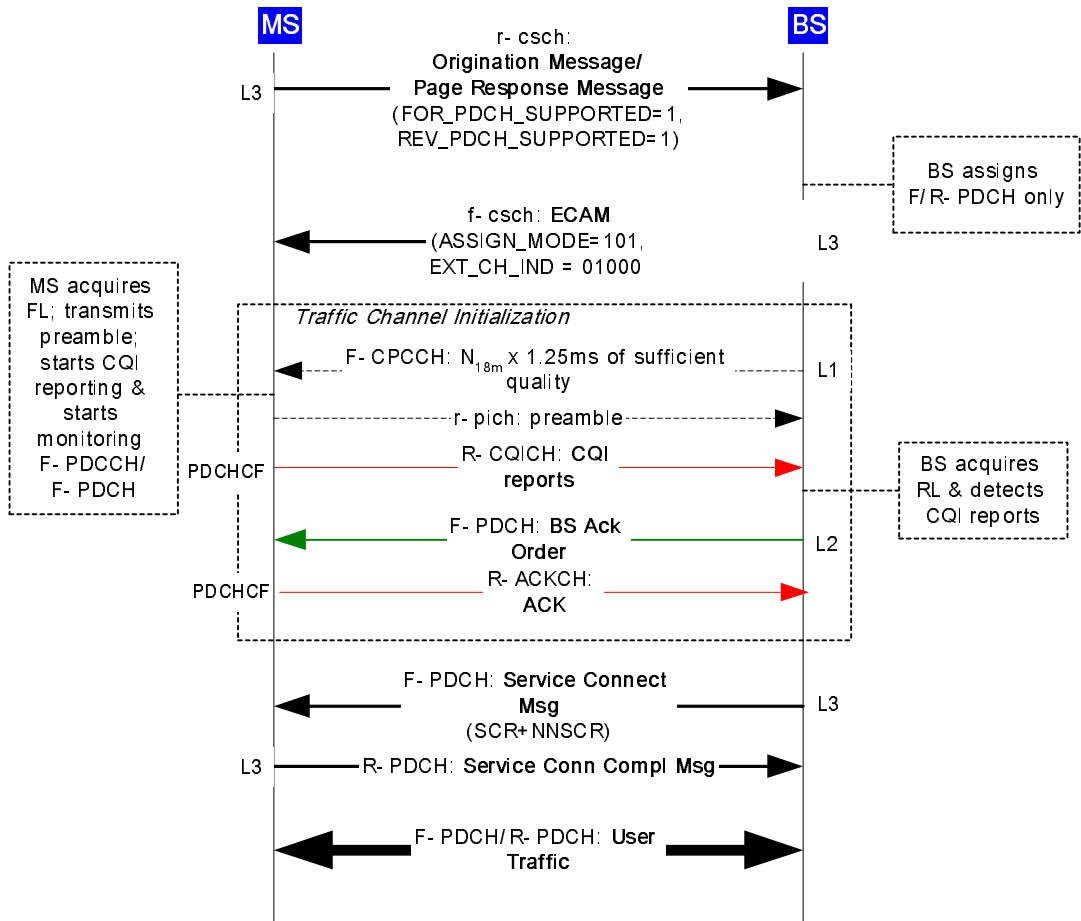
**Figure C-1. 2 Call setup with F-PDCH and F-Fundicated**

5

6

C-1.3 Call setup with F/R-PDCH

2



3

4

5

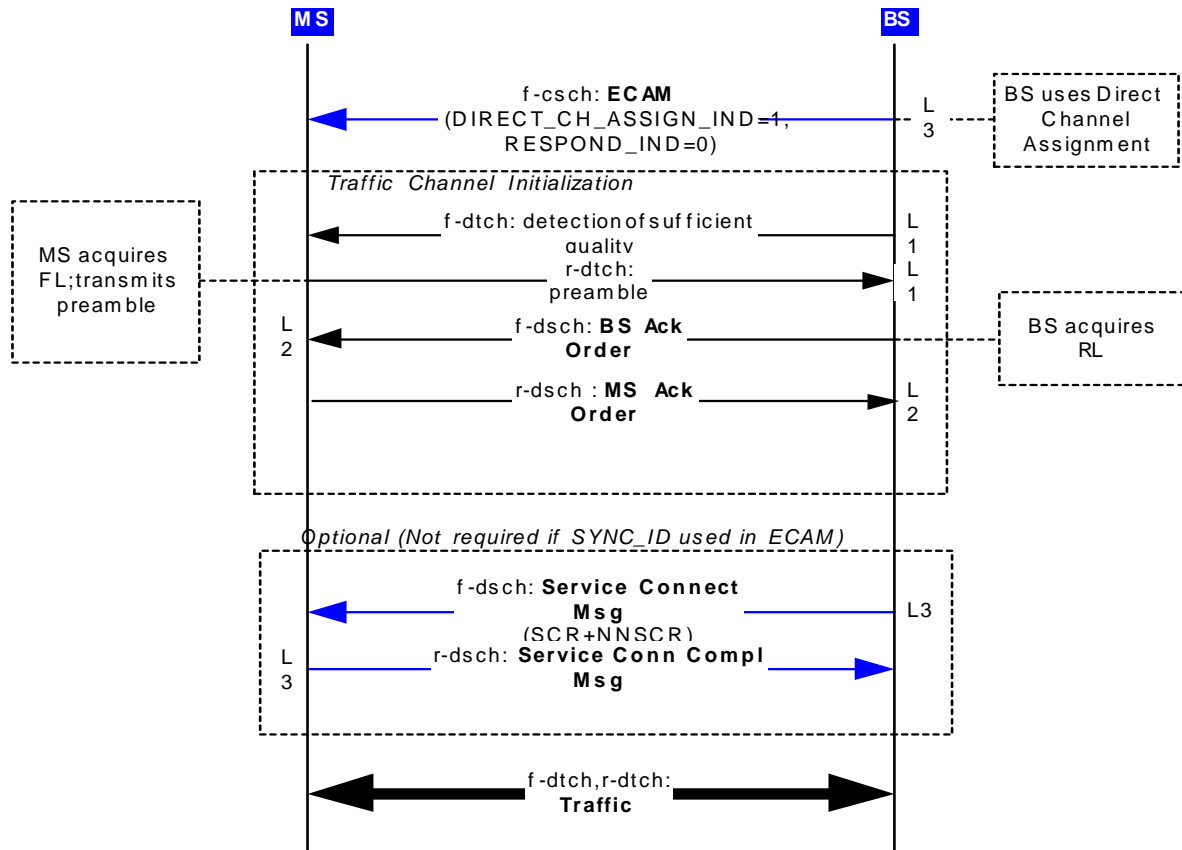
6

Figure C-1. 3 Call setup with F/R-PDCH

## 1 C-2 Fast Call Setup Enhancements

### 2 C-2.1 Direct Channel Assignment - Normal setup

3



4

5

6

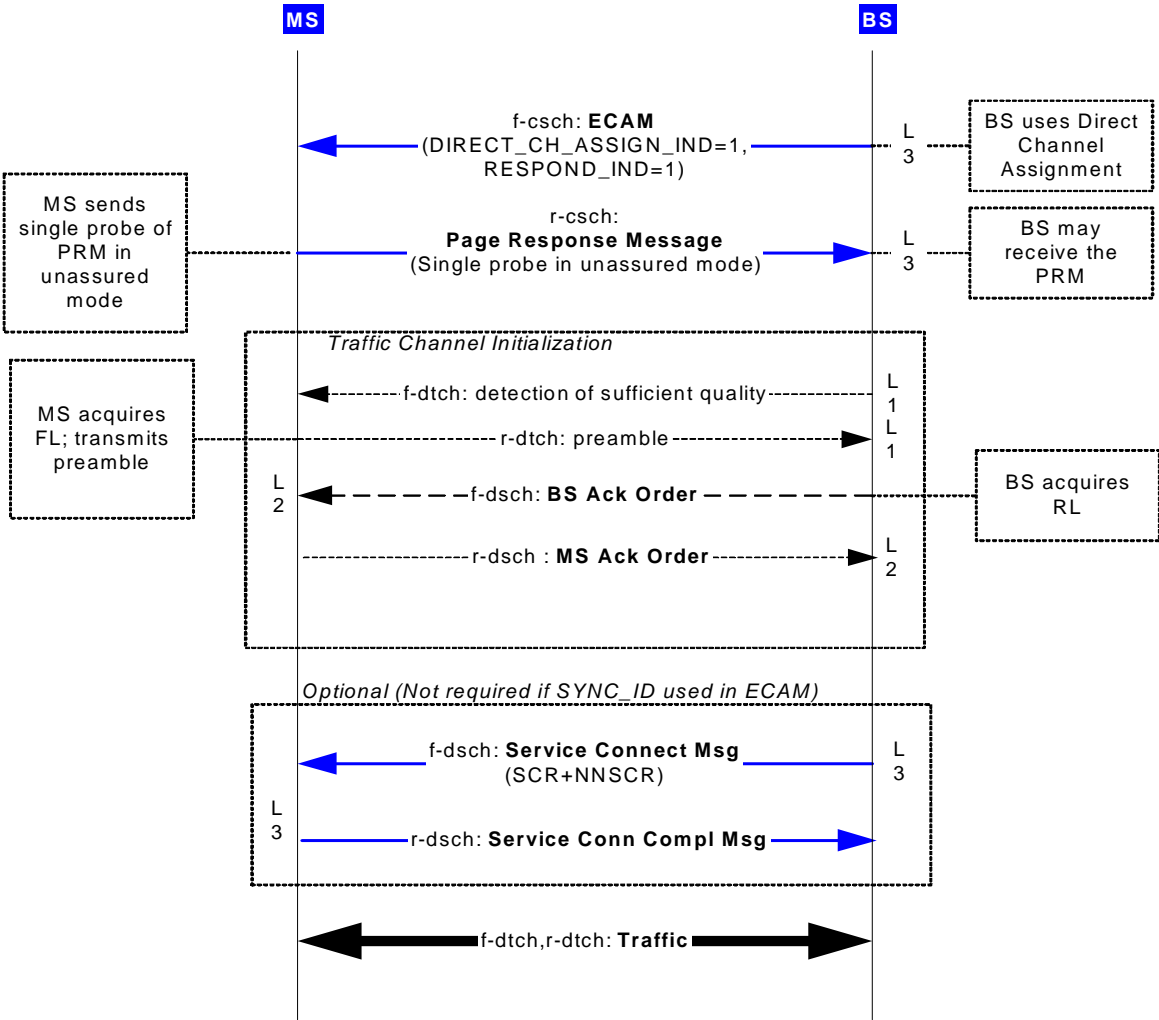
7

**Figure C-2. 1 Direct Channel Assignment - Normal setup**



C-2.2 Direct Channel Assignment - With unassured page response

2



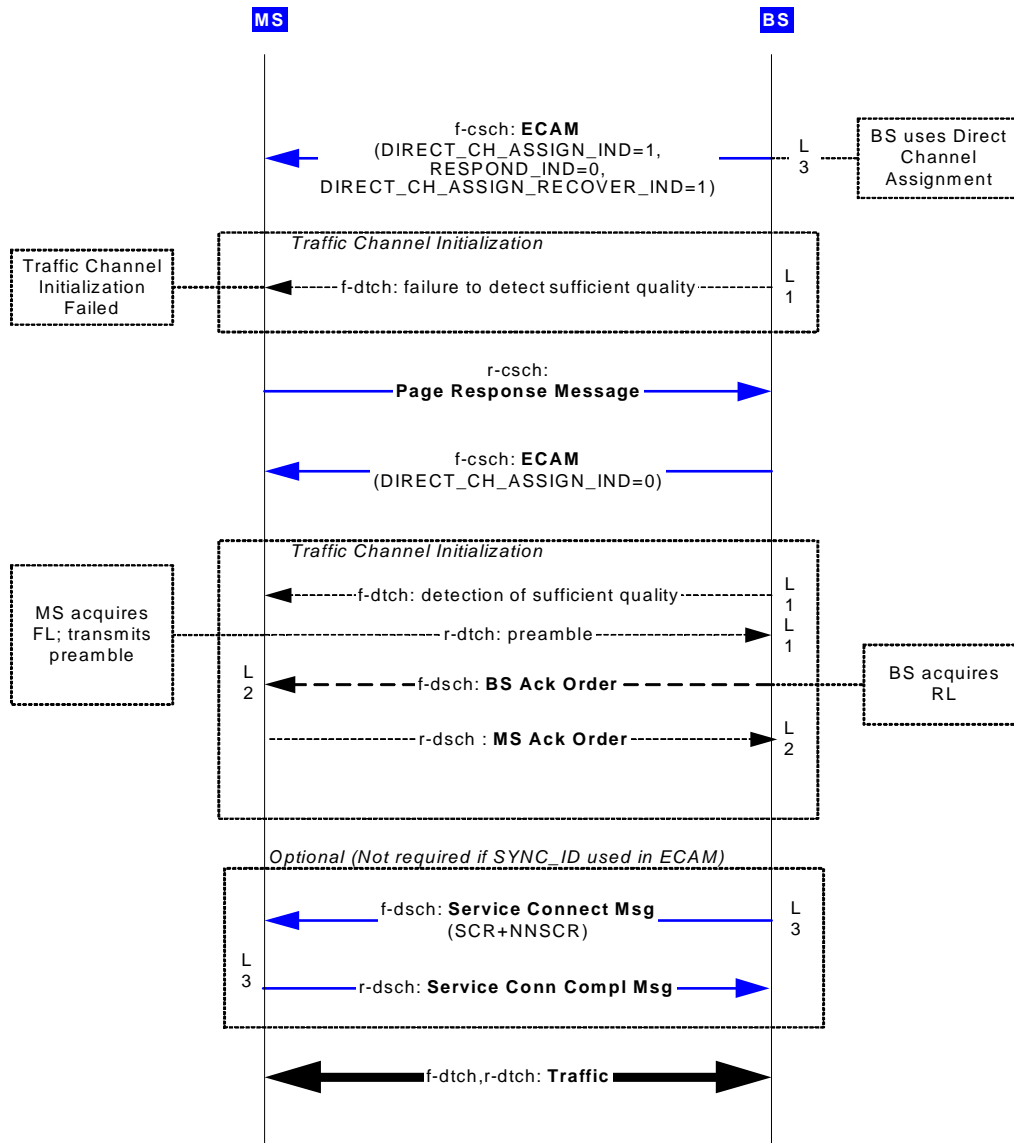
3  
4

Figure C-2. 2 Direct Channel Assignment - With unassured page response

6  
7

### 1 C-2.3 Direct Channel Assignment - With failure recovery

2



3

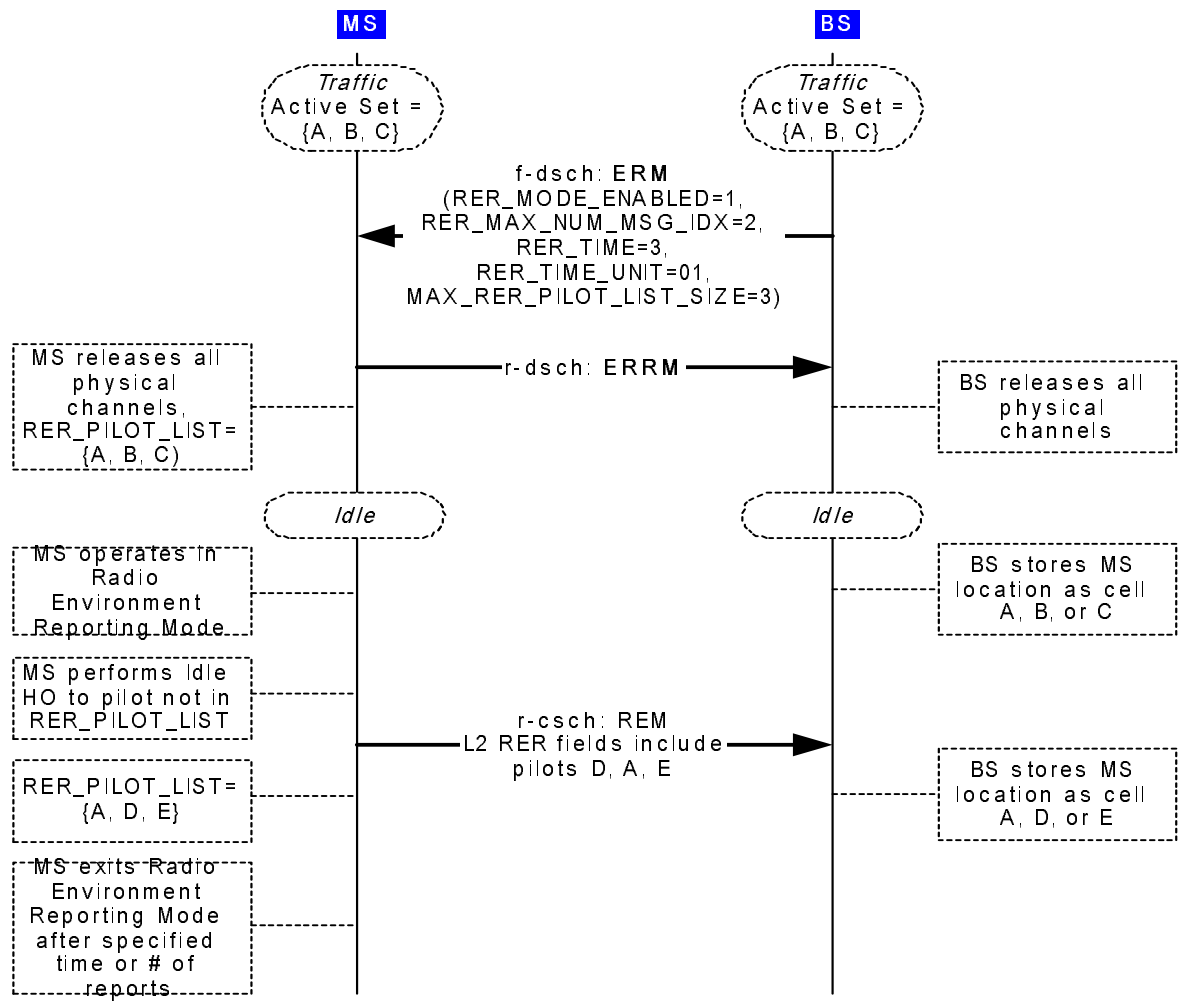
4

**Figure C-2. 3 Direct Channel Assignment - With failure recovery**

5

6

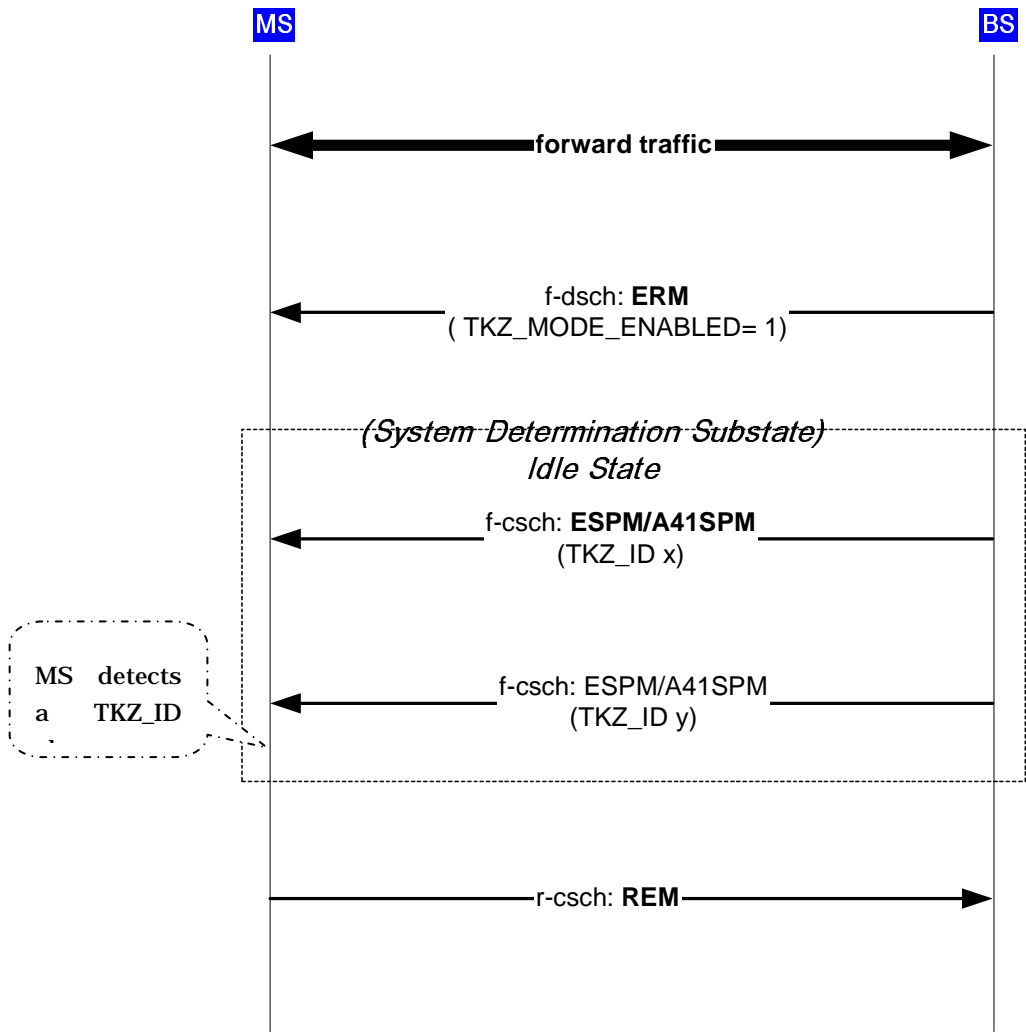
1 C-2.4 Radio Environment Reporting Mode Example



2  
3  
4  
5 **Figure C-2. 4 Radio Environment Reporting Mode Example**  
6  
7

1 C-2.5 Tracking zone reporting example

2



3

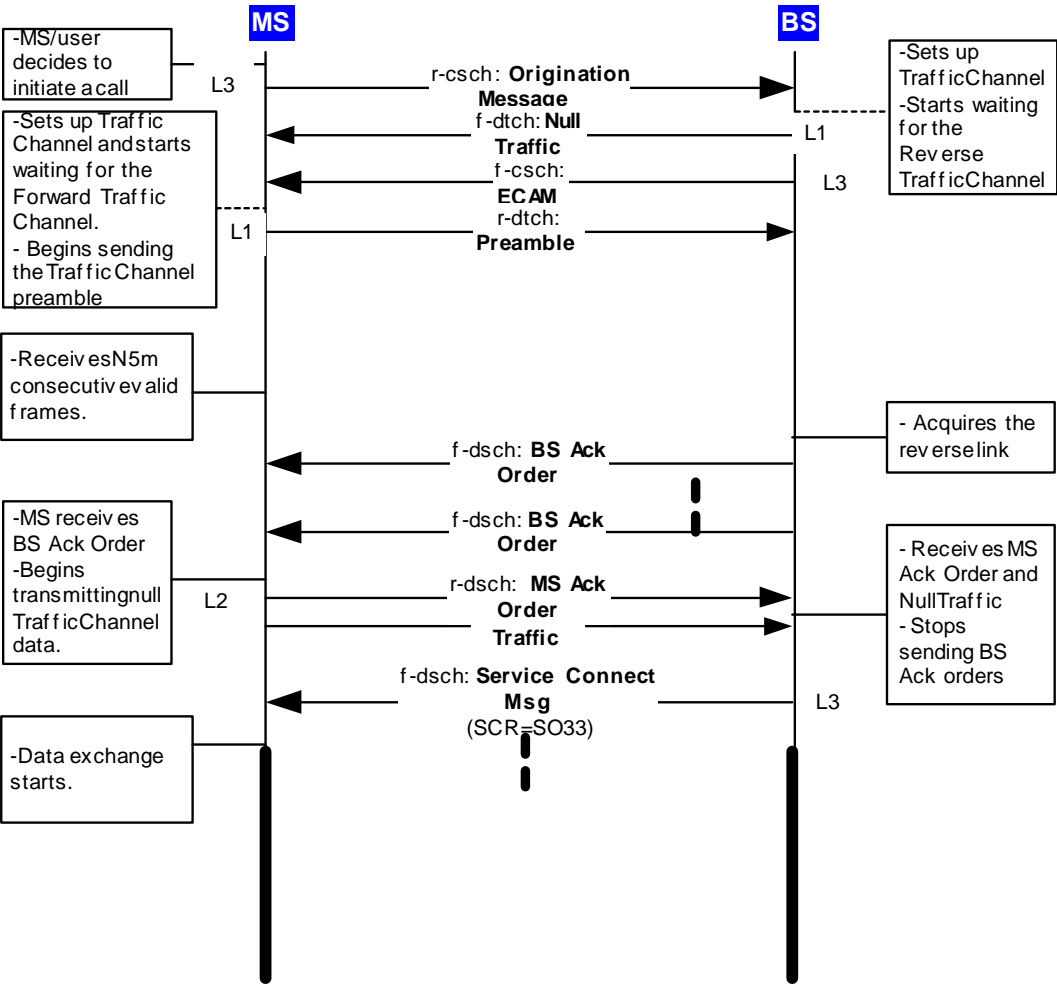
4 **Figure C-2. 5 Tracking zone reporting example**

5

6

1 C-2.6 Call setup with bypass two good frames

2



3

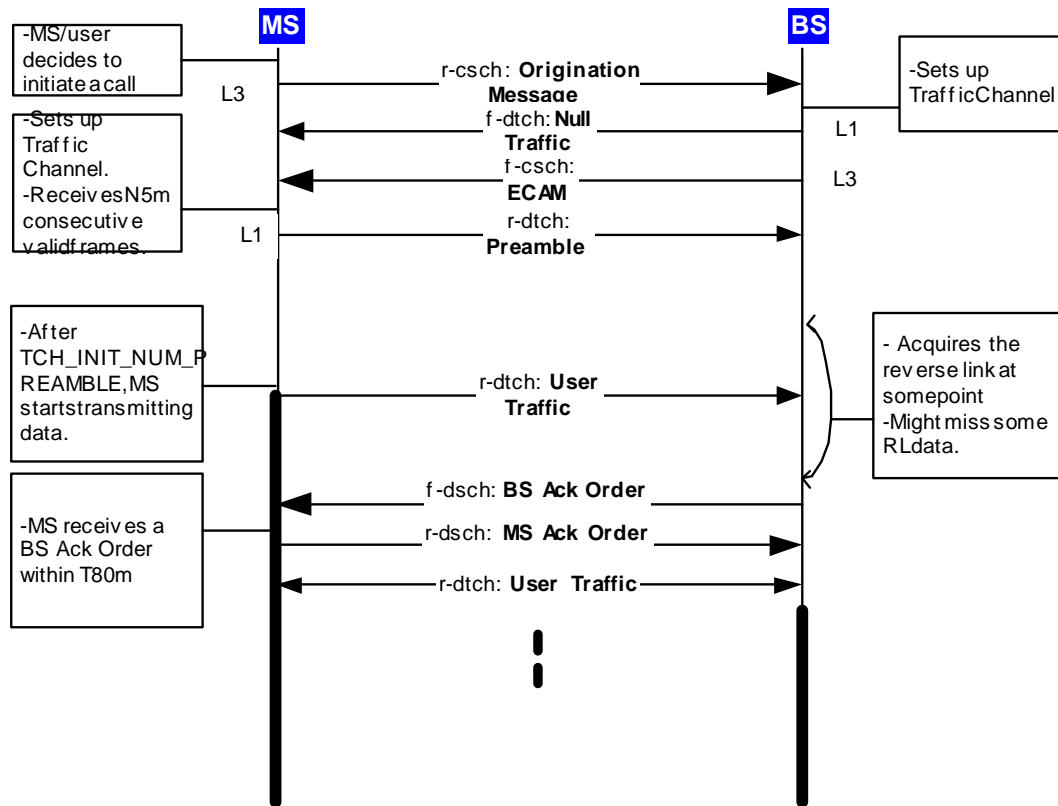
4 **Figure C-2. 6 Call setup with bypass two good frames**

5

6

# 1 C-2.7 Call setup with fixed duration preamble transmission

2



3

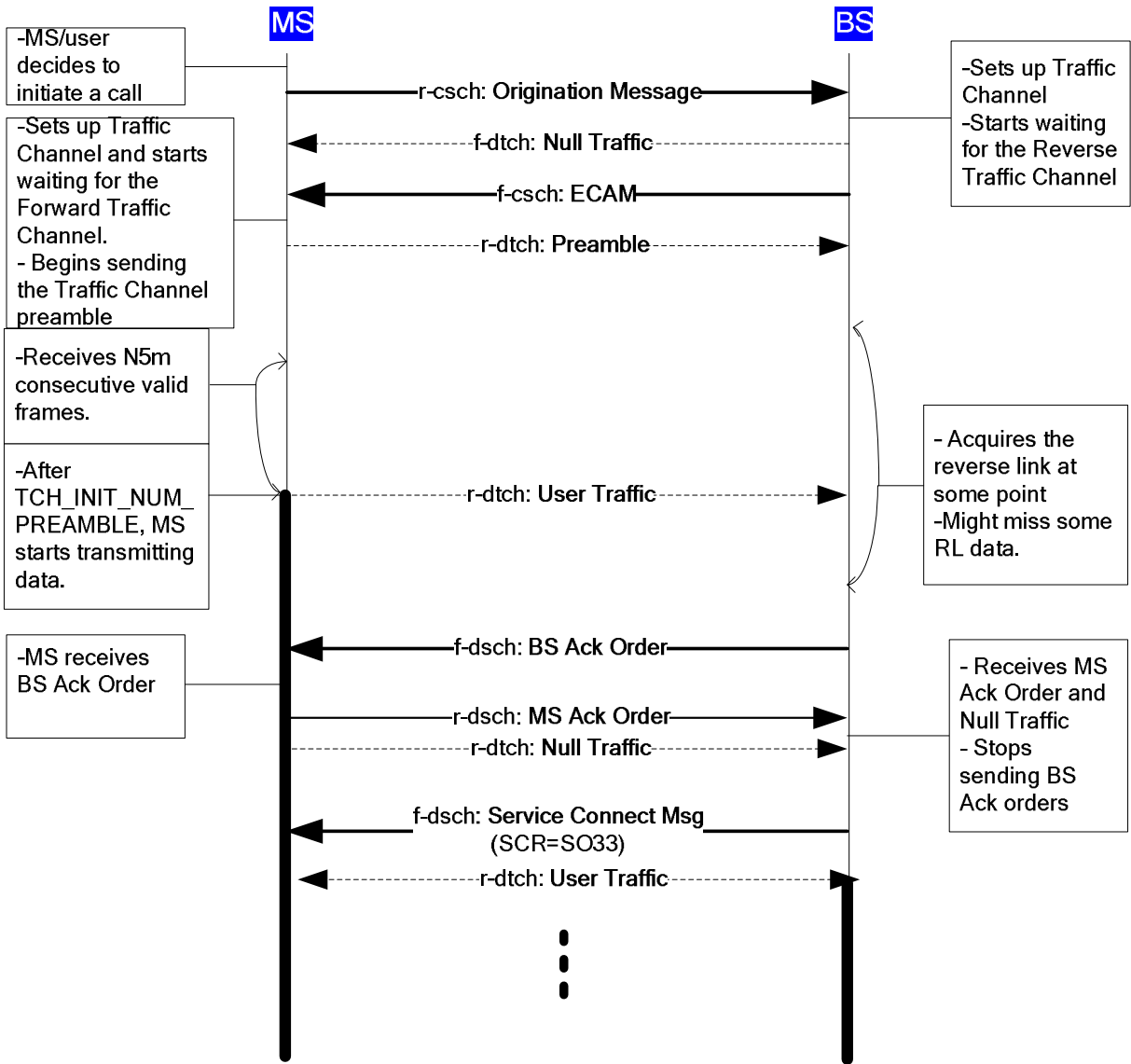
4 **Figure C-2. 7 Call setup with fixed duration preamble transmission**

5

6

1 C-2.8 Call setup with bypass two good frames + fixed duration preamble transmission

2



3

4

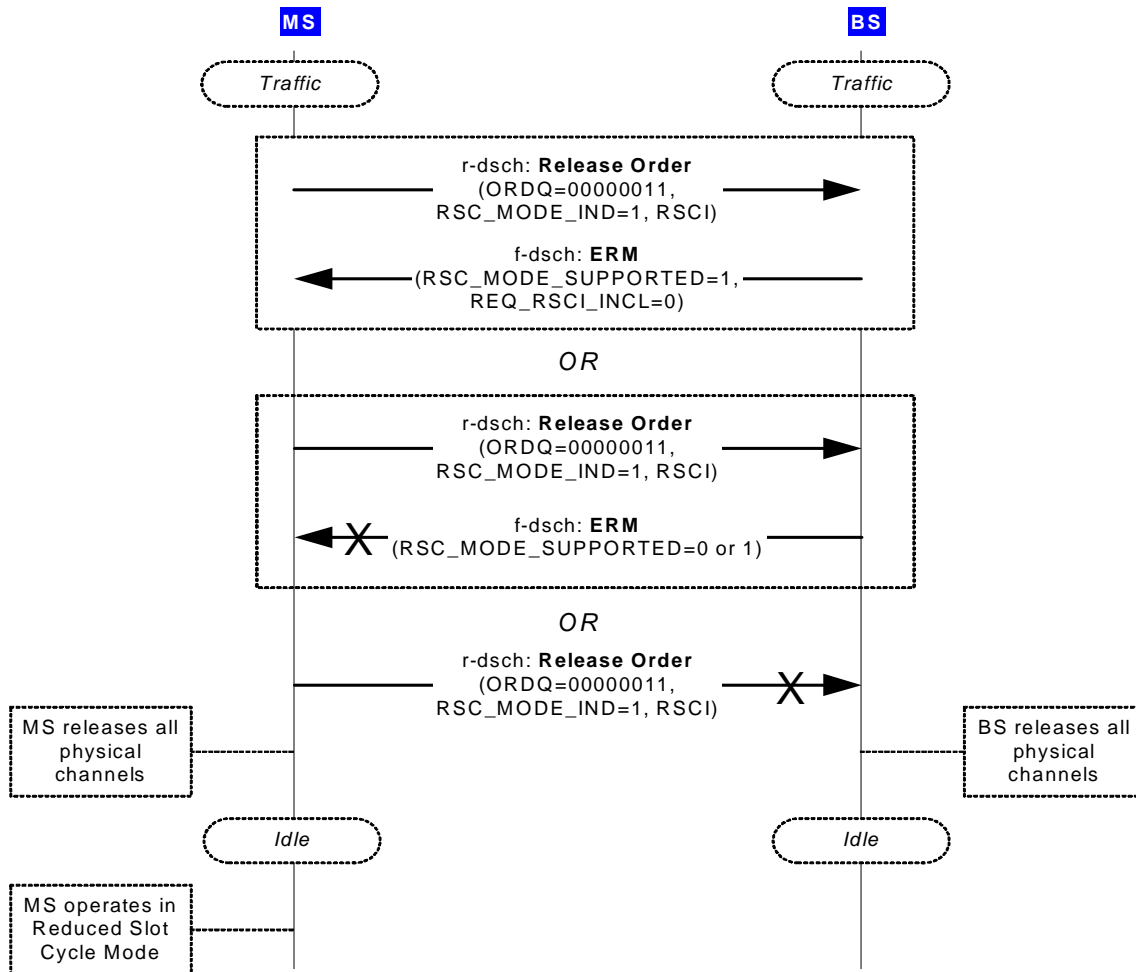
5 **Figure C-2. 8 Call setup with bypass two good frames + fixed duration preamble**  
6 **transmission**

7

8

# 1 C-2.9 Reduced Slot Cycle Mode - MS initiated release; MS request

2



3

4

5 **Figure C-2. 9 Reduced Slot Cycle Mode - MS initiated release; MS request**

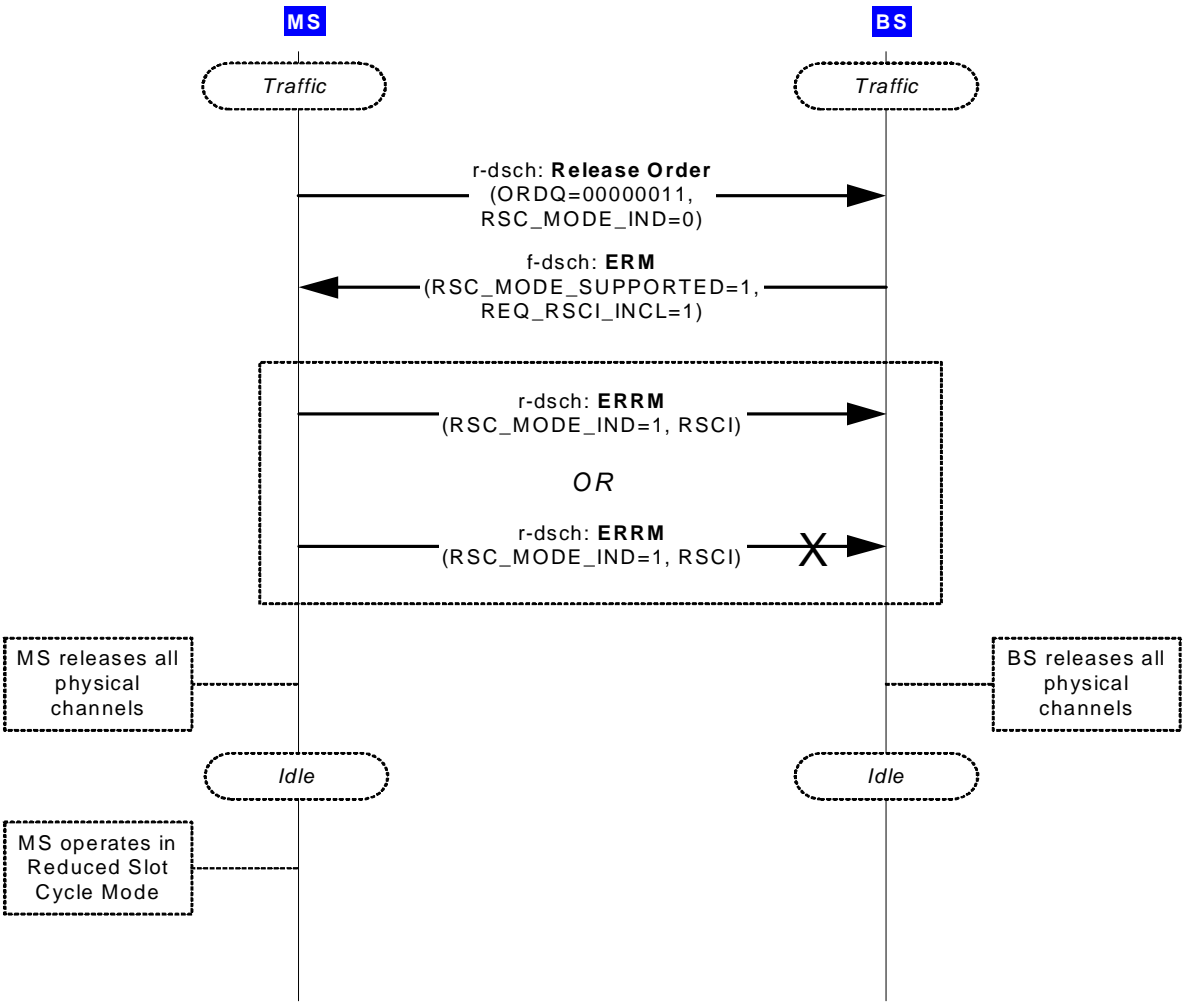
6

7



1 C-2.10 Reduced Slot Cycle Mode - MS initiated release; BS request

2



3

4

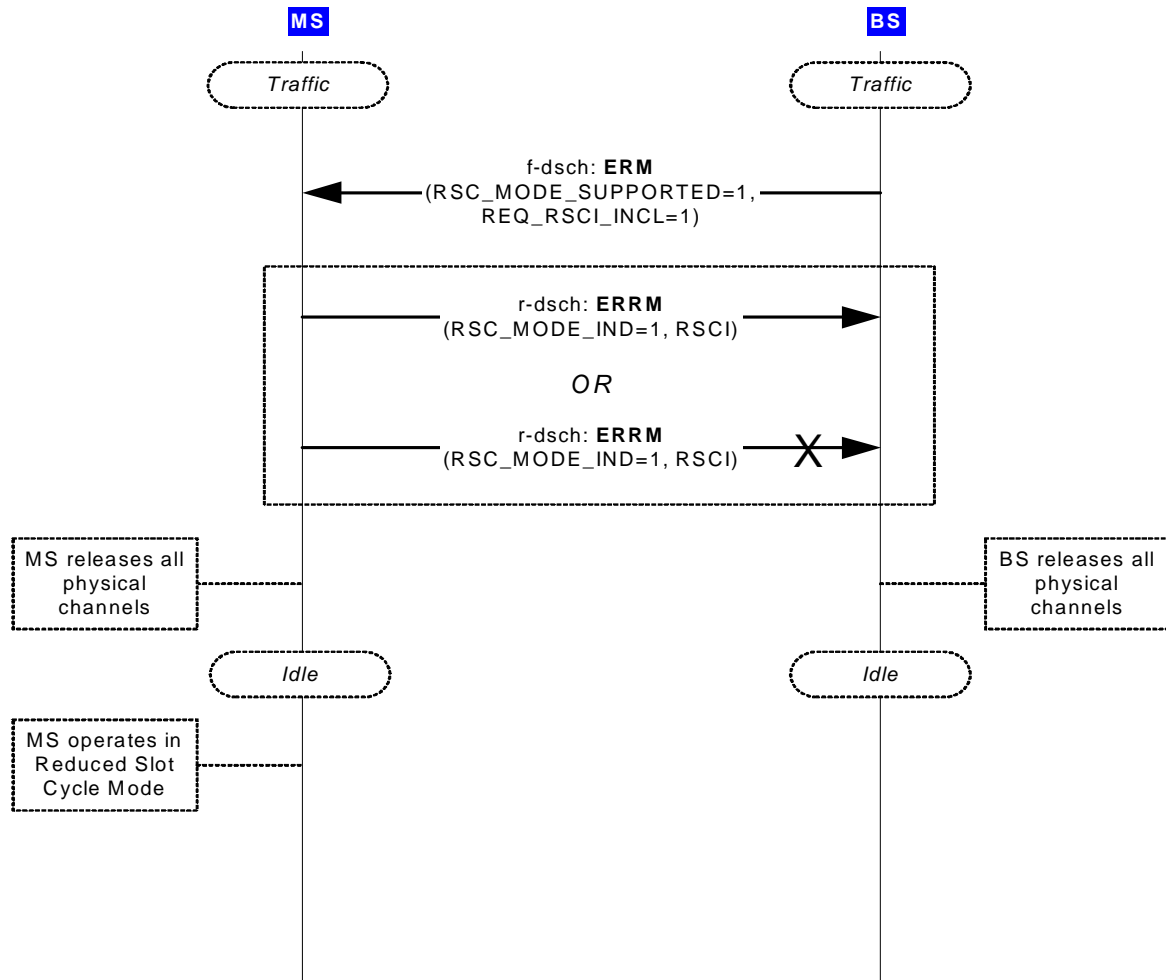
5 **Figure C-2. 10 Reduced Slot Cycle Mode (MS Initiated Release; BS Request)**

6

7

1 C-2.11 Reduced Slot Cycle Mode - BS initiated release; BS request

2



3

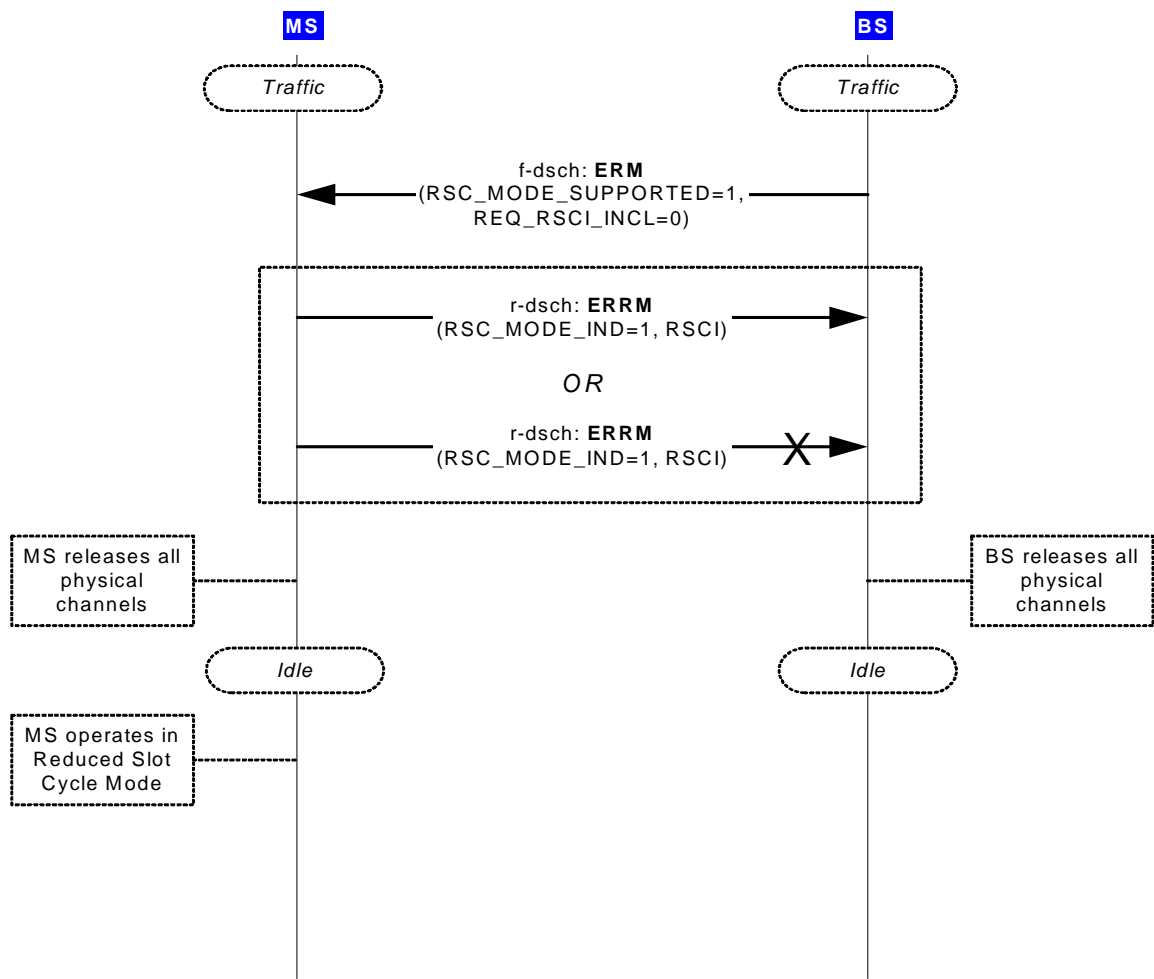
4

5 **Figure C-2. 11 Reduced Slot Cycle Mode - BS initiated release; BS request**

6

7

1 C-2.12 Reduced Slot Cycle Mode - BS initiated release; MS request  
2

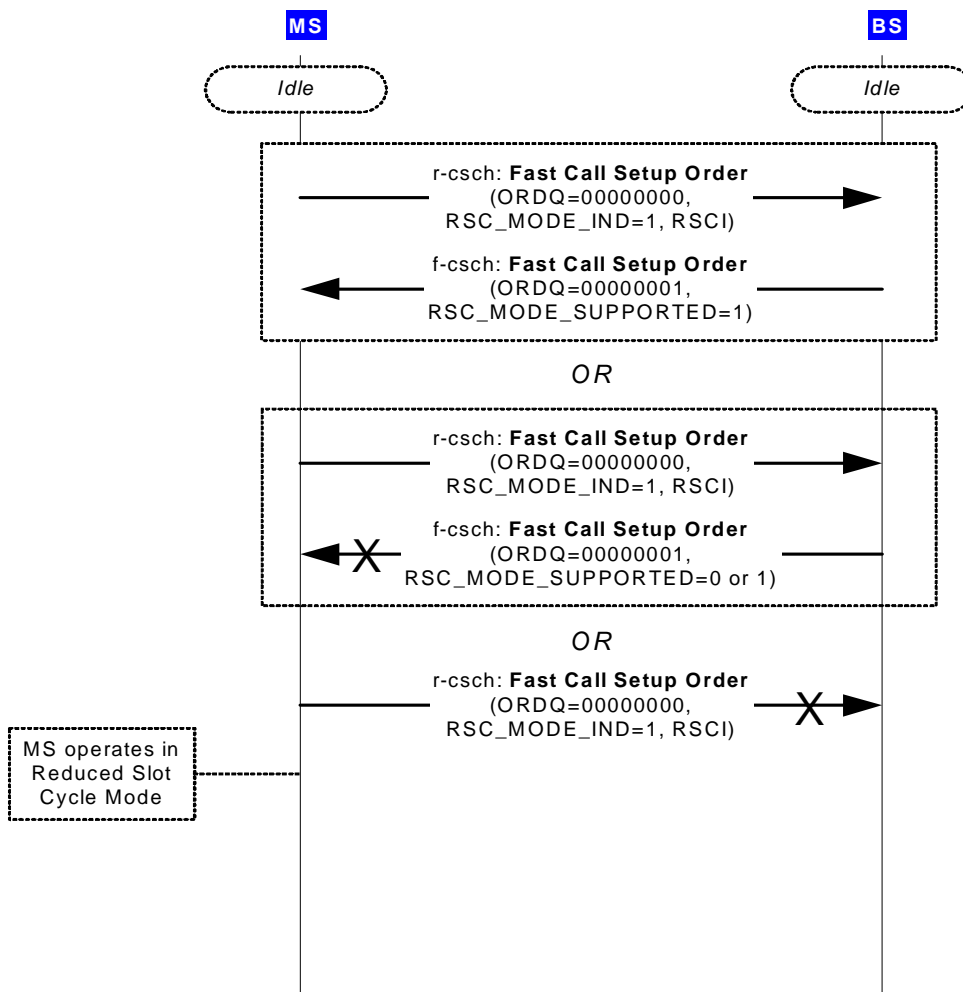


3  
4  
5  
6  
7

**Figure C-2. 12 Reduced Slot Cycle Mode - BS initiated release; MS request**

## 1 C-2.13 Reduced Slot Cycle Mode - MS initiated in Idle State

2



3

4

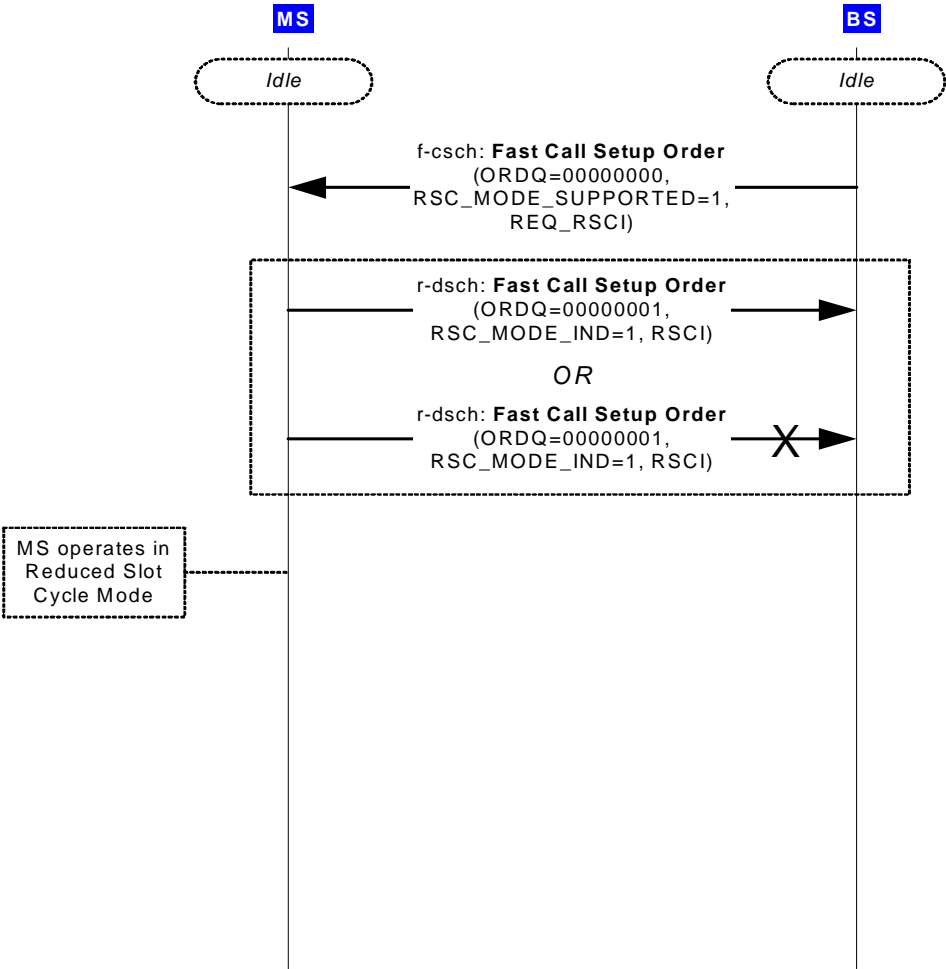
5 **Figure C-2. 13 Reduced Slot Cycle Mode - MS initiated in Idle State**

6

7

1 C-2.14 Reduced Slot Cycle Mode - BS initiated in Idle State

2



3

4

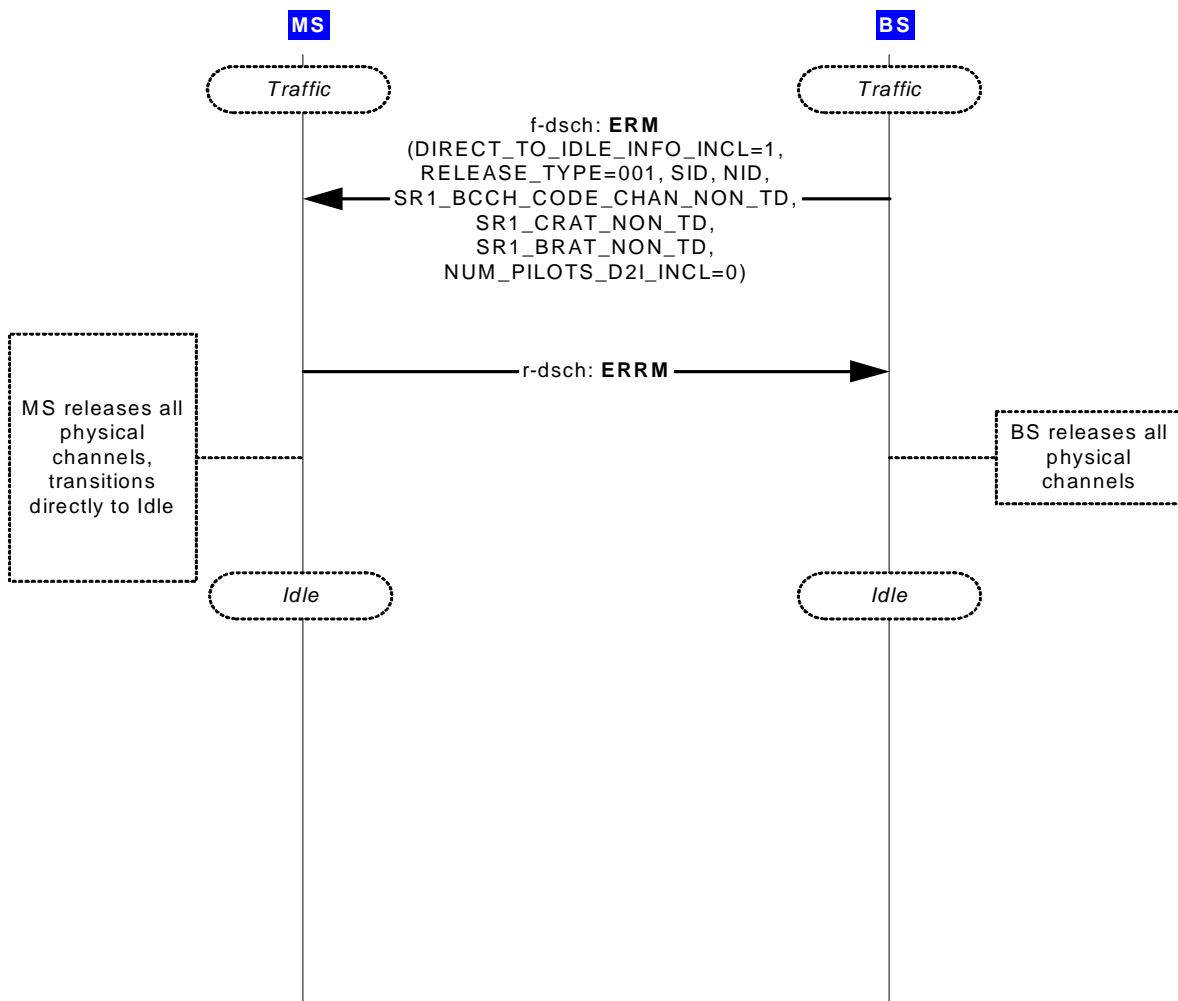
5 **Figure C-2. 14 Reduced Slot Cycle Mode - BS initiated in Idle State**

6

7

## 1 C-2.15 Direct to Idle transition example

2



3

4

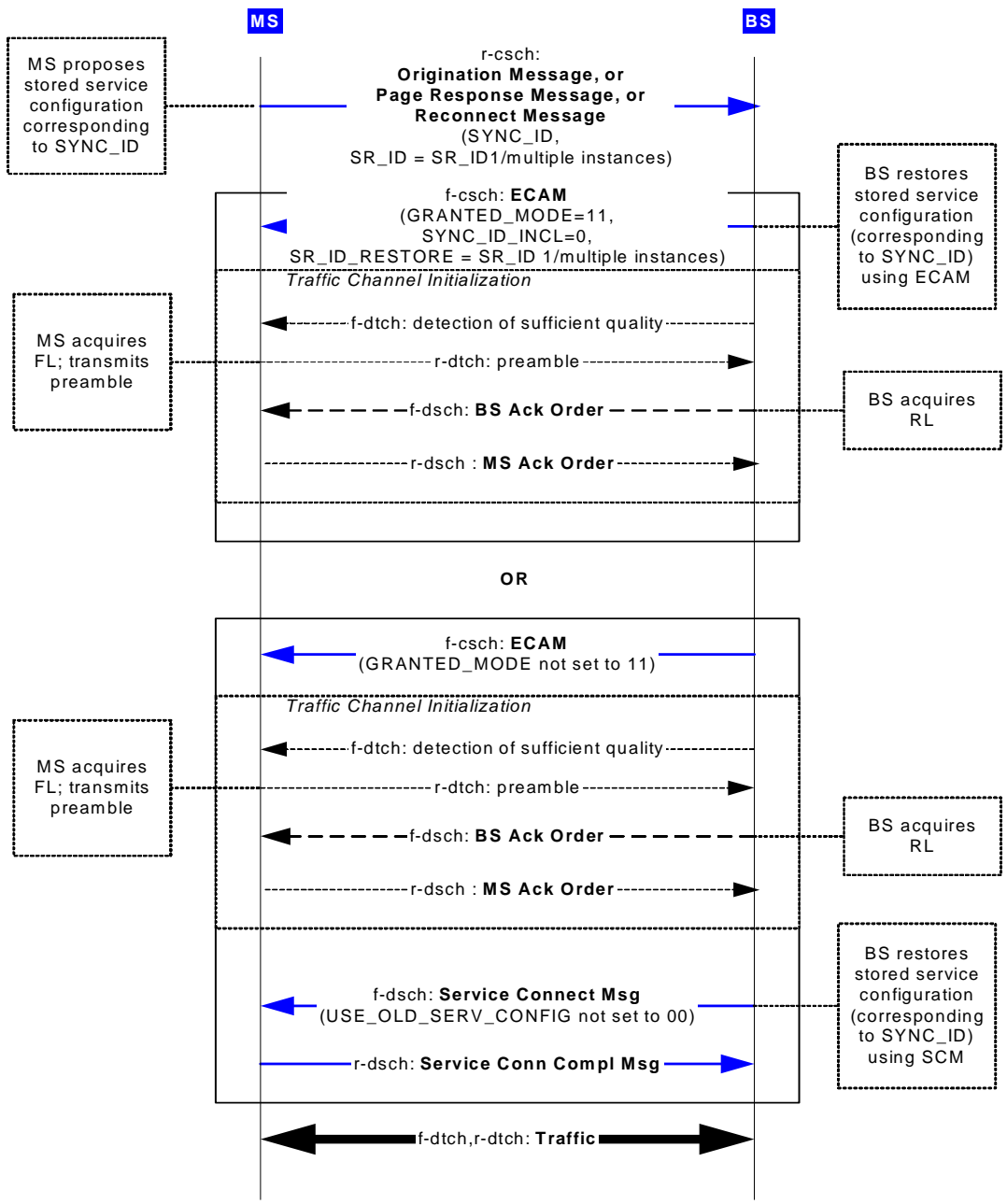
5 **Figure C-2. 15 Direct to Idle Transition Example (BS Initiated Release to BCCH)**

6

7

1 **C-3 SYNC\_ID enhancements**

2 **C-3.1 SYNC\_ID in Origination/Page Response/Reconnect Message and BS grants it via**  
3 **ECAM or SCM**



4  
5 **Figure C-3. 1 SYNC\_ID in Origination/Page Response/Reconnect Message and BS**  
6 **grants it via ECAM or SCM**

- 1 C-3.2 SYNC\_ID in Origination/Page Response/Reconnect Message and BS assigns a  
 2 different one in ECAM or SCM

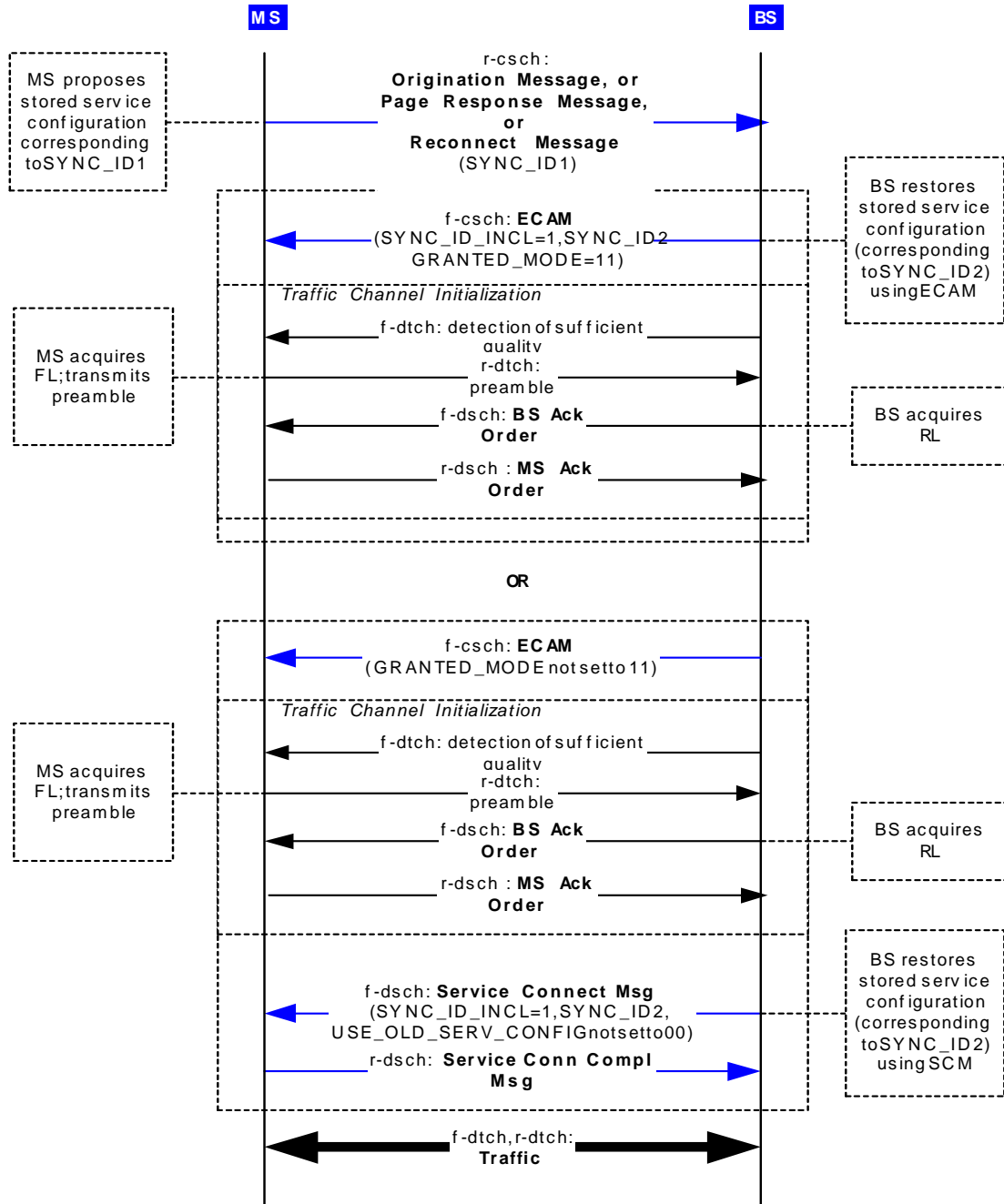
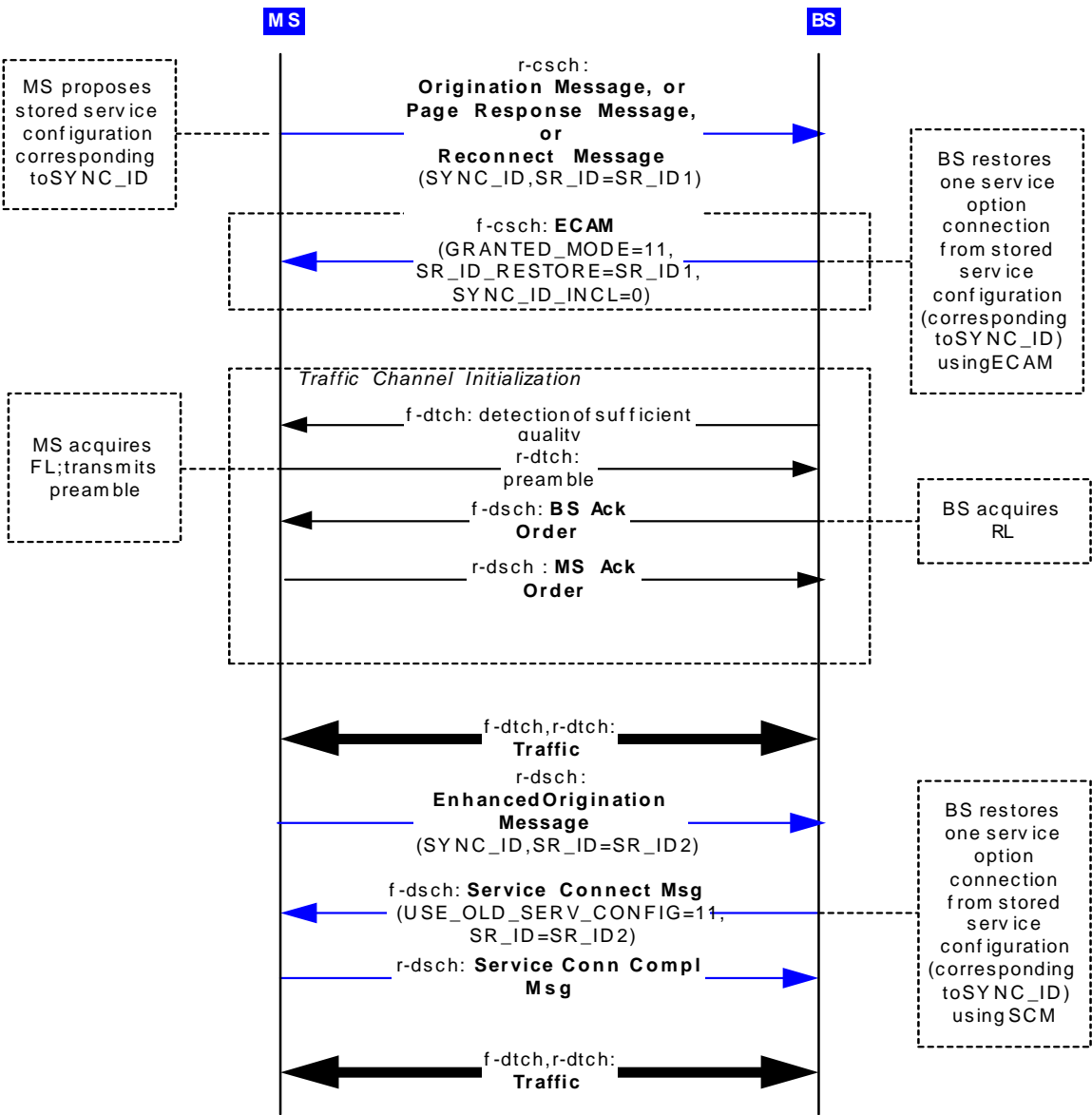


Figure C-3. 2 SYNC\_ID in Origination/Page Response/Reconnect Message and BS assigns a different one in ECAM or SCM



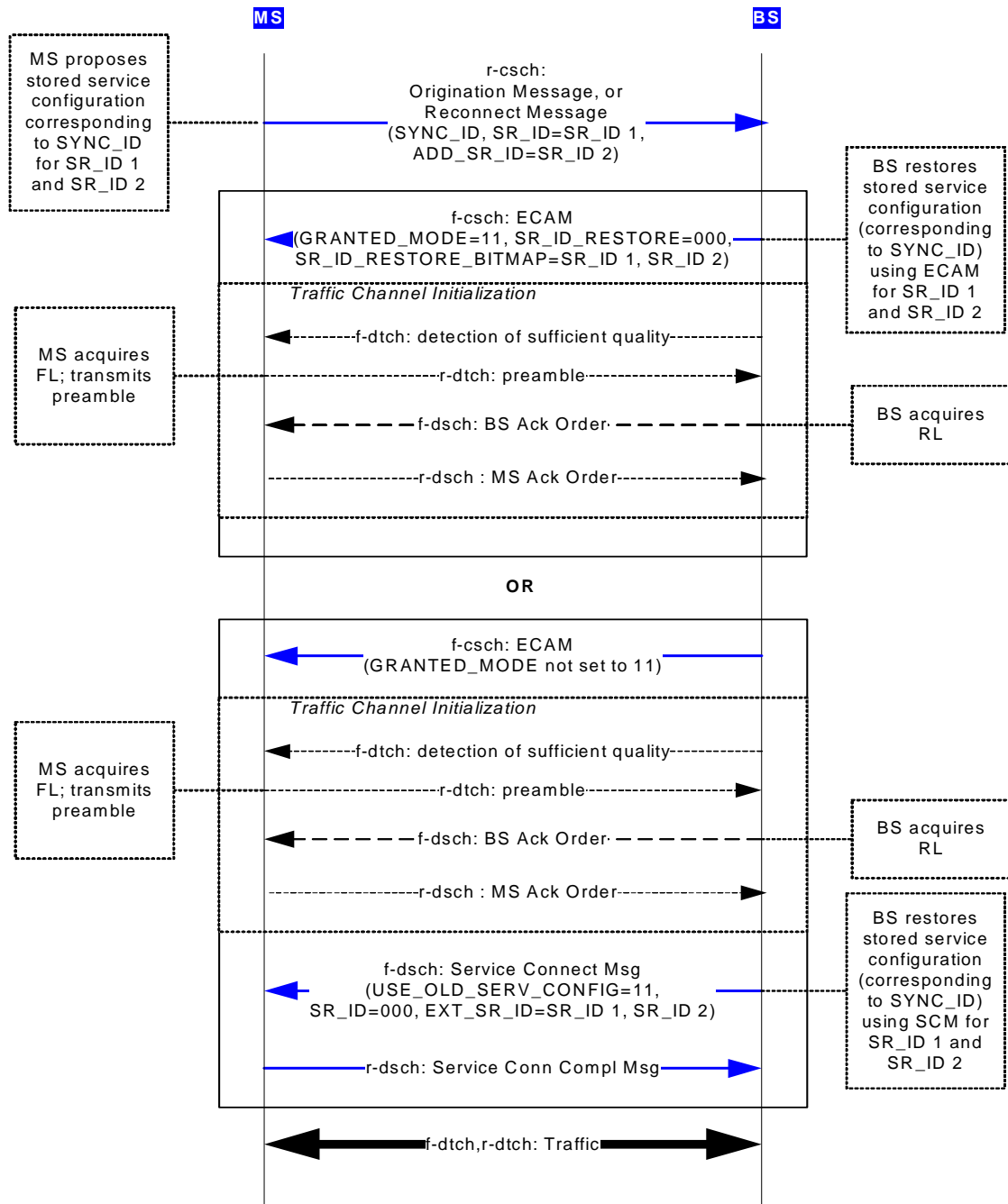
1 C-3.3 Incremental restoration of stored service option connections with SYNC\_ID (ORM +  
2 EOM example)



3  
4  
5  
6  
7  
8

**Figure C-3. 3 Incremental restoration of stored service option connections with SYNC\_ID (ORM + EOM example)**

# 1 C-3.4 Initiate M of N service option connections from SYNC\_ID

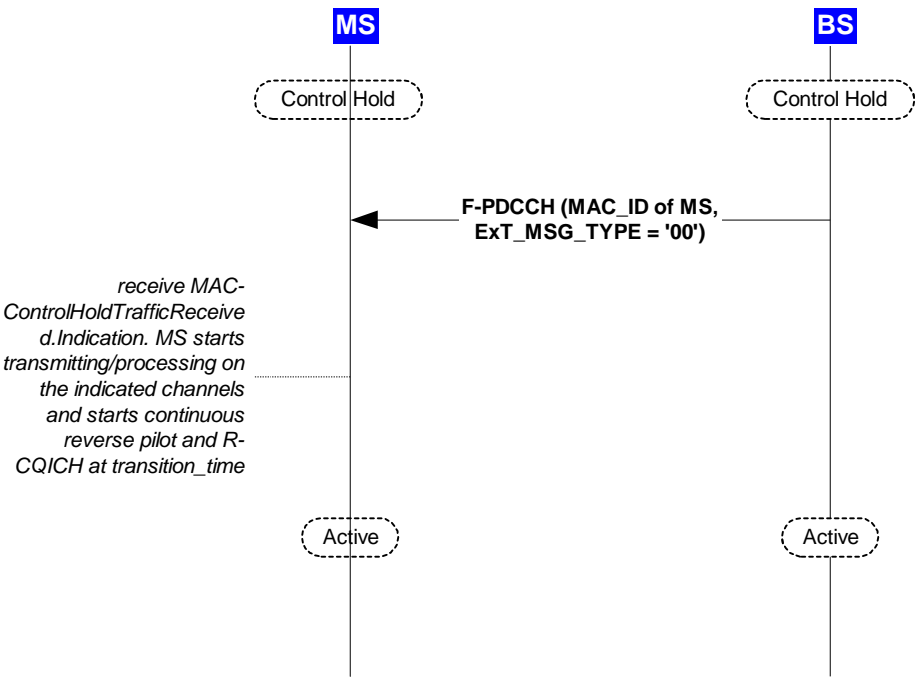


**Figure C-3. 4 Initiate M of N service option connections from SYNC\_ID**

1 **C-4 DV Control Hold**

2 C-4.1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-DCCH)

3

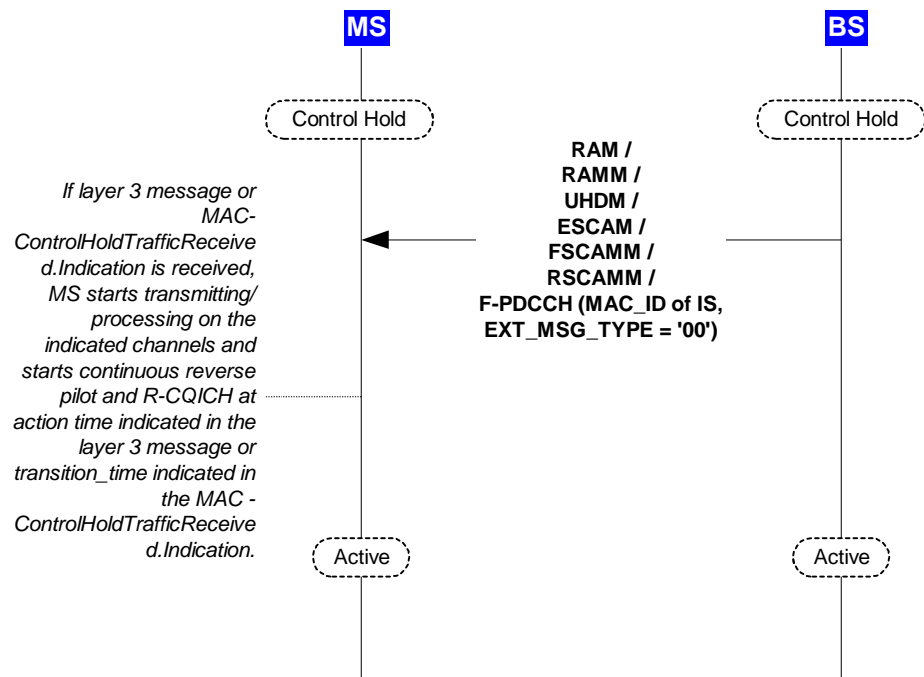


4  
5

6 **Figure C-4. 1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-**  
7 **DCCH)**

8  
9

C-4.2 BS initiated transition from DV Control Hold Mode (F-PDCH with F-DCCH)

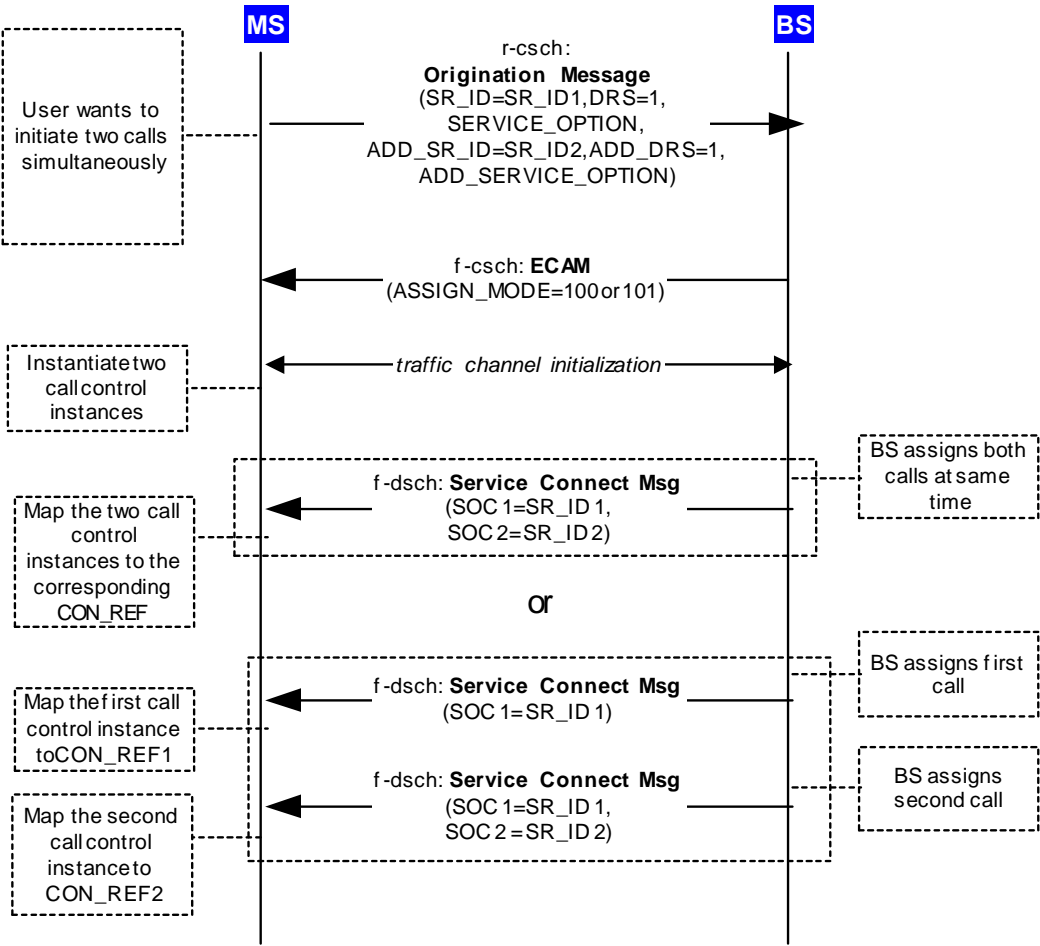


**Figure C-4. 2 BS initiated transition from DV Control Hold Mode (F-PDCH with F-DCCH)**

1 **C-5 Multiple Services Support**

2 **C-5.1 Initiate multiple calls in Origination Message**

3



4

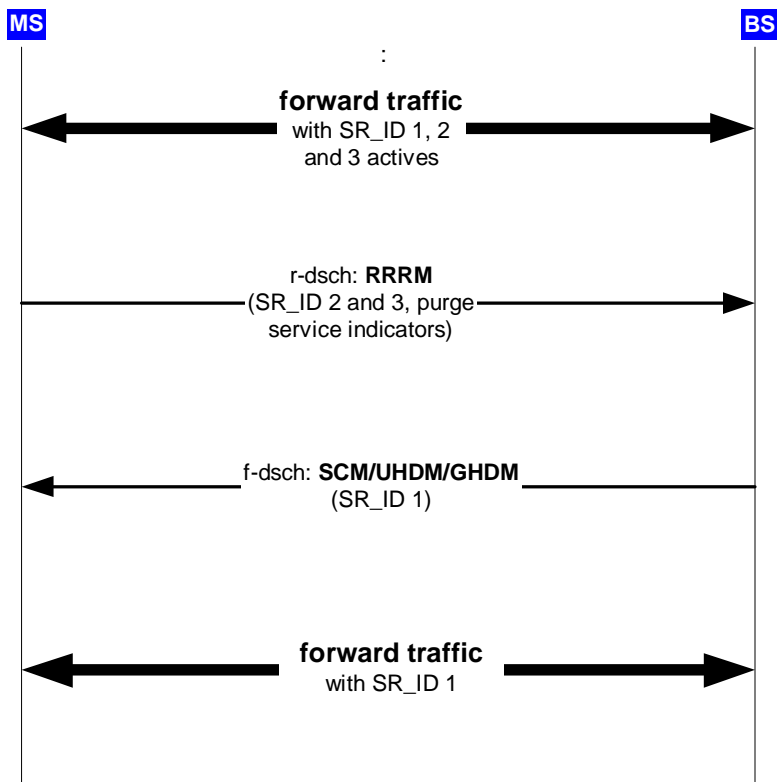
5 **Figure C-5. 1 Initiate multiple calls in Origination Message**

6

7

1 C-5.2 Request release of multiple calls via RRRM

2



3

4

5 **Figure C-5. 2 Request release of multiple calls via RRRM**

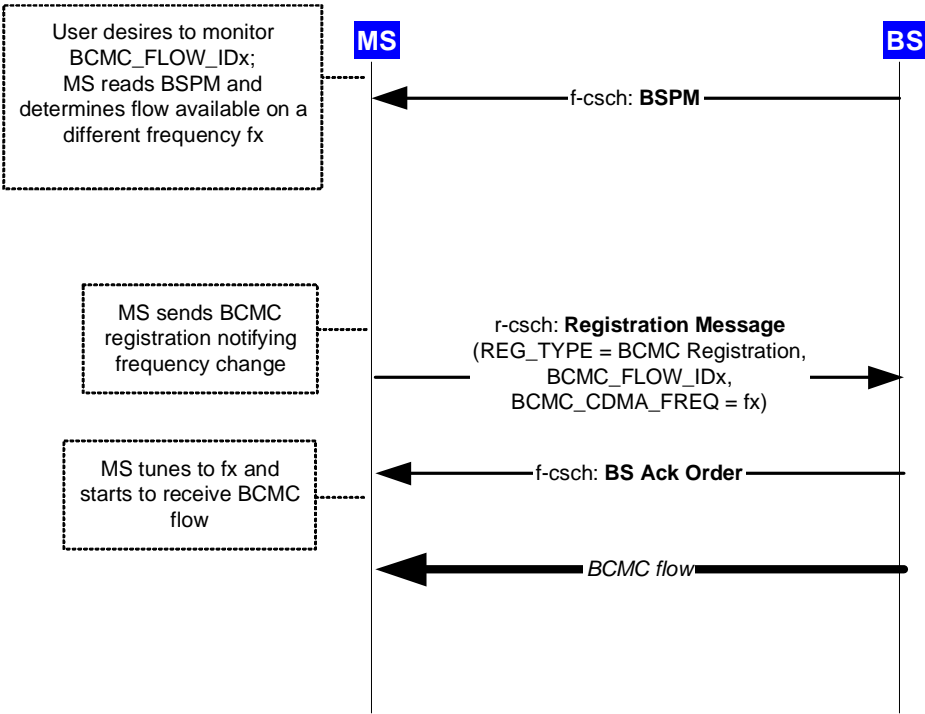
6

7

1 **C-6 BCMC**

2 **C-6.1 Initiating BCMC monitoring in idle state that results in Registration Message**

3



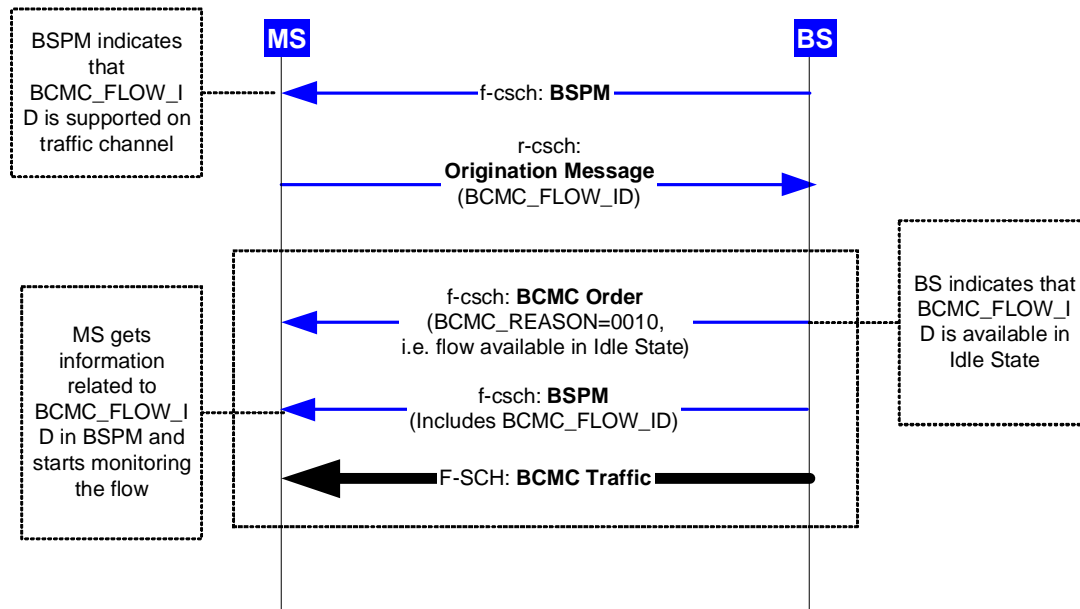
4

5 **Figure C-6. 1 Initiating BCMC monitoring in idle state that results in Registration**  
6 **Message**

7

8

- 1 C-6.2 Initiating BCMC monitoring in idle state that results in Origination Message and  
 2 directed to Idle State BCMC

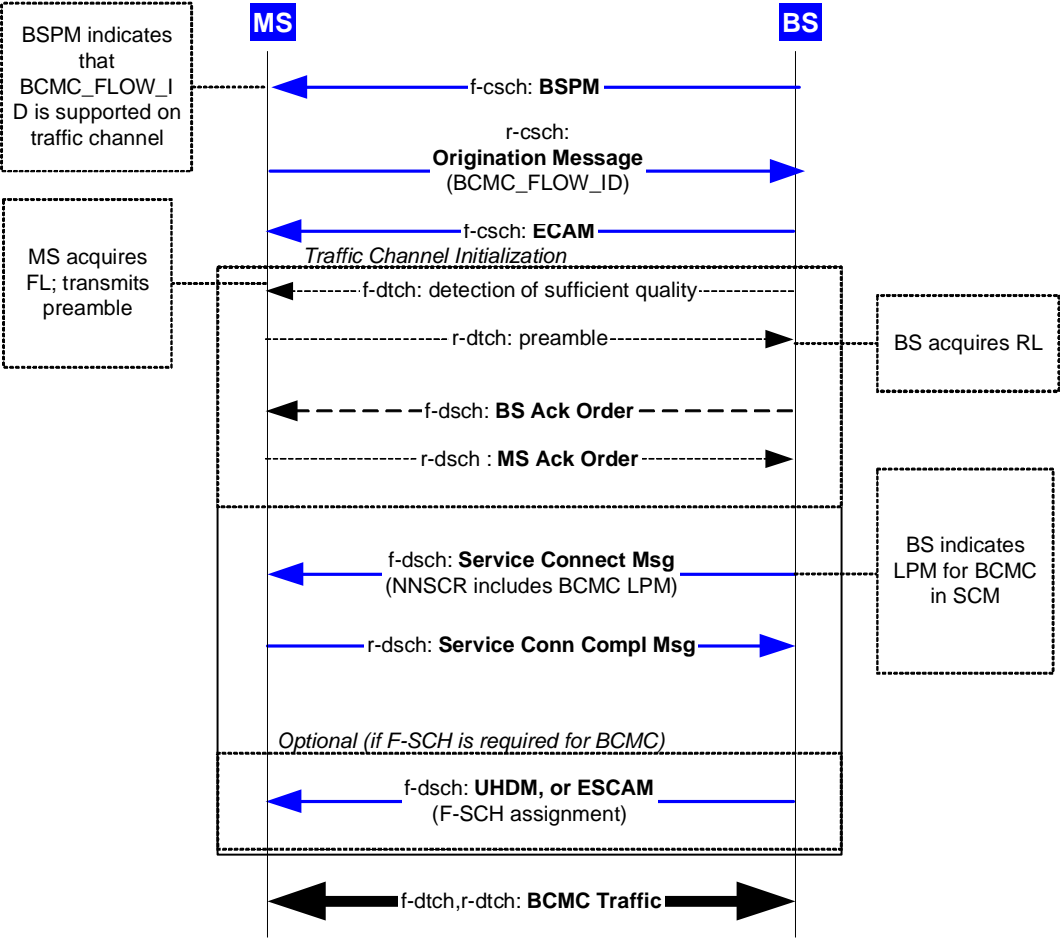


**Figure C-6. 2 Initiating BCMC monitoring in idle state that results in Origination Message and directed to Idle State BCMC**



C-6.3 Initiating BCMC monitoring in idle state that results in Origination Message and assigned to Traffic State BCMC

3



4

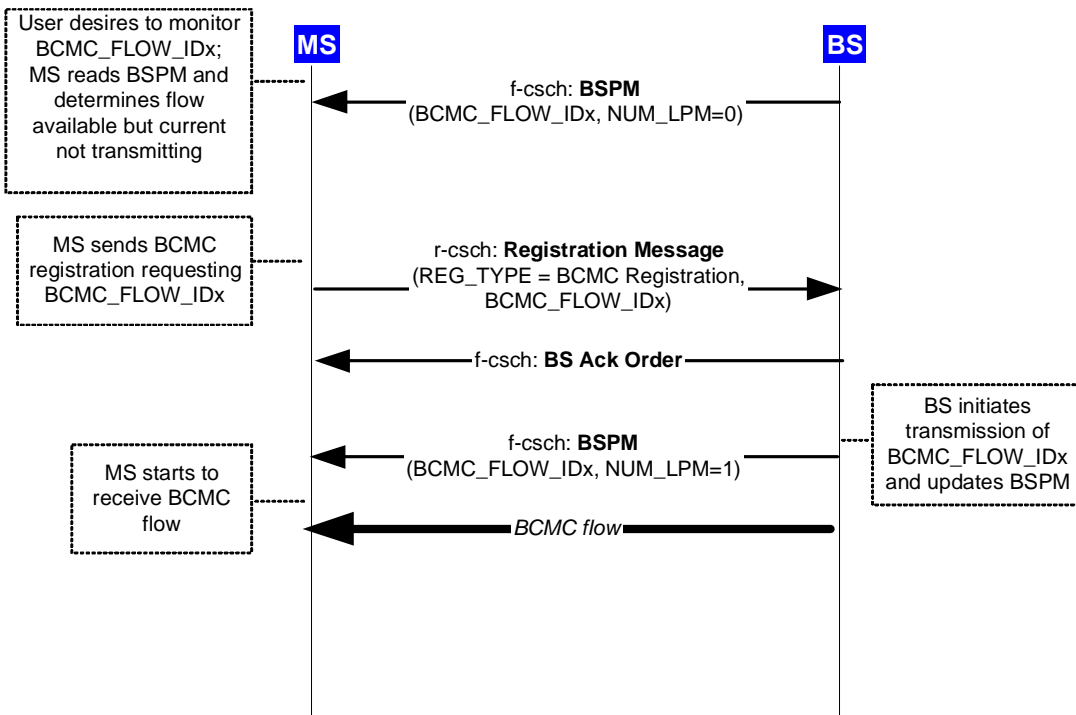
Figure C-6. 3 Initiating BCMC monitoring in idle state that results in Origination Message and assigned to Traffic State BCMC

7

8

## 1 C-6.4 Dynamic BCMC in idle state

2



3

4

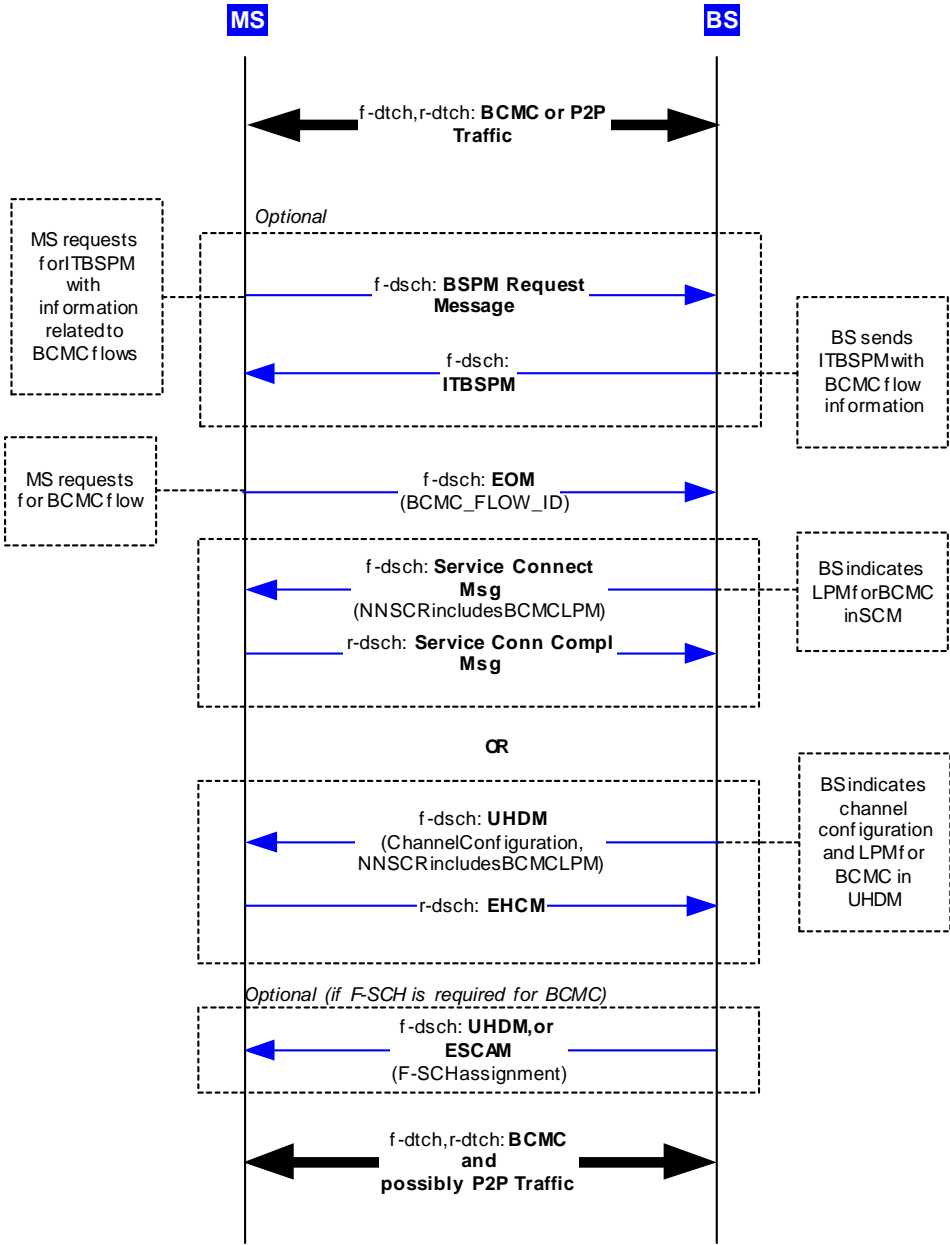
Figure C-6. 4 Dynamic BCMC in idle state

5

6

1 C-6.5 Initiating BCMC in traffic state

2



3

4

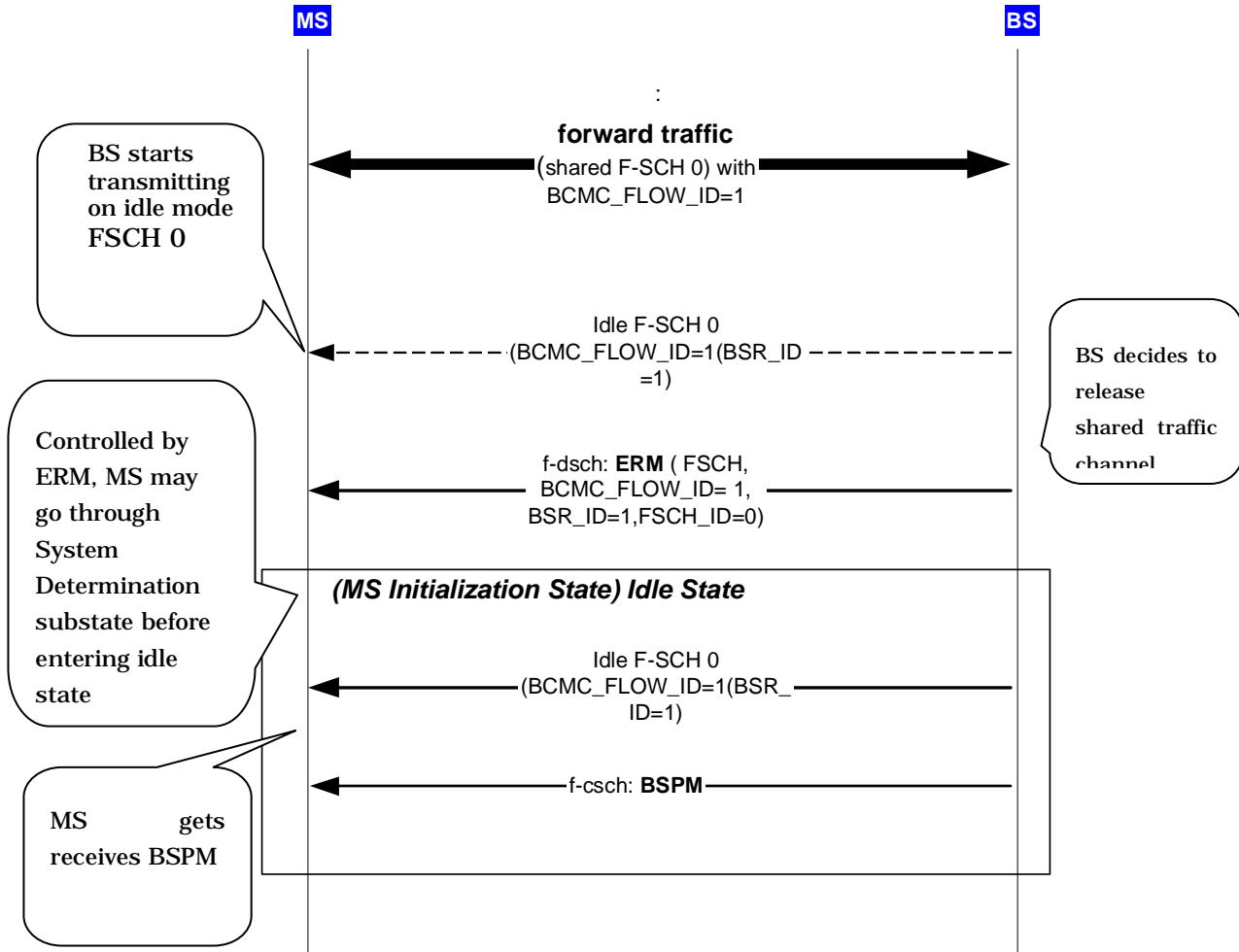
5

6

**Figure C-6. 5 Initiating BCMC in traffic state**

## 1 C-6.6 Traffic State BCMC to Idle State BCMC transition

2



3

4

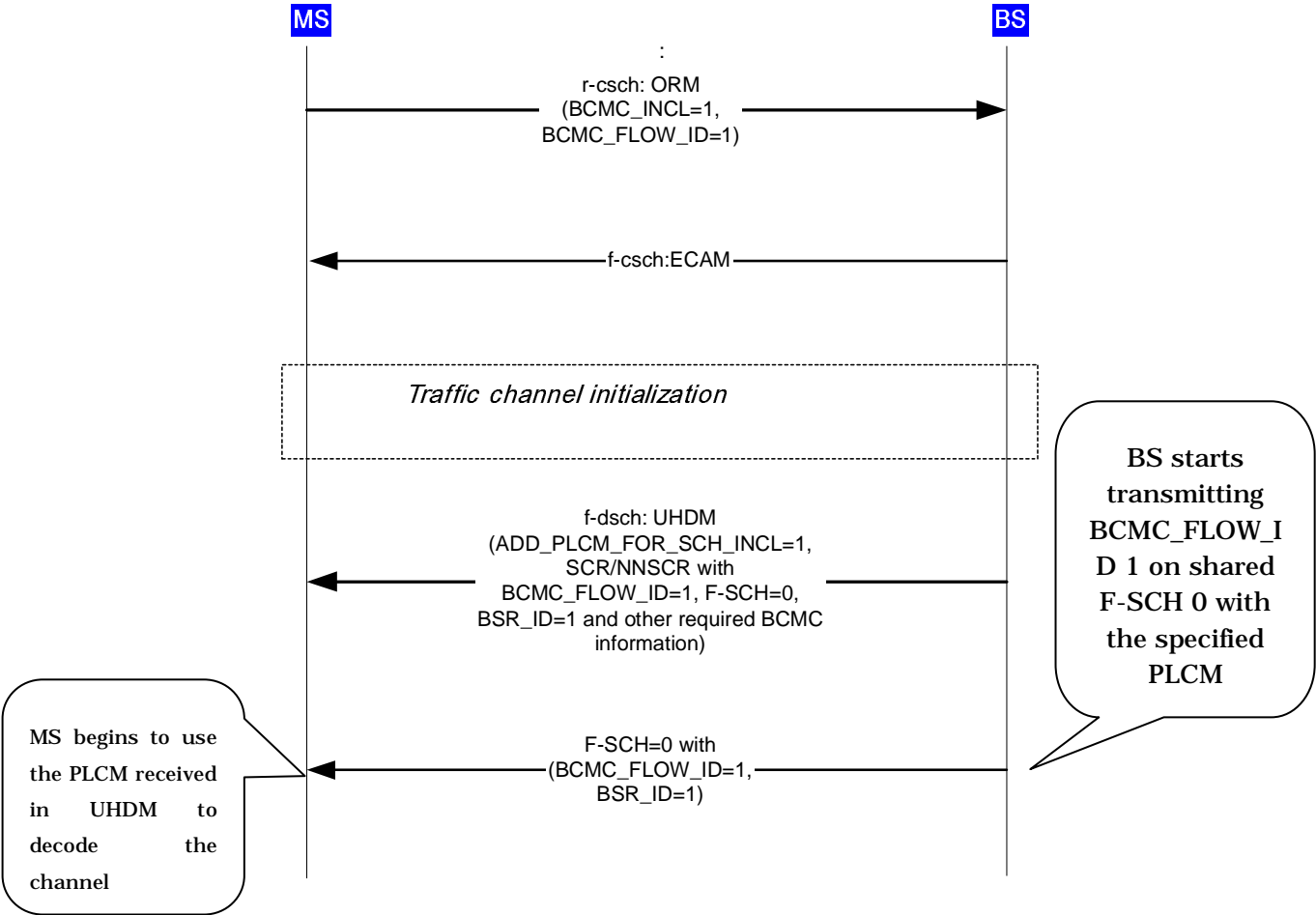
5 **Figure C-6. 6 Traffic State BCMC to Idle State BCMC transition**

6

7

1 C-6.7 Concurrent BCMC flows monitoring

2



3

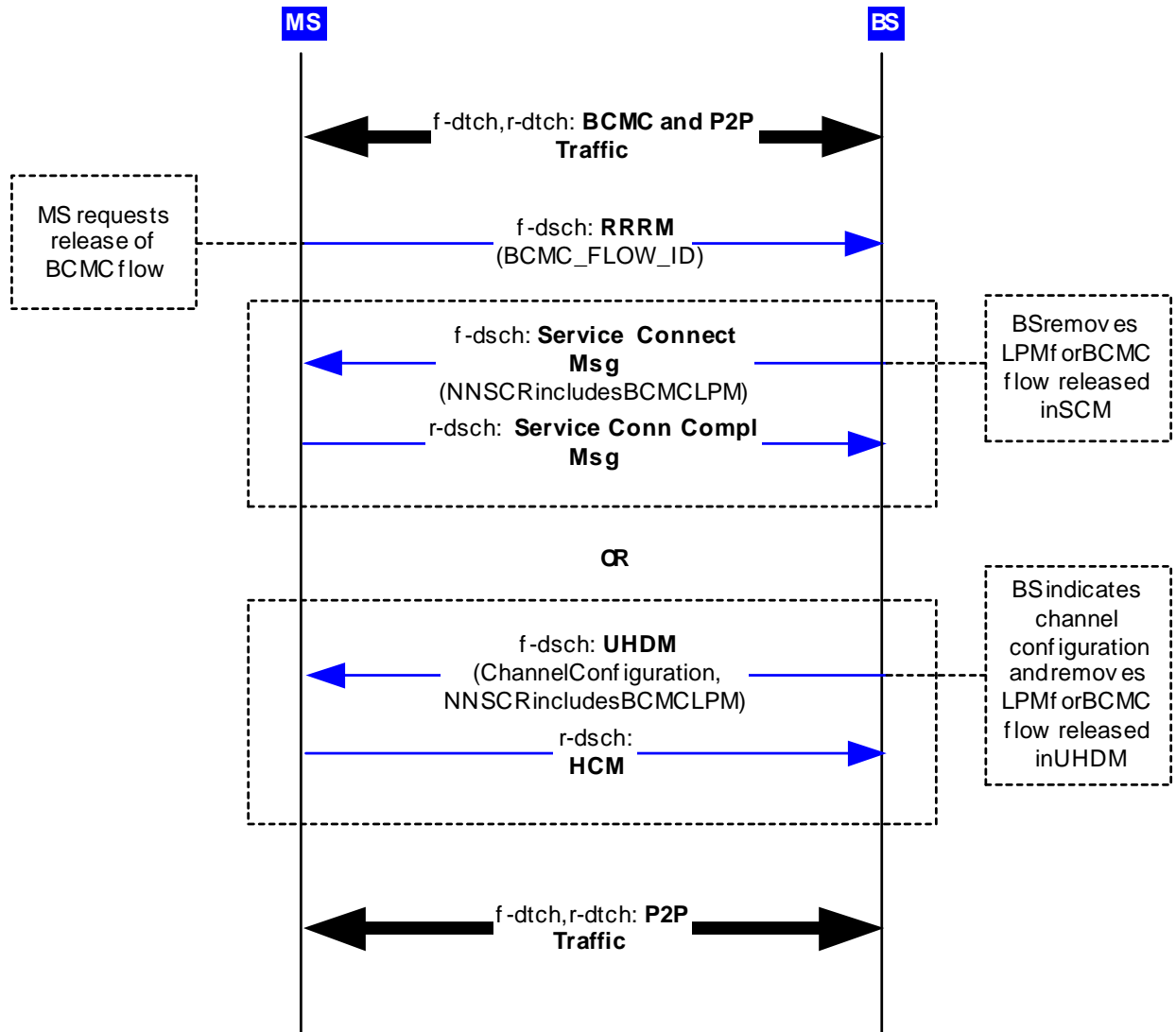
4 **Figure C-6. 7 Concurrent BCMC flows monitoring**

5

6

## 1 C-6.8 Concurrent BCMC and Point-to-Point call

2



3

4

5 **Figure C-6. 8 Concurrent BCMC and Point-to-Point call**

6

7

8

Annex D is a normative annex which contains tables that give specific values for the constant identifiers. These identifiers take the forms such as  $T_{20m}$  and  $N_{5m}$ . The subscripted numbers vary to identify the particular constant. Typically the subscripted letter “m” refers to the mobile station and the subscripted letter “b” refers to the base station. The following tables provide values for identifiers given in the text:

7 Table D-1. Time Limits

8                      Table D-2. Other Constants

10 **Table D-1. Time Limits (Part 1 of 5)**

<b>Time Limit</b>	<b>Description</b>	<b>Value</b>	<b>References</b>
T <sub>5m</sub>	Limit of the Forward Traffic Channel fade timer	5 s	2.6.4.1.8
T <sub>20m</sub>	Maximum time to remain in the <i>Pilot Channel Acquisition Substate</i> of the <i>Mobile Station Initialization State</i>	15 s	2.6.1.2
T <sub>21m</sub>	Maximum time to receive a valid Sync Channel message	1 s	2.6.1.3
T <sub>30m</sub>	Maximum time to receive a valid Paging Channel or Forward Common Control Channel/Broadcast Control Channel message	3 s	2.6.2.1.1.1
T <sub>31m</sub>	Maximum time for which configuration parameters are considered valid	600 s	2.6.2.2
T <sub>32m</sub>	Maximum time to enter the <i>Update Overhead Information Substate</i> of the <i>System Access State</i> to respond to an <i>SSD Update Message</i> , <i>Base Station Challenge Confirmation Order</i> , <i>Authentication Challenge Message</i> , and <i>Authentication Request Message</i>	5 s	2.6.2.4 2.6.4

1

**Table D-1. Time Limits (Part 2 of 5)**

<b>Time Limit</b>	<b>Description</b>	<b>Value</b>	<b>References</b>
T33m	Maximum time to enter the <i>Update Overhead Information Substate</i> of the <i>System Access State</i> (except in response to authentication messages)	0.3 s	2.6.2 2.6.5.5.2.3
T34m	Maximum time to enter the <i>Update Overhead Information Substate</i> or the <i>Mobile Station Idle State</i> after receiving a <i>Channel Assignment Message</i> with ASSIGN_MODE <sub>r</sub> equal to '001' or '101' or <i>Extended Channel Assignment Message</i> with ASSIGN_MODE <sub>r</sub> equal to '001'	3 s	2.6.3.3
T40m	Maximum time to receive a valid Paging Channel or Forward Common Control Channel/Broadcast Control Channel message before aborting an access attempt (see T72m)	3 s	2.6.3.1.8
T41m	Maximum time to obtain updated overhead messages arriving on the Paging Channel or Broadcast Control Channel	4 s	2.6.3.2
T42m	Maximum time to receive a delayed Layer 3 response following the receipt of an acknowledgment for an access probe in the <i>System Access State</i> .  The maximum time to receive a Layer 3 response to an <i>Enhanced Origination Message</i> on the <i>Mobile Station Control on the Traffic Channel State</i> .  The maximum time to receive connection reference after call control instance is instantiated.	12 s	2.6.3.1.1.2 2.6.3.3 2.6.3.5 2.6.4



T50m	<p>When a F-CPCCH is not assigned:</p> <ul style="list-style-type: none"> <li>Maximum time to obtain (<math>N_{5m} \times 20</math>) ms of sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN<sub>S</sub> when in the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i></li> </ul> <p>When a F-CPCCH is assigned:</p> <ul style="list-style-type: none"> <li>Maximum time to obtain (<math>N_{18m} \times 1.25</math>) ms of sufficient signal quality on the Forward Common Power Control Subchannel assigned to this mobile station when in the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i></li> </ul>	1 s	2.6.4.2
T51m	Maximum time for the mobile station to receive a <i>forward dedicated channel acquired</i> indication from Layer 2 (see [4]) after the transmitter was last enabled.	2 s	2.6.4.2
T52m	Maximum time to receive a message in the <i>Waiting for Order Substate</i> of the Call Control processing that transits Call Control instance to a different substate or state	5 s	2.6.10.1.1

1  
2

1

**Table D-1. Time Limits (Part 3 of 5)**

<b>Time Limit</b>	<b>Description</b>	<b>Value</b>	<b>References</b>
T53m	Maximum time to receive a message in the <i>Waiting for Mobile Station Answer Substate</i> of Call Control processing that transits the Call Control instance to a different substate or state	65 s	2.6.10.1.2
T54m	Maximum time for the Call Control instance to send an <i>Origination Continuation Message</i> upon entering the <i>Conversation Substate</i>	0.2 s	2.6.10.2
T55m	Maximum time to receive a message in the <i>Release Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i> that transits the mobile station to a different substate or state	2 s	2.6.4.4
T56m	Default maximum time to respond to a received message or order on the Forward Traffic Channel	0.2 s	2.6.4 2.6.6
T57m	Limit of the power-up registration timer	20 s	2.6.5.1.1 2.6.5.5.1.3
T58m	Maximum time for the mobile station to respond to a service option request	5 s	2.6.4.1.2.2
T59m	Maximum time for the mobile station to respond to a <i>Service Request Message</i> or a <i>Service Response Message</i>	5 s	2.6.4.1.2.2
T60m	Maximum time to execute a hard handoff without return on failure involving a new frequency assignment using the same base station	0.06 s	2.6.6.2.8.1
T61m	Maximum time to execute a hard handoff without return on failure involving a new frequency assignment using a different base station	0.08 s	2.6.6.2.8.1

2

3

1

**Table D-1. Time Limits (Part 4 of 5)**

<b>Time Limit</b>	<b>Description</b>	<b>Value</b>	<b>References</b>
T62m	Maximum time to execute a hard handoff without return on failure involving the same frequency assignment	0.02 s	2.6.6.2.8.1
T63m	Reserved (Previously: Maximum time to execute a CDMA-to-Analog handoff)		
T64m	Maximum time to wait for a <i>Base Station Challenge Confirmation Order</i>	10 s	2.3.12.1.5
T65m	Maximum time for the mobile station to wait for a <i>Service Connect Message</i> while the <i>Waiting for Service Connect Message Subfunction</i> is active	5 s	2.6.4.1.2.2.4
T66m	Maximum time for the mobile station to delete the TMSI after TMSI expiration time has exceeded the System Time	200 s	2.6.2
T68m	Maximum time for the mobile station to wait for a <i>Service Request Message</i> , <i>Service Response Message</i> , or <i>Service Connect Message</i> while the <i>Waiting for Service Request Message Subfunction</i> or <i>Waiting for Service Response Message Subfunction</i> is active	5 s	2.6.4.1.2.2.2 2.6.4.1.2.2.3
T69m	Fixed portion of the full-TMSI timer	24 s	2.6.3.1.6
T70m	Maximum time between the mobile station's obtaining a measurement and sending a <i>Candidate Frequency Search Report Message</i> which contains that measurement	0.8 s	2.6.6.2.8.3 2.6.6.2.10
T71m	Maximum time for the mobile station to send a <i>Candidate Frequency Search Report Message</i> after completing a search	0.04 s	2.6.6.2.8.3
T72m	Maximum time to receive a valid Paging Channel or Forward Common Control Channel/Broadcast Control Channel message before aborting an access attempt, when there exists at least one access handoff candidate pilot for the access attempt (see also T40m)	1 s	2.6.3.1.8
T73m	Maximum time for the mobile station to send a <i>Handoff Completion Message</i> after the action time of a received handoff message directing the mobile station to perform a hard handoff without return on failure	0.3s	2.6.6.2.5.2
T74m	Default value of the slotted timer	0.0s	2.6.4.2

2

1

**Table D-1. Time Limits (Part 5 of 5)**

<b>Time Limit</b>	<b>Description</b>	<b>Value</b>	<b>References</b>
T75m	Default value of the key set-up timer	10 s	2.3.12.5
T78m	Maximum time for the mobile station to receive a Physical Layer PDCH SDU destined for this mobile station when in the <i>Traffic Channel State</i>	30 s	2.6.4.1.8.2
T79m	<p>Maximum time the mobile station is allowed to keep the transmitter on while attempting to obtain sufficient signal quality on the forward link when in the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i> and when early reverse link transmission is allowed.</p> <p>When a F-CPCCH is not assigned:</p> <p>Maximum time the mobile station is allowed to keep the transmitter on while attempting to obtain (<math>N_{5m} \times 20</math>) ms of sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN<sub>S</sub> when in the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i>.</p> <p>When a F-CPCCH is assigned:</p> <p>Maximum time the mobile station is allowed to keep the transmitter on while attempting to obtain (<math>N_{18m} \times 1.25</math>) ms of sufficient signal quality on the Forward Common Power Control Subchannel assigned to this mobile station when in the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i>.</p>	0.1s	2.6.4.2
T80m	Maximum time the mobile station is allowed to remain in the <i>Traffic Channel Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i> while waiting for the <i>Base Station Acknowledgment Order</i> .	0.1s	3.6.4.2
T81m	Default maximum time the mobile station's transmitter can be disabled before the MAC Layer is to perform Forward Packet Data Channel initialization.	0.1s	2.6.3.3 2.6.3.5

2

T <sub>1b</sub>	Maximum period between subsequent transmissions of an overhead message on the Paging Channel by the base station	1.28 s	3.6.2.2
T <sub>2b</sub>	Maximum time for the base station to send a <i>Release Order</i> after receiving a <i>Release Order</i>	0.8 s	3.6.4
T <sub>3b</sub>	Minimum time the base station continues to transmit on a code channel after sending or receiving a <i>Release Order</i>	0.3 s	3.6.4.5
T <sub>4b</sub>	Maximum time for the base station to respond to a service option request	5 s	3.6.4.1.2.2.1
T <sub>5b</sub>	Minimum time a base station should wait before assigning a Forward Common Power Control Channel subchannel to another mobile station when the mobile station previously assigned this subchannel did not respond to the Layer 3 message sent to release the call.	10 s	3.6.4.4

1  
2

1

**Table D-2. Other Constants (Part 1 of 2)**

<b>Con-stant</b>	<b>Description</b>	<b>Value</b>	<b>References</b>
N <sub>2m</sub>	The duration, of insufficient signal quality (e.g. bad frames), in units of 20ms, received on the Forward Traffic Channel before a mobile station must disable its transmitter	12	2.6.4.1.8.1
N <sub>3m</sub>	The duration, of sufficient signal quality (e.g. good frames), in units of 20ms, received on the Forward Traffic Channel before a mobile station is allowed to re-enable its transmitter after disabling its transmitter	2	2.6.4.1.8.1
N <sub>4m</sub>	Reserved		
N <sub>5m</sub>	The duration, of sufficient signal quality (e.g. good frames), in units of 20ms, received on the Forward Traffic Channel before a mobile station is allowed to enable its transmitter after entering the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i>	2	2.6.4.2
N <sub>6m</sub>	Supported Traffic Channel Active Set size	6	2.6.6.2.6.1 3.6.6.2.2.2 3.6.6.2.2.10
N <sub>7m</sub>	Supported Traffic Channel Candidate Set size	10	2.6.6.2.6.2
N <sub>8m</sub>	Minimum supported Neighbor Set size	40	2.6.2.1.4.1 2.6.2.2.3 2.6.6.2.6.3 3.6.6.2.1.2 3.6.6.2.1.3
N <sub>9m</sub>	Minimum supported zone list size	7	2.6.5.1.5
N <sub>10m</sub>	SID/NID list size	4	2.6.5

2

3

1

**Table D-2. Other Constants (Part 2 of 2)**

N <sub>11m</sub>	The duration, of sufficient signal quality (e.g. good frames), in units of 20ms, received on the Forward Traffic Channel before a mobile station re-enables its transmitter after disabling its transmitter during a CDMA-to-CDMA Hard Handoff	1	2.6.6.2.8
N <sub>12m</sub>	Number of frames over which the mobile station maintains a running average of the total received power	10	2.6.6.2.8.3
N <sub>13m</sub>	Maximum number of pilots reported in an Access Channel message	6	2.6.3.1.7 2.7.1.3.1.3
N <sub>16m</sub>	The duration of insufficient signal quality, in units of 1.25ms, received on the Forward Common Power Control Subchannels assigned to this mobile station, before a mobile station must disable its transmitter.	384 (if F-CPCCH rate is 800 bps) 576 (if F-CPCCH rate is 400 bps) 768 (if F-CPCCH rate is 200 bps)	2.6.4.1.8.2
N <sub>17m</sub>	The duration of sufficient signal quality, in units of 1.25 ms, received on the Forward Common Power Control Subchannels assigned to this mobile station, before a mobile station is allowed to re-enable its transmitter after disabling its transmitter	64 (if F-CPCCH rate is 800 bps) 128 (if F-CPCCH rate is 400 bps) 160 (if F-CPCCH rate is 200 bps)	2.6.4.1.8.2
N <sub>18m</sub>	The duration of sufficient signal quality, in units of 1.25 ms, received on the Forward Common Power Control Subchannels assigned to this mobile station, before a mobile station is allowed to enable its transmitter after entering the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i>	32 (if F-CPCCH rate is 800 bps) 64 (if F-CPCCH rate is 400 bps) 64 (if F-CPCCH rate is 200 bps)	2.6.4.2
N <sub>19m</sub>	The duration, of sufficient signal quality, in units of 1.25 ms, received on the Forward Common Power Control Subchannels assigned to this mobile station, before a mobile station re-enables its transmitter after disabling its transmitter during a CDMA-to-CDMA Hard Handoff	16 (if F-CPCCH rate is 800 bps) 32 (if F-CPCCH rate is 400 bps) 32 (if F-CPCCH rate is 200 bps)	2.6.6.2.8

2

- 1 This page intentionally left blank.



1    ANNEX E   CDMA RETRIEVABLE AND SETTABLE PARAMETERS

2    This is a normative annex which describes the parameters that can be retrieved and set in  
3    the mobile station using the *Retrieve Parameters Message*, the *Parameters Response*  
4    *Message*, and the *Set Parameters Message*.

5    PARAMETER\_ID values from 0 through 32767 are reserved for definition by this standard  
6    and shall not be defined by mobile station manufacturers. PARAMETER\_ID values from  
7    32768 through 65535 may be defined by mobile station manufacturers.

8

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX1_REV_FCH_1	1	24	Y	Y	[3]
MUX1_REV_FCH_2	2	24	Y	Y	[3]
MUX1_REV_FCH_3	3	24	Y	Y	[3]
MUX1_REV_FCH_4	4	24	Y	Y	[3]
MUX1_REV_FCH_5	5	24	Y	Y	[3]
MUX1_REV_FCH_6	6	24	Y	Y	[3]
MUX1_REV_FCH_7	7	24	Y	Y	[3]
MUX1_REV_FCH_8	8	24	Y	Y	[3]
MUX1_REV_FCH_9	9	24	Y	Y	[3]
MUX1_REV_FCH_10	10	N/A	N/A	N/A	[3]
MUX1_REV_FCH_11	11	24	N	Y	[3]
MUX1_REV_FCH_12	12	24	N	Y	[3]
MUX1_REV_FCH_13	13	24	N	Y	[3]
MUX1_REV_FCH_14	14	24	N	Y	[3]
MUX1_FOR_FCH_1	15	24	Y	Y	[3]
MUX1_FOR_FCH_2	16	24	Y	Y	[3]
MUX1_FOR_FCH_3	17	24	Y	Y	[3]
MUX1_FOR_FCH_4	18	24	Y	Y	[3]
MUX1_FOR_FCH_5	19	24	Y	Y	[3]
MUX1_FOR_FCH_6	20	24	Y	Y	[3]
MUX1_FOR_FCH_7	21	24	Y	Y	[3]
MUX1_FOR_FCH_8	22	24	Y	Y	[3]

2

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX1_FOR_FCH_9	23	24	Y	Y	[3]
MUX1_FOR_FCH_10	24	24	Y	Y	[3]
MUX1_FOR_FCH_11	25	24	N	Y	[3]
MUX1_FOR_FCH_12	26	24	N	Y	[3]
MUX1_FOR_FCH_13	27	24	N	Y	[3]
MUX1_FOR_FCH_14	28	24	N	Y	[3]
PAG_1	29	24	Y	Y	[4]
PAG_2	30	24	Y	Y	[4]
PAG_3	31	16	Y	Y	[4]
PAG_4	32	24	Y	Y	[4]
PAG_5	33	24	Y	Y	[4]
PAG_6	34	16	Y	Y	2.4
PAG_7	35	16	Y	Y	2.4
ACC_1	36	16	Y	Y	[4]
ACC_2	37	16	Y	Y	[4]
ACC_3	38	16	Y	Y	[4]
ACC_4	39	16	Y	Y	[4]
ACC_5	40	16	Y	Y	[4]
ACC_6	41	16	Y	Y	[4]
ACC_7	42	16	Y	Y	[4]
ACC_8	43	16	Y	Y	[4]
LAYER2_RTC1	44	16	Y	Y	[4]
LAYER2_RTC2	45	16	Y	Y	[4]
LAYER2_RTC3	46	16	Y	Y	[4]
LAYER2_RTC4	47	16	Y	Y	[4]
LAYER2_RTC5	48	16	Y	Y	[4]
OTHER_SYS_TIME	49	36	Y	N	2.4

2

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX2_REV_FCH_1	50	24	Y	Y	[3]
MUX2_REV_FCH_2	51	24	Y	Y	[3]
MUX2_REV_FCH_3	52	24	Y	Y	[3]
MUX2_REV_FCH_4	53	24	Y	Y	[3]
MUX2_REV_FCH_5	54	24	Y	Y	[3]
MUX2_REV_FCH_6	55	24	Y	Y	[3]
MUX2_REV_FCH_7	56	24	Y	Y	[3]
MUX2_REV_FCH_8	57	24	Y	Y	[3]
MUX2_REV_FCH_9	58	24	Y	Y	[3]
MUX2_REV_FCH_10	59	24	Y	Y	[3]
MUX2_REV_FCH_11	60	24	Y	Y	[3]
MUX2_REV_FCH_12	61	24	Y	Y	[3]
MUX2_REV_FCH_13	62	24	Y	Y	[3]
MUX2_REV_FCH_14	63	24	Y	Y	[3]
MUX2_REV_FCH_15	64	24	Y	Y	[3]
MUX2_REV_FCH_16	65	24	Y	Y	[3]
MUX2_REV_FCH_17	66	24	Y	Y	[3]
MUX2_REV_FCH_18	67	24	Y	Y	[3]
MUX2_REV_FCH_19	68	24	Y	Y	[3]
MUX2_REV_FCH_20	69	24	Y	Y	[3]
MUX2_REV_FCH_21	70	24	Y	Y	[3]
MUX2_REV_FCH_22	71	24	Y	Y	[3]
MUX2_REV_FCH_23	72	24	Y	Y	[3]
MUX2_REV_FCH_24	73	24	Y	Y	[3]
MUX2_REV_FCH_25	74	24	Y	Y	[3]
MUX2_REV_FCH_26	75	N/A	N/A	N/A	[3]

2

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX2_FOR_FCH_1	76	24	Y	Y	[3]
MUX2_FOR_FCH_2	77	24	Y	Y	[3]
MUX2_FOR_FCH_3	78	24	Y	Y	[3]
MUX2_FOR_FCH_4	79	24	Y	Y	[3]
MUX2_FOR_FCH_5	80	24	Y	Y	[3]
MUX2_FOR_FCH_6	81	24	Y	Y	[3]
MUX2_FOR_FCH_7	82	24	Y	Y	[3]
MUX2_FOR_FCH_8	83	24	Y	Y	[3]
MUX2_FOR_FCH_9	84	24	Y	Y	[3]
MUX2_FOR_FCH_10	85	24	Y	Y	[3]
MUX2_FOR_FCH_11	86	24	Y	Y	[3]
MUX2_FOR_FCH_12	87	24	Y	Y	[3]
MUX2_FOR_FCH_13	88	24	Y	Y	[3]
MUX2_FOR_FCH_14	89	24	Y	Y	[3]
MUX2_FOR_FCH_15	90	24	Y	Y	[3]
MUX2_FOR_FCH_16	91	24	Y	Y	[3]
MUX2_FOR_FCH_17	92	24	Y	Y	[3]
MUX2_FOR_FCH_18	93	24	Y	Y	[3]
MUX2_FOR_FCH_19	94	24	Y	Y	[3]
MUX2_FOR_FCH_20	95	24	Y	Y	[3]
MUX2_FOR_FCH_21	96	24	Y	Y	[3]
MUX2_FOR_FCH_22	97	24	Y	Y	[3]
MUX2_FOR_FCH_23	98	24	Y	Y	[3]
MUX2_FOR_FCH_24	99	24	Y	Y	[3]
MUX2_FOR_FCH_25	100	24	Y	Y	[3]
MUX2_FOR_FCH_26	101	24	Y	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
SCCH1_REV_S	102	24	Y	Y	[3]
SCCH1_REV_P	103	24	Y	Y	[3]
SCCH2_REV_S	104	24	Y	Y	[3]
SCCH2_REV_P	105	24	Y	Y	[3]
SCCH3_REV_S	106	24	Y	Y	[3]
SCCH3_REV_P	107	24	Y	Y	[3]
SCCH4_REV_S	108	24	Y	Y	[3]
SCCH4_REV_P	109	24	Y	Y	[3]
SCCH5_REV_S	110	24	Y	Y	[3]
SCCH5_REV_P	111	24	Y	Y	[3]
SCCH6_REV_S	112	24	Y	Y	[3]
SCCH6_REV_P	113	24	Y	Y	[3]
SCCH7_REV_S	114	24	Y	Y	[3]
SCCH7_REV_P	115	24	Y	Y	[3]
SCCH1_FOR_S	116	24	Y	Y	[3]
SCCH1_FOR_P	117	24	Y	Y	[3]
SCCH2_FOR_S	118	24	Y	Y	[3]
SCCH2_FOR_P	119	24	Y	Y	[3]
SCCH3_FOR_S	120	24	Y	Y	[3]
SCCH3_FOR_P	121	24	Y	Y	[3]
SCCH4_FOR_S	122	24	Y	Y	[3]
SCCH4_FOR_P	123	24	Y	Y	[3]
SCCH5_FOR_S	124	24	Y	Y	[3]
SCCH5_FOR_P	125	24	Y	Y	[3]
SCCH6_FOR_S	126	24	Y	Y	[3]
SCCH6_FOR_P	127	24	Y	Y	[3]
SCCH7_FOR_S	128	24	Y	Y	[3]
SCCH7_FOR_P	129	24	Y	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MM_RTC1	130	16	Y	Y	[4]
MM_RTC2	131	16	Y	Y	[4]
MM_RTC3	132	16	Y	Y	[4]
MM_RTC4	133	16	Y	Y	[4]
MM_RTC5	134	16	Y	Y	[4]
MUX1_REV_FCH_15	135	N/A	N/A	N/A	[3]
MUX1_REV_FCH_5_ms	136	24	N	Y	[3]
MUX1_FOR_FCH_15	137	N/A	N/A	N/A	[3]
MUX1_FOR_FCH_5_ms	138	24	N	Y	[3]
MUX2_REV_FCH_27	139	N/A	N/A	N/A	[3]
MUX2_REV_FCH_5_ms	140	24	N	Y	[3]
MUX2_FOR_FCH_27	141	N/A	N/A	N/A	[3]
MUX2_FOR_FCH_5_ms	142	24	N	Y	[3]
MUX1_REV_DCCH_1	143	24	Y	Y	[3]
MUX1_REV_DCCH_2	144	24	Y	Y	[3]
MUX1_REV_DCCH_3	145	24	Y	Y	[3]
MUX1_REV_DCCH_4	146	24	Y	Y	[3]
MUX1_REV_DCCH_5	147	24	Y	Y	[3]
MUX1_REV_DCCH_6	148	N/A	N/A	N/A	[3]
MUX1_REV_DCCH_7	149	N/A	N/A	N/A	[3]
MUX1_REV_DCCH_8	150	N/A	N/A	N/A	[3]
MUX1_REV_DCCH_9	151	N/A	N/A	N/A	[3]
MUX1_REV_DCCH_10	152	N/A	N/A	N/A	[3]
MUX1_REV_DCCH_11	153	24	N	Y	[3]
MUX1_REV_DCCH_12	154	24	N	Y	[3]
MUX1_REV_DCCH_13	155	24	N	Y	[3]
MUX1_REV_DCCH_14	156	24	N	Y	[3]

2

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX1_REV_DCCH_15	157	24	Y	Y	[3]
MUX1_REV_DCCH_5_ms	158	24	N	Y	[3]
MUX1_FOR_DCCH_1	159	24	Y	Y	[3]
MUX1_FOR_DCCH_2	160	24	Y	Y	[3]
MUX1_FOR_DCCH_3	161	24	Y	Y	[3]
MUX1_FOR_DCCH_4	162	24	Y	Y	[3]
MUX1_FOR_DCCH_5	163	24	Y	Y	[3]
MUX1_FOR_DCCH_6	164	N/A	N/A	N/A	[3]
MUX1_FOR_DCCH_7	165	N/A	N/A	N/A	[3]
MUX1_FOR_DCCH_8	166	N/A	N/A	N/A	[3]
MUX1_FOR_DCCH_9	167	N/A	N/A	N/A	[3]
MUX1_FOR_DCCH_10	168	24	Y	Y	[3]
MUX1_FOR_DCCH_11	169	24	N	Y	[3]
MUX1_FOR_DCCH_12	170	24	N	Y	[3]
MUX1_FOR_DCCH_13	171	24	N	Y	[3]
MUX1_FOR_DCCH_14	172	24	N	Y	[3]
MUX1_FOR_DCCH_15	173	24	Y	Y	[3]
MUX1_FOR_DCCH_5_ms	174	24	N	Y	[3]
MUX2_REV_DCCH_1	175	24	Y	Y	[3]
MUX2_REV_DCCH_2	176	24	Y	Y	[3]
MUX2_REV_DCCH_3	177	24	Y	Y	[3]
MUX2_REV_DCCH_4	178	24	Y	Y	[3]
MUX2_REV_DCCH_5	179	24	Y	Y	[3]
MUX2_REV_DCCH_6	180	24	Y	Y	[3]
MUX2_REV_DCCH_7	181	24	Y	Y	[3]
MUX2_REV_DCCH_8	182	24	Y	Y	[3]
MUX2_REV_DCCH_9	183	24	Y	Y	[3]

2

3



1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARAMETER_ID (decimal)</b>	<b>Length (bits) (PARAMETER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX2_REV_DCCH_10	184	24	Y	Y	[3]
MUX2_REV_DCCH_11	185	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_12	186	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_13	187	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_14	188	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_15	189	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_16	190	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_17	191	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_18	192	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_19	193	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_20	194	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_21	195	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_22	196	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_23	197	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_24	198	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_25	199	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_26	200	N/A	N/A	N/A	[3]
MUX2_REV_DCCH_27	201	24	Y	Y	[3]
MUX2_REV_DCCH_5_ms	202	24	N	Y	[3]
MUX2_FOR_DCCH_1	203	24	Y	Y	[3]
MUX2_FOR_DCCH_2	204	24	Y	Y	[3]
MUX2_FOR_DCCH_3	205	24	Y	Y	[3]
MUX2_FOR_DCCH_4	206	24	Y	Y	[3]
MUX2_FOR_DCCH_5	207	24	Y	Y	[3]
MUX2_FOR_DCCH_6	208	24	Y	Y	[3]
MUX2_FOR_DCCH_7	209	24	Y	Y	[3]
MUX2_FOR_DCCH_8	210	24	Y	Y	[3]
MUX2_FOR_DCCH_9	211	24	Y	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX2_FOR_DCCH_10	212	24	Y	Y	[3]
MUX2_FOR_DCCH_11	213	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_12	214	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_13	215	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_14	216	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_15	217	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_16	218	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_17	219	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_18	220	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_19	221	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_20	222	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_21	223	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_22	224	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_23	225	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_24	226	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_25	227	N/A	N/A	N/A	[3]
MUX2_FOR_DCCH_26	228	24	Y	Y	[3]
MUX2_FOR_DCCH_27	229	24	Y	Y	[3]
MUX2_FOR_DCCH_5_ms	230	24	N	Y	[3]
SCH0_REV_1X	231	24	Y	Y	[3]
SCH0_REV_2X	232	24	Y	Y	[3]
SCH0_REV_4X	233	24	Y	Y	[3]
SCH0_REV_8X	234	24	Y	Y	[3]
SCH0_REV_16X	235	24	Y	Y	[3]
SCH0_REV_LTU	236	24	Y	Y	[3]
SCH0_REV_LTUOK	237	N/A	N/A	N/A	[3]
SCH1_REV_1X	238	24	Y	Y	[3]
SCH1_REV_2X	239	24	Y	Y	[3]

2

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARAMETER_ID (decimal)</b>	<b>Length (bits) (PARAMETER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
SCH1_REV_4X	240	24	Y	Y	[3]
SCH1_REV_8X	241	24	Y	Y	[3]
SCH1_REV_16X	242	24	Y	Y	[3]
SCH1_REV_LTU	243	24	Y	Y	[3]
SCH1_REV_LTUOK	244	N/A	N/A	N/A	[3]
SCH0_FOR_1X	245	24	Y	Y	[3]
SCH0_FOR_2X	246	24	Y	Y	[3]
SCH0_FOR_4X	247	24	Y	Y	[3]
SCH0_FOR_8X	248	24	Y	Y	[3]
SCH0_FOR_16X	249	24	Y	Y	[3]
SCH0_FOR_LTU	250	24	Y	Y	[3]
SCH0_FOR_LTUOK	251	24	Y	Y	[3]
SCH1_FOR_1X	252	24	Y	Y	[3]
SCH1_FOR_2X	253	24	Y	Y	[3]
SCH1_FOR_4X	254	24	Y	Y	[3]
SCH1_FOR_8X	255	24	Y	Y	[3]
SCH1_FOR_16X	256	24	Y	Y	[3]
SCH1_FOR_LTU	257	24	Y	Y	[3]
SCH1_FOR_LTUOK	258	24	Y	Y	[3]
BCCH_1	259	24	Y	Y	[4]
BCCH_2	260	24	Y	Y	[4]
BCCH_3	261	24	Y	Y	[4]
BCCH_4	262	24	Y	Y	[4]
BCCH_5	263	16	Y	Y	2.4
FCCCH_1	264	24	Y	Y	[4]
FCCCH_2	265	24	Y	Y	[4]
FCCCH_3	266	16	Y	Y	[4]
FCCCH_4	267	16	Y	Y	2.4

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX_FLEX_RFCH_1	268	24	N	Y	[3]
MUX_FLEX_RFCH_2	269	24	N	Y	[3]
MUX_FLEX_RFCH_3	270	24	N	Y	[3]
MUX_FLEX_RFCH_4	271	24	N	Y	[3]
MUX_FLEX_RFCH_5	272	24	N	Y	[3]
MUX_FLEX_RFCH_6	273	24	N	Y	[3]
MUX_FLEX_RFCH_7	274	24	N	Y	[3]
MUX_FLEX_RFCH_8	275	24	N	Y	[3]
MUX_FLEX_RFCH_9	276	24	N	Y	[3]
MUX_FLEX_RFCH_10	277	24	N	Y	[3]
MUX_FLEX_RFCH_11	278	24	N	Y	[3]
MUX_FLEX_RFCH_12	279	24	N	Y	[3]
MUX_FLEX_RFCH_13	280	24	N	Y	[3]
MUX_FLEX_RFCH_14	281	24	N	Y	[3]
MUX_FLEX_RFCH_15	282	24	N	Y	[3]
MUX_FLEX_RFCH_16	283	24	N	Y	[3]
MUX_FLEX_RFCH_17	284	24	N	Y	[3]
MUX_FLEX_RFCH_18	285	24	N	Y	[3]
MUX_FLEX_RFCH_19	286	24	N	Y	[3]
MUX_FLEX_RFCH_20	287	24	N	Y	[3]
MUX_FLEX_RFCH_21	288	24	N	Y	[3]
MUX_FLEX_RFCH_22	289	24	N	Y	[3]
MUX_FLEX_RFCH_23	290	24	N	Y	[3]
MUX_FLEX_RFCH_24	291	24	N	Y	[3]
MUX_FLEX_RFCH_25	292	24	N	Y	[3]
MUX_FLEX_RFCH_26	293	24	N	Y	[3]
MUX_FLEX_RFCH_27	294	24	N	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARAMETER_ID (decimal)</b>	<b>Length (bits) (PARAMETER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX_FLEX_RFCH_28	295	24	N	Y	[3]
MUX_FLEX_RFCH_29	296	24	N	Y	[3]
MUX_FLEX_RFCH_30	297	24	N	Y	[3]
MUX_FLEX_RFCH_31	298	24	N	Y	[3]
MUX_FLEX_RFCH_32	299	24	N	Y	[3]
MUX_FLEX_RDCCH_1	300	24	N	Y	[3]
MUX_FLEX_RDCCH_2	301	24	N	Y	[3]
MUX_FLEX_RDCCH_3	302	24	N	Y	[3]
MUX_FLEX_RDCCH_4	303	24	N	Y	[3]
MUX_FLEX_RDCCH_5	304	24	N	Y	[3]
MUX_FLEX_RDCCH_6	305	24	N	Y	[3]
MUX_FLEX_RDCCH_7	306	24	N	Y	[3]
MUX_FLEX_RDCCH_8	307	24	N	Y	[3]
MUX_FLEX_RDCCH_9	308	24	N	Y	[3]
MUX_FLEX_RDCCH_10	309	24	N	Y	[3]
MUX_FLEX_RDCCH_11	310	24	N	Y	[3]
MUX_FLEX_RDCCH_12	311	24	N	Y	[3]
MUX_FLEX_RDCCH_13	312	24	N	Y	[3]
MUX_FLEX_RDCCH_14	313	24	N	Y	[3]
MUX_FLEX_RDCCH_15	314	24	N	Y	[3]
MUX_FLEX_RDCCH_16	315	24	N	Y	[3]
MUX_FLEX_RDCCH_17	316	24	N	Y	[3]
MUX_FLEX_RDCCH_18	317	24	N	Y	[3]
MUX_FLEX_RDCCH_19	318	24	N	Y	[3]
MUX_FLEX_RDCCH_20	319	24	N	Y	[3]
MUX_FLEX_RDCCH_21	320	24	N	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX_FLEX_RDCCH_22	321	24	N	Y	[3]
MUX_FLEX_RDCCH_23	322	24	N	Y	[3]
MUX_FLEX_RDCCH_24	323	24	N	Y	[3]
MUX_FLEX_RDCCH_25	324	24	N	Y	[3]
MUX_FLEX_RDCCH_26	325	24	N	Y	[3]
MUX_FLEX_RDCCH_27	326	24	N	Y	[3]
MUX_FLEX_RDCCH_28	327	24	N	Y	[3]
MUX_FLEX_RDCCH_29	328	24	N	Y	[3]
MUX_FLEX_RDCCH_30	329	24	N	Y	[3]
MUX_FLEX_RDCCH_31	330	24	N	Y	[3]
MUX_FLEX_RDCCH_32	331	24	N	Y	[3]
RSCH0_1	332	24	N	Y	[3]
RSCH0_2	333	24	N	Y	[3]
RSCH0_3	334	24	N	Y	[3]
RSCH0_4	335	24	N	Y	[3]
RSCH0_5	336	24	N	Y	[3]
RSCH0_6	337	24	N	Y	[3]
RSCH0_7	338	24	N	Y	[3]
RSCH0_8	339	24	N	Y	[3]
RSCH0_9	340	24	N	Y	[3]
RSCH0_10	341	24	N	Y	[3]
RSCH0_11	342	24	N	Y	[3]
RSCH0_12	343	24	N	Y	[3]
RSCH0_13	344	24	N	Y	[3]
RSCH0_14	345	24	N	Y	[3]
RSCH0_15	346	24	N	Y	[3]
RSCH0_16	347	24	N	Y	[3]
RSCH0_LTU	348	24	N	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARAMETER_ID (decimal)</b>	<b>Length (bits) (PARAMETER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
RSCH1_1	349	24	N	Y	[3]
RSCH1_2	350	24	N	Y	[3]
RSCH1_3	351	24	N	Y	[3]
RSCH1_4	352	24	N	Y	[3]
RSCH1_5	353	24	N	Y	[3]
RSCH1_6	354	24	N	Y	[3]
RSCH1_7	355	24	N	Y	[3]
RSCH1_8	356	24	N	Y	[3]
RSCH1_9	357	24	N	Y	[3]
RSCH1_10	358	24	N	Y	[3]
RSCH1_11	359	24	N	Y	[3]
RSCH1_12	360	24	N	Y	[3]
RSCH1_13	361	24	N	Y	[3]
RSCH1_14	362	24	N	Y	[3]
RSCH1_15	363	24	N	Y	[3]
RSCH1_16	364	24	N	Y	[3]
RSCH1_LTU	365	24	N	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX_FLEX_FFCH_1	366	24	N	Y	[3]
MUX_FLEX_FFCH_2	367	24	N	Y	[3]
MUX_FLEX_FFCH_3	368	24	N	Y	[3]
MUX_FLEX_FFCH_4	369	24	N	Y	[3]
MUX_FLEX_FFCH_5	370	24	N	Y	[3]
MUX_FLEX_FFCH_6	371	24	N	Y	[3]
MUX_FLEX_FFCH_7	372	24	N	Y	[3]
MUX_FLEX_FFCH_8	373	24	N	Y	[3]
MUX_FLEX_FFCH_9	374	24	N	Y	[3]
MUX_FLEX_FFCH_10	375	24	N	Y	[3]
MUX_FLEX_FFCH_11	376	24	N	Y	[3]
MUX_FLEX_FFCH_12	377	24	N	Y	[3]
MUX_FLEX_FFCH_13	378	24	N	Y	[3]
MUX_FLEX_FFCH_14	379	24	N	Y	[3]
MUX_FLEX_FFCH_15	380	24	N	Y	[3]
MUX_FLEX_FFCH_16	381	24	N	Y	[3]
MUX_FLEX_FFCH_17	382	24	N	Y	[3]
MUX_FLEX_FFCH_18	383	24	N	Y	[3]
MUX_FLEX_FFCH_19	384	24	N	Y	[3]
MUX_FLEX_FFCH_20	385	24	N	Y	[3]
MUX_FLEX_FFCH_21	386	24	N	Y	[3]
MUX_FLEX_FFCH_22	387	24	N	Y	[3]
MUX_FLEX_FFCH_23	388	24	N	Y	[3]
MUX_FLEX_FFCH_24	389	24	N	Y	[3]
MUX_FLEX_FFCH_25	390	24	N	Y	[3]
MUX_FLEX_FFCH_26	391	24	N	Y	[3]

2

3



1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARAMETER_ID (decimal)</b>	<b>Length (bits) (PARAMETER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX_FLEX_FFCH_27	392	24	N	Y	[3]
MUX_FLEX_FFCH_28	393	24	N	Y	[3]
MUX_FLEX_FFCH_29	394	24	N	Y	[3]
MUX_FLEX_FFCH_30	395	24	N	Y	[3]
MUX_FLEX_FFCH_31	396	24	N	Y	[3]
MUX_FLEX_FFCH_32	397	24	N	Y	[3]
MUX_FLEX_FDCCH_1	398	24	N	Y	[3]
MUX_FLEX_FDCCH_2	399	24	N	Y	[3]
MUX_FLEX_FDCCH_3	400	24	N	Y	[3]
MUX_FLEX_FDCCH_4	401	24	N	Y	[3]
MUX_FLEX_FDCCH_5	402	24	N	Y	[3]
MUX_FLEX_FDCCH_6	403	24	N	Y	[3]
MUX_FLEX_FDCCH_7	404	24	N	Y	[3]
MUX_FLEX_FDCCH_8	405	24	N	Y	[3]
MUX_FLEX_FDCCH_9	406	24	N	Y	[3]
MUX_FLEX_FDCCH_10	407	24	N	Y	[3]
MUX_FLEX_FDCCH_11	408	24	N	Y	[3]
MUX_FLEX_FDCCH_12	409	24	N	Y	[3]
MUX_FLEX_FDCCH_13	410	24	N	Y	[3]
MUX_FLEX_FDCCH_14	411	24	N	Y	[3]
MUX_FLEX_FDCCH_15	412	24	N	Y	[3]
MUX_FLEX_FDCCH_16	413	24	N	Y	[3]
MUX_FLEX_FDCCH_17	414	24	N	Y	[3]
MUX_FLEX_FDCCH_18	415	24	N	Y	[3]
MUX_FLEX_FDCCH_19	416	24	N	Y	[3]
MUX_FLEX_FDCCH_20	417	24	N	Y	[3]

2

3

1

**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
MUX_FLEX_FDCCH_21	418	24	N	Y	[3]
MUX_FLEX_FDCCH_22	419	24	N	Y	[3]
MUX_FLEX_FDCCH_23	420	24	N	Y	[3]
MUX_FLEX_FDCCH_24	421	24	N	Y	[3]
MUX_FLEX_FDCCH_25	422	24	N	Y	[3]
MUX_FLEX_FDCCH_26	423	24	N	Y	[3]
MUX_FLEX_FDCCH_27	424	24	N	Y	[3]
MUX_FLEX_FDCCH_28	425	24	N	Y	[3]
MUX_FLEX_FDCCH_29	426	24	N	Y	[3]
MUX_FLEX_FDCCH_30	427	24	N	Y	[3]
MUX_FLEX_FDCCH_31	428	24	N	Y	[3]
MUX_FLEX_FDCCH_32	429	24	N	Y	[3]
FSCH0_1	430	24	N	Y	[3]
FSCH0_2	431	24	N	Y	[3]
FSCH0_3	432	24	N	Y	[3]
FSCH0_4	433	24	N	Y	[3]
FSCH0_5	434	24	N	Y	[3]
FSCH0_6	435	24	N	Y	[3]
FSCH0_7	436	24	N	Y	[3]
FSCH0_8	437	24	N	Y	[3]
FSCH0_9	438	24	N	Y	[3]
FSCH0_10	439	24	N	Y	[3]
FSCH0_11	440	24	N	Y	[3]
FSCH0_12	441	24	N	Y	[3]
FSCH0_13	442	24	N	Y	[3]
FSCH0_14	443	24	N	Y	[3]

2

3

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARAMETER_ID (decimal)</b>	<b>Length (bits) (PARAMETER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
FSCH0_15	444	24	N	Y	[3]
FSCH0_16	445	24	N	Y	[3]
FSCH0_LTU	446	24	N	Y	[3]
FSCH0_LTUOK	447	24	N	Y	[3]
FSCH1_1	448	24	N	Y	[3]
FSCH1_2	449	24	N	Y	[3]
FSCH1_3	450	24	N	Y	[3]
FSCH1_4	451	24	N	Y	[3]
FSCH1_5	452	24	N	Y	[3]
FSCH1_6	453	24	N	Y	[3]
FSCH1_7	454	24	N	Y	[3]
FSCH1_8	455	24	N	Y	[3]
FSCH1_9	456	24	N	Y	[3]
FSCH1_10	457	24	N	Y	[3]
FSCH1_11	458	24	N	Y	[3]
FSCH1_12	459	24	N	Y	[3]
FSCH1_13	460	24	N	Y	[3]
FSCH1_14	461	24	N	Y	[3]
FSCH1_15	462	24	N	Y	[3]
FSCH1_16	463	24	N	Y	[3]
FSCH1_LTU	464	24	N	Y	[3]
FSCH1_LTUOK	465	24	N	Y	[3]
MUX_FLEX_RFCH_5_ms	466	24	N	Y	[3]
MUX_FLEX_FFCH_5_ms	467	24	N	Y	[3]
MUX_FLEX- _RDCCH_5_ms	468	24	N	Y	[3]
MUX_FLEX- _FDCCH_5_ms	469	24	N	Y	[3]

2

**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
EACH_BA_1	470	16	Y	Y	[4]
EACH_BA_2	471	16	Y	Y	[4]
EACH_BA_3	472	16	Y	Y	[4]
EACH_BA_4	473	16	Y	Y	[4]
EACH_BA_5	474	16	Y	Y	[4]
EACH_BA_6	475	16	Y	Y	[4]
EACH_BA_7	476	16	Y	Y	[4]
EACH_BA_8	477	16	Y	Y	[4]
EACH_RA_3	478	16	Y	Y	[4]
EACH_RA_4	479	16	Y	Y	[4]
EACH_RA_5	480	16	Y	Y	[4]
EACH_RA_6	481	16	Y	Y	[4]
EACH_RA_7	482	16	Y	Y	[4]
EACH_RA_8	483	16	Y	Y	[4]
RCCCH_1	484	16	Y	Y	[4]
RCCCH_2	485	16	Y	Y	[4]
RCCCH_3	486	16	Y	Y	[4]
RCCCH_4	487	16	Y	Y	[4]
RCCCH_5	488	16	Y	Y	[4]
RCCCH_6	489	16	Y	Y	[4]
RCCCH_7	490	16	Y	Y	[4]
RCCCH_8	491	16	Y	Y	[4]
RCCCH_9	492	16	Y	Y	[4]
BCCH_6	493	24	Y	Y	[3]
BCCH_7	494	24	Y	Y	[3]
BCCH_8	495	24	Y	Y	[3]
BCCH_9	496	24	Y	Y	[3]
CACH_1	497	24	Y	Y	[3]
CACH_2	498	24	Y	Y	[3]

1

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARAMETER_ID (decimal)</b>	<b>Length (bits) (PARAMETER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
FCCCH_5	499	24	Y	Y	[3]
FCCCH_6	500	24	Y	Y	[3]
FCCCH_7	501	24	Y	Y	[3]
FCCCH_8	502	24	Y	Y	[3]
FCCCH_9	503	24	Y	Y	[3]
FCCCH_10	504	24	Y	Y	[3]
FCCCH_11	505	24	Y	Y	[3]
MUX1_FOR_FCH_17	506	24	Y	Y	[3]
MUX2_FOR_FCH_29	507	24	Y	Y	[3]
FPDCH0_ACK_0.5X	508	24	Y	Y	[3]
FPDCH0_ACK_1X	509	24	Y	Y	[3]
FPDCH0_ACK_2X	510	24	Y	Y	[3]
FPDCH0_ACK_4X	511	24	Y	Y	[3]
FPDCH0_ACK_6X	512	24	Y	Y	[3]
FPDCH0_ACK_8X	513	24	Y	Y	[3]
FPDCH0_ACK_10X	514	24	Y	Y	[3]
FPDCH1_ACK_0.5X	515	24	Y	Y	[3]
FPDCH1_ACK_1X	516	24	Y	Y	[3]
FPDCH1_ACK_2X	517	24	Y	Y	[3]
FPDCH1_ACK_4X	518	24	Y	Y	[3]
FPDCH1_ACK_6X	519	24	Y	Y	[3]
FPDCH1_ACK_8X	520	24	Y	Y	[3]
FPDCH1_ACK_10X	521	24	Y	Y	[3]
FPDCH0_NAK_0.5X	522	24	Y	Y	[3]
FPDCH0_NAK_1X	523	24	Y	Y	[3]
FPDCH0_NAK_2X	524	24	Y	Y	[3]
FPDCH0_NAK_4X	525	24	Y	Y	[3]

2

**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
FPDCH0_NAK_6X	526	24	Y	Y	[3]
FPDCH0_NAK_8X	527	24	Y	Y	[3]
FPDCH0_NAK_10X	528	24	Y	Y	[3]
FPDCH1_NAK_0.5X	529	24	Y	Y	[3]
FPDCH1_NAK_1X	530	24	Y	Y	[3]
FPDCH1_NAK_2X	531	24	Y	Y	[3]
FPDCH1_NAK_4X	532	24	Y	Y	[3]
FPDCH1_NAK_6X	533	24	Y	Y	[3]
FPDCH1_NAK_8X	534	24	Y	Y	[3]
FPDCH1_NAK_10X	535	24	Y	Y	[3]
FPDCCH0_TOTAL_ACKS	536	24	Y	Y	[3]
FPDCCH0_TOTAL_NAKS	537	24	Y	Y	[3]
FPDCCH1_TOTAL_ACKS	538	24	Y	Y	[3]
FPDCCH1_TOTAL_NAKS	539	24	Y	Y	[3]
FPDCCH0_CNTL_MSG _ACKS	540	24	Y	Y	[3]
FPDCCH1_CNTL_MSG _ACKS	541	24	Y	Y	[3]
FSCH_ID_0_BSR_ID_0	542	N/A	N/A	N/A	[3]
FSCH_ID_0_BSR_ID_1	543	24	Y	Y	[3]
FSCH_ID_0_BSR_ID_2	544	24	Y	Y	[3]
FSCH_ID_0_BSR_ID_3	545	24	Y	Y	[3]
FSCH_ID_0_BSR_ID_4	546	24	Y	Y	[3]
FSCH_ID_0_BSR_ID_5	547	24	Y	Y	[3]
FSCH_ID_0_BSR_ID_6	548	24	Y	Y	[3]
FSCH_ID_0_BSR_ID_7	549	N/A	N/A	N/A	[3]
FSCH_ID_1_BSR_ID_0	550	N/A	N/A	N/A	[3]
FSCH_ID_1_BSR_ID_1	551	24	Y	Y	[3]

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
FSCH_ID_1_BSR_ID_2	552	24	Y	Y	[3]
FSCH_ID_1_BSR_ID_3	553	24	Y	Y	[3]
FSCH_ID_1_BSR_ID_4	554	24	Y	Y	[3]
FSCH_ID_1_BSR_ID_5	555	24	Y	Y	[3]
FSCH_ID_1_BSR_ID_6	556	24	Y	Y	[3]
FSCH_ID_1_BSR_ID_7	557	N/A	N/A	N/A	[3]
FSCH_ID_2_BSR_ID_0	558	N/A	N/A	N/A	[3]
FSCH_ID_2_BSR_ID_1	559	24	Y	Y	[3]
FSCH_ID_2_BSR_ID_2	560	24	Y	Y	[3]
FSCH_ID_2_BSR_ID_3	561	24	Y	Y	[3]
FSCH_ID_2_BSR_ID_4	562	24	Y	Y	[3]
FSCH_ID_2_BSR_ID_5	563	24	Y	Y	[3]
FSCH_ID_2_BSR_ID_6	564	24	Y	Y	[3]
FSCH_ID_2_BSR_ID_7	565	N/A	N/A	N/A	[3]
FSCH_ID_3_BSR_ID_0	566	N/A	N/A	N/A	[3]
FSCH_ID_3_BSR_ID_1	567	24	Y	Y	[3]
FSCH_ID_3_BSR_ID_2	568	24	Y	Y	[3]
FSCH_ID_3_BSR_ID_3	569	24	Y	Y	[3]
FSCH_ID_3_BSR_ID_4	570	24	Y	Y	[3]
FSCH_ID_3_BSR_ID_5	571	24	Y	Y	[3]
FSCH_ID_3_BSR_ID_6	572	24	Y	Y	[3]
FSCH_ID_3_BSR_ID_7	573	N/A	N/A	N/A	[3]
FSCH_ID_4_BSR_ID_0	574	N/A	N/A	N/A	[3]
FSCH_ID_4_BSR_ID_1	575	24	Y	Y	[3]
FSCH_ID_4_BSR_ID_2	576	24	Y	Y	[3]
FSCH_ID_4_BSR_ID_3	577	24	Y	Y	[3]
FSCH_ID_4_BSR_ID_4	578	24	Y	Y	[3]
FSCH_ID_4_BSR_ID_5	579	24	Y	Y	[3]

**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required? (Y or N)</b>	<b>Settable Parameter? (Y or N)</b>	<b>Reference</b>
FSCH_ID_4_BSR_ID_6	580	24	Y	Y	[3]
FSCH_ID_4_BSR_ID_7	581	N/A	N/A	N/A	[3]
FSCH_ID_5_BSR_ID_0	582	N/A	N/A	N/A	[3]
FSCH_ID_5_BSR_ID_1	583	24	Y	Y	[3]
FSCH_ID_5_BSR_ID_2	584	24	Y	Y	[3]
FSCH_ID_5_BSR_ID_3	585	24	Y	Y	[3]
FSCH_ID_5_BSR_ID_4	586	24	Y	Y	[3]
FSCH_ID_5_BSR_ID_5	587	24	Y	Y	[3]
FSCH_ID_5_BSR_ID_6	588	24	Y	Y	[3]
FSCH_ID_5_BSR_ID_7	589	N/A	N/A	N/A	[3]
FSCH_ID_6_BSR_ID_0	590	N/A	N/A	N/A	[3]
FSCH_ID_6_BSR_ID_1	591	24	Y	Y	[3]
FSCH_ID_6_BSR_ID_2	592	24	Y	Y	[3]
FSCH_ID_6_BSR_ID_3	593	24	Y	Y	[3]
FSCH_ID_6_BSR_ID_4	594	24	Y	Y	[3]
FSCH_ID_6_BSR_ID_5	595	24	Y	Y	[3]
FSCH_ID_6_BSR_ID_6	596	24	Y	Y	[3]
FSCH_ID_6_BSR_ID_7	597	N/A	N/A	N/A	[3]
FSCH_ID_7_BSR_ID_0	598	N/A	N/A	N/A	[3]
FSCH_ID_7_BSR_ID_1	599	24	Y	Y	[3]
FSCH_ID_7_BSR_ID_2	600	24	Y	Y	[3]
FSCH_ID_7_BSR_ID_3	601	24	Y	Y	[3]
FSCH_ID_7_BSR_ID_4	602	24	Y	Y	[3]
FSCH_ID_7_BSR_ID_5	603	24	Y	Y	[3]
FSCH_ID_7_BSR_ID_6	604	24	Y	Y	[3]
FSCH_ID_7_BSR_ID_7	605	N/A	N/A	N/A	[3]



**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required ? (Y or N)</b>	<b>Settable Parameter ? (Y or N)</b>	<b>Reference</b>
RPDCH_174_0	606	24	Y	Y	[3]
RPDCH_174_1	607	24	Y	Y	[3]
RPDCH_174_2	608	24	Y	Y	[3]
RPDCH_174_NAK	609	24	Y	Y	[3]
RPDCH_1X_0	610	24	Y	Y	[3]
RPDCH_1X_1	611	24	Y	Y	[3]
RPDCH_1X_2	612	24	Y	Y	[3]
RPDCH_1X_NAK	613	24	Y	Y	[3]
RPDCH_2X_0	614	24	Y	Y	[3]
RPDCH_2X_1	615	24	Y	Y	[3]
RPDCH_2X_2	616	24	Y	Y	[3]
RPDCH_2X_NAK	617	24	Y	Y	[3]
RPDCH_4X_0	618	24	Y	Y	[3]
RPDCH_4X_1	619	24	Y	Y	[3]
RPDCH_4X_2	620	24	Y	Y	[3]
RPDCH_4X_NAK	621	24	Y	Y	[3]
RPDCH_8X_0	622	24	Y	Y	[3]
RPDCH_8X_1	623	24	Y	Y	[3]
RPDCH_8X_2	624	24	Y	Y	[3]
RPDCH_8X_NAK	625	24	Y	Y	[3]
RPDCH_12X_0	626	24	Y	Y	[3]
RPDCH_12X_1	627	24	Y	Y	[3]
RPDCH_12X_2	628	24	Y	Y	[3]
RPDCH_12X_NAK	629	24	Y	Y	[3]
RPDCH_16X_0	630	24	Y	Y	[3]
RPDCH_16X_1	631	24	Y	Y	[3]
RPDCH_16X_2	632	24	Y	Y	[3]
RPDCH_16X_NAK	633	24	Y	Y	[3]
RPDCH_24X_0	634	24	Y	Y	[3]
RPDCH_24X_1	635	24	Y	Y	[3]
RPDCH_24X_2	636	24	Y	Y	[3]
RPDCH_24X_NAK	637	24	Y	Y	[3]

**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required ? (Y or N)</b>	<b>Settable Parameter ? (Y or N)</b>	<b>Reference</b>
RPDCH_32X_0	638	24	Y	Y	[3]
RPDCH_32X_1	639	24	Y	Y	[3]
RPDCH_32X_2	640	24	Y	Y	[3]
RPDCH_32X_NAK	641	24	Y	Y	[3]
RPDCH_40X_0	642	24	Y	Y	[3]
RPDCH_40X_1	643	24	Y	Y	[3]
RPDCH_40X_2	644	24	Y	Y	[3]
RPDCH_40X_NAK	645	24	Y	Y	[3]
RPDCH_48X_0	646	24	Y	Y	[3]
RPDCH_48X_1	647	24	Y	Y	[3]
RPDCH_48X_2	648	24	Y	Y	[3]
RPDCH_48X_NAK	649	24	Y	Y	[3]
RPDCH_TOTAL_174	650	24	Y	Y	[3]
RPDCH_TOTAL_1X	651	24	Y	Y	[3]
RPDCH_TOTAL_2X	652	24	Y	Y	[3]
RPDCH_TOTAL_4X	653	24	Y	Y	[3]
RPDCH_TOTAL_8X	654	24	Y	Y	[3]
RPDCH_TOTAL_12X	655	24	Y	Y	[3]
RPDCH_TOTAL_16X	656	24	Y	Y	[3]
RPDCH_TOTAL_24X	657	24	Y	Y	[3]
RPDCH_TOTAL_32X	658	24	Y	Y	[3]
RPDCH_TOTAL_40X	659	24	Y	Y	[3]
RPDCH_TOTAL_48X	660	24	Y	Y	[3]
PCG_0_FOR_FCH_1	661	24	Y	Y	[3]
PCG_0_FOR_FCH_2	662	24	Y	Y	[3]
PCG_0_FOR_FCH_3	663	24	Y	Y	[3]
PCG_0_FOR_FCH_4	664	24	Y	Y	[3]
PCG_1_FOR_FCH_1	665	24	Y	Y	[3]
PCG_1_FOR_FCH_2	666	24	Y	Y	[3]

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required ? (Y or N)</b>	<b>Settable Parameter ? (Y or N)</b>	<b>Reference</b>
PCG_1_FOR_FCH_3	667	24	Y	Y	[3]
PCG_1_FOR_FCH_4	668	24	Y	Y	[3]
PCG_2_FOR_FCH_1	669	24	Y	Y	[3]
PCG_2_FOR_FCH_2	670	24	Y	Y	[3]
PCG_2_FOR_FCH_3	671	24	Y	Y	[3]
PCG_2_FOR_FCH_4	672	24	Y	Y	[3]
PCG_3_FOR_FCH_1	673	24	Y	Y	[3]
PCG_3_FOR_FCH_2	674	24	Y	Y	[3]
PCG_3_FOR_FCH_3	675	24	Y	Y	[3]
PCG_3_FOR_FCH_4	676	24	Y	Y	[3]
PCG_4_FOR_FCH_1	677	24	Y	Y	[3]
PCG_4_FOR_FCH_2	678	24	Y	Y	[3]
PCG_4_FOR_FCH_3	679	24	Y	Y	[3]
PCG_4_FOR_FCH_4	680	24	Y	Y	[3]
PCG_5_FOR_FCH_1	681	24	Y	Y	[3]
PCG_5_FOR_FCH_2	682	24	Y	Y	[3]
PCG_5_FOR_FCH_3	683	24	Y	Y	[3]
PCG_5_FOR_FCH_4	684	24	Y	Y	[3]
PCG_6_FOR_FCH_1	685	24	Y	Y	[3]
PCG_6_FOR_FCH_2	686	24	Y	Y	[3]
PCG_6_FOR_FCH_3	687	24	Y	Y	[3]
PCG_6_FOR_FCH_4	688	24	Y	Y	[3]
PCG_7_FOR_FCH_1	689	24	Y	Y	[3]
PCG_7_FOR_FCH_2	690	24	Y	Y	[3]
PCG_7_FOR_FCH_3	691	24	Y	Y	[3]
PCG_7_FOR_FCH_4	692	24	Y	Y	[3]
PCG_8_FOR_FCH_1	693	24	Y	Y	[3]
PCG_8_FOR_FCH_2	694	24	Y	Y	[3]
PCG_8_FOR_FCH_3	695	24	Y	Y	[3]

**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required ? (Y or N)</b>	<b>Settable Parameter ? (Y or N)</b>	<b>Reference</b>
PCG_8_FOR_FCH_4	696	24	Y	Y	[3]
PCG_9_FOR_FCH_1	697	24	Y	Y	[3]
PCG_9_FOR_FCH_2	698	24	Y	Y	[3]
PCG_9_FOR_FCH_3	699	24	Y	Y	[3]
PCG_9_FOR_FCH_4	700	24	Y	Y	[3]
PCG_10_FOR_FCH_1	701	24	Y	Y	[3]
PCG_10_FOR_FCH_2	702	24	Y	Y	[3]
PCG_10_FOR_FCH_3	703	24	Y	Y	[3]
PCG_10_FOR_FCH_4	704	24	Y	Y	[3]
PCG_11_FOR_FCH_1	705	24	Y	Y	[3]
PCG_11_FOR_FCH_2	706	24	Y	Y	[3]
PCG_11_FOR_FCH_3	707	24	Y	Y	[3]
PCG_11_FOR_FCH_4	708	24	Y	Y	[3]
PCG_12_FOR_FCH_1	709	24	Y	Y	[3]
PCG_12_FOR_FCH_2	710	24	Y	Y	[3]
PCG_12_FOR_FCH_3	711	24	Y	Y	[3]
PCG_12_FOR_FCH_4	712	24	Y	Y	[3]
PCG_13_FOR_FCH_1	713	24	Y	Y	[3]
PCG_13_FOR_FCH_2	714	24	Y	Y	[3]
PCG_13_FOR_FCH_3	715	24	Y	Y	[3]
PCG_13_FOR_FCH_4	716	24	Y	Y	[3]
PCG_14_FOR_FCH_1	717	24	Y	Y	[3]
PCG_14_FOR_FCH_2	718	24	Y	Y	[3]
PCG_14_FOR_FCH_3	719	24	Y	Y	[3]
PCG_14_FOR_FCH_4	720	24	Y	Y	[3]
PCG_15_FOR_FCH_1	721	24	Y	Y	[3]
PCG_15_FOR_FCH_2	722	24	Y	Y	[3]
PCG_15_FOR_FCH_3	723	24	Y	Y	[3]
PCG_15_FOR_FCH_4	724	24	Y	Y	[3]

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required ? (Y or N)</b>	<b>Settable Parameter ? (Y or N)</b>	<b>Reference</b>
PCG_0_FOR_SCH_1	725	24	Y	Y	[3]
PCG_0_FOR_SCH_2	726	24	Y	Y	[3]
PCG_0_FOR_SCH_3	727	24	Y	Y	[3]
PCG_0_FOR_SCH_4	728	24	Y	Y	[3]
PCG_0_FOR_SCH_5	729	24	Y	Y	[3]
PCG_1_FOR_SCH_1	730	24	Y	Y	[3]
PCG_1_FOR_SCH_2	731	24	Y	Y	[3]
PCG_1_FOR_SCH_3	732	24	Y	Y	[3]
PCG_1_FOR_SCH_4	733	24	Y	Y	[3]
PCG_1_FOR_SCH_5	734	24	Y	Y	[3]
PCG_2_FOR_SCH_1	735	24	Y	Y	[3]
PCG_2_FOR_SCH_2	736	24	Y	Y	[3]
PCG_2_FOR_SCH_3	737	24	Y	Y	[3]
PCG_2_FOR_SCH_4	738	24	Y	Y	[3]
PCG_2_FOR_SCH_5	739	24	Y	Y	[3]
PCG_3_FOR_SCH_1	740	24	Y	Y	[3]
PCG_3_FOR_SCH_2	741	24	Y	Y	[3]
PCG_3_FOR_SCH_3	742	24	Y	Y	[3]
PCG_3_FOR_SCH_4	743	24	Y	Y	[3]
PCG_3_FOR_SCH_5	744	24	Y	Y	[3]
PCG_4_FOR_SCH_1	745	24	Y	Y	[3]
PCG_4_FOR_SCH_2	746	24	Y	Y	[3]
PCG_4_FOR_SCH_3	747	24	Y	Y	[3]
PCG_4_FOR_SCH_4	748	24	Y	Y	[3]
PCG_4_FOR_SCH_5	749	24	Y	Y	[3]
PCG_5_FOR_SCH_1	750	24	Y	Y	[3]
PCG_5_FOR_SCH_2	751	24	Y	Y	[3]
PCG_5_FOR_SCH_3	752	24	Y	Y	[3]
PCG_5_FOR_SCH_4	753	24	Y	Y	[3]

**Table E-1. Retrievable and Settable Parameters**

<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required ? (Y or N)</b>	<b>Settable Parameter ? (Y or N)</b>	<b>Reference</b>
PCG_5_FOR_SCH_5	754	24	Y	Y	[3]
PCG_6_FOR_SCH_1	755	24	Y	Y	[3]
PCG_6_FOR_SCH_2	756	24	Y	Y	[3]
PCG_6_FOR_SCH_3	757	24	Y	Y	[3]
PCG_6_FOR_SCH_4	758	24	Y	Y	[3]
PCG_6_FOR_SCH_5	759	24	Y	Y	[3]
PCG_7_FOR_SCH_1	760	24	Y	Y	[3]
PCG_7_FOR_SCH_2	761	24	Y	Y	[3]
PCG_7_FOR_SCH_3	762	24	Y	Y	[3]
PCG_7_FOR_SCH_4	763	24	Y	Y	[3]
PCG_7_FOR_SCH_5	763	24	Y	Y	[3]
PCG_8_FOR_SCH_1	764	24	Y	Y	[3]
PCG_8_FOR_SCH_2	765	24	Y	Y	[3]
PCG_8_FOR_SCH_3	766	24	Y	Y	[3]
PCG_8_FOR_SCH_4	767	24	Y	Y	[3]
PCG_8_FOR_SCH_5	768	24	Y	Y	[3]
PCG_9_FOR_SCH_1	769	24	Y	Y	[3]
PCG_9_FOR_SCH_2	770	24	Y	Y	[3]
PCG_9_FOR_SCH_3	772	24	Y	Y	[3]
PCG_9_FOR_SCH_4	773	24	Y	Y	[3]
PCG_9_FOR_SCH_5	774	24	Y	Y	[3]
PCG_10_FOR_SCH_1	775	24	Y	Y	[3]
PCG_10_FOR_SCH_2	776	24	Y	Y	[3]
PCG_10_FOR_SCH_3	777	24	Y	Y	[3]
PCG_10_FOR_SCH_4	778	24	Y	Y	[3]
PCG_10_FOR_SCH_5	779	24	Y	Y	[3]
PCG_11_FOR_SCH_1	780	24	Y	Y	[3]
PCG_11_FOR_SCH_2	781	24	Y	Y	[3]
PCG_11_FOR_SCH_3	782	24	Y	Y	[3]

<b>Table E-1. Retrievable and Settable Parameters</b>					
<b>Parameter Identifier</b>	<b>Value of PARA- METER_ID (decimal)</b>	<b>Length (bits) (PARA- METER_LEN is Length - 1)</b>	<b>Support Required ? (Y or N)</b>	<b>Settable Parameter ? (Y or N)</b>	<b>Reference</b>
PCG_11_FOR_SCH_4	783	24	Y	Y	[3]
PCG_11_FOR_SCH_5	784	24	Y	Y	[3]
PCG_12_FOR_SCH_1	785	24	Y	Y	[3]
PCG_12_FOR_SCH_2	786	24	Y	Y	[3]
PCG_12_FOR_SCH_3	787	24	Y	Y	[3]
PCG_12_FOR_SCH_4	788	24	Y	Y	[3]
PCG_12_FOR_SCH_5	789	24	Y	Y	[3]
PCG_13_FOR_SCH_1	790	24	Y	Y	[3]
PCG_13_FOR_SCH_2	791	24	Y	Y	[3]
PCG_13_FOR_SCH_3	792	24	Y	Y	[3]
PCG_13_FOR_SCH_4	793	24	Y	Y	[3]
PCG_13_FOR_SCH_5	794	24	Y	Y	[3]
PCG_14_FOR_SCH_1	795	24	Y	Y	[3]
PCG_14_FOR_SCH_2	796	24	Y	Y	[3]
PCG_14_FOR_SCH_3	797	24	Y	Y	[3]
PCG_14_FOR_SCH_4	798	24	Y	Y	[3]
PCG_14_FOR_SCH_5	799	24	Y	Y	[3]
PCG_15_FOR_SCH_1	800	24	Y	Y	[3]
PCG_15_FOR_SCH_2	801	24	Y	Y	[3]
PCG_15_FOR_SCH_3	802	24	Y	Y	[3]
PCG_15_FOR_SCH_4	803	24	Y	Y	[3]
PCG_15_FOR_SCH_5	804	24	Y	Y	[3]

- 1 This page intentionally left blank.



## 1 ANNEX F MOBILE STATION DATABASE

### 2 **F.1 Introduction**

3 This is an informative annex which lists the numeric indicators that are described by this  
4 document and stored in the mobile station's permanent or semi-permanent memory. Some  
5 of these indicators are required; other indicators are optional and are so noted.

6 The indicators are organized in this annex according to two categories:

7     • Mobile station indicators     These indicators are global to the mobile station and  
8   independent of the mobile station's NAMs.

9     • NAM indicators                 These indicators specify parameters associated with the  
10   mobile station's NAM.

11 The description of each indicator below includes the indicator's name, the number of bits it  
12 contains, and the section in this document where it is defined. Permanent indicators are  
13 denoted by the "p" subscript; semi-permanent indicators are denoted by the "s-p"  
14 subscript.

15

## 1 **F.2 Mobile Station Indicators**

2 Mobile station indicators are organized into permanent mobile station indicators and semi-  
3 permanent mobile station indicators.

### 4 **F.2.1 Permanent Mobile Station Indicators**

5 Permanent mobile station indicators specify physical station configuration and attributes,  
6 independent of NAM. The indicators are listed in Table F.2.1-1.

7

8 **Table F.2.1-1. Permanent Mobile Station Indicators**

Indicator	Number of Bits	Where Defined	Notes
ESN <sub>p</sub>	32	2.3.2.1	See 2.3.14 for special ESN storage and protection requirements. Includes MOB_MFG_CODE <sub>p</sub> .
MEID <sub>p</sub>	56	2.3.2.2	
ACCOLC <sub>p</sub>	4	2.3.5	
SCM <sub>p</sub>	8	2.3.3	
SLOT_CYCLE_INDEX <sub>p</sub>	4	2.3.11	This is a signed integer that can take the values between -4 and +7 inclusive.
MOB_FIRM_REV <sub>p</sub>	16	2.3.14	
MOB_MODEL <sub>p</sub>	8	2.3.14	
MOB_MFG_CODE <sub>p</sub>	8	2.3.14	
For each band class supported:			
MOB_P_REV <sub>p</sub>	8	2.3.14	

9

10

## F.2.2 Semi-permanent Mobile Station Indicators

Semi-permanent mobile station indicators are retained when the mobile station power is turned off. These indicators are associated with mobile station registration and lock. They are independent of the NAM in use. CDMA indicators are listed in Table F.2.2-1.

**Table F.2.2-1. CDMA Semi-permanent Mobile Station Indicators**

Indicator	Number of Bits	Where Defined	Notes
ZONE_LIST <sub>s-p</sub>		2.3.4	
REG_ZONE <sub>s-p</sub>	12	2.3.4	
SID <sub>s-p</sub>	15	2.3.4	
NID <sub>s-p</sub>	16	2.3.4	
SID_NID_LIST <sub>s-p</sub>		2.3.4	
SID <sub>s-p</sub>	15	2.3.4	
NID <sub>s-p</sub>	16	2.3.4	
BASE_LAT_REG <sub>s-p</sub>	22	2.3.4	
BASE_LONG_REG <sub>s-p</sub>	23	2.3.4	
REG_DIST_REG <sub>s-p</sub>	11	2.3.4	
LCKRSN_P <sub>s-p</sub>	4	2.3.13	
MAINTRSN <sub>s-p</sub>	4	2.3.13	

### 1 F.3 NAM Indicators

2 Each mobile station contains one or more NAMs. Table F.3-1 lists the permanent and  
3 semi-permanent values associated with each NAM.

4

5

**Table F.3-1. NAM Indicators (Part 1 of 2)**

Indicator	Number of Bits	Where Defined	Notes
A_KEY	64	2.3.12.1.5	
SSD_A <sub>s-p</sub>	64	2.3.12.1.1	Shared Secret Data A
SSD_B <sub>s-p</sub>	64	2.3.12.1.1	Shared Secret Data B
COUNT <sub>s-p</sub>	6	2.3.12.1.3	Call History Parameter
IMSI_M_CLASS <sub>p</sub>	1	2.3.1	
IMSI_T_CLASS <sub>p</sub>	1	2.3.1	
IMSI_M_S <sub>p</sub>	34	2.3.1.1	Includes IMSI_M_S1 <sub>p</sub> and IMSI_M_S2 <sub>p</sub> .
IMSI_T_S <sub>p</sub>	34	2.3.1.1	Includes IMSI_T_S1 <sub>p</sub> and IMSI_T_S2 <sub>p</sub> .
IMSI_M_ADDR_NUM <sub>p</sub>	3	2.3.1	Applies to IMSI_M.
IMSI_T_ADDR_NUM <sub>p</sub>	3	2.3.1	Applies to IMSI_T.
IMSI_M_11_12 <sub>p</sub>	7	2.3.1.2	
IMSI_T_11_12 <sub>p</sub>	7	2.3.1.1	
MCC_M <sub>p</sub>	10	2.3.1.1	
MCC_T <sub>p</sub>	10	2.3.1.1	
MDN <sub>p</sub>	See Notes	2.3.1.4	An MDN consists of up to 15 digits based on manufacturer specific coding.
ASSIGNING_TMSI_ZONE_LEN <sub>s-p</sub>	4	2.3.15.2	
ASSIGNING_TMSI_ZONE <sub>s-p</sub>	64	2.3.15.2	
TMSI_CODE <sub>s-p</sub>	32	2.3.15.2	
TMSI_EXP_TIME <sub>s-p</sub>	24	2.3.15.2	

6

1

**Table F.3-1. NAM Indicators (Part 2 of 2)**

<b>Indicator</b>	<b>Number of Bits</b>	<b>Where Defined</b>	<b>Notes</b>
SID <sub>p</sub>	15	2.3.8	
NID <sub>p</sub>	16	2.3.8	
MOB_TERM_HOME <sub>p</sub>	1	2.3.8	
MOB_TERM_FOR_SID <sub>p</sub>	1	2.3.8	
MOB_TERM_FOR_NID <sub>p</sub>	1	2.3.8	
IMSI_10_M <sub>p</sub>	4	2.3.1.1	
IMSI_10_T <sub>p</sub>	4	2.3.1.1	

2

3

- 1
- 2 This page intentionally left blank
- 3

# 1 ANNEX G CDMA EXTENDED ENCRYPTION CALL FLOW EXAMPLES

2 This is an informative annex, which contains examples of extended encryption call flow.  
 3 The diagrams follow these conventions:

- 4 • All messages are received without error
- 5 • Acknowledgments are not shown

6 For all the call flow diagrams, the following conventions hold:

- 7 • The following message acronyms are defined:

8 RGM: Registration Message

9 ORM: Origination Message

10 CAM: Channel Assignment Message

11 ECAM: Extended Channel Assignment Message

12 SMCM: Security Mode Command Message

- 13 • The following short forms are defined:

14 enc.k1: encrypt the message with key k1

15 csch\_enc\_req: C\_SIG\_ENCRYPT\_REQ

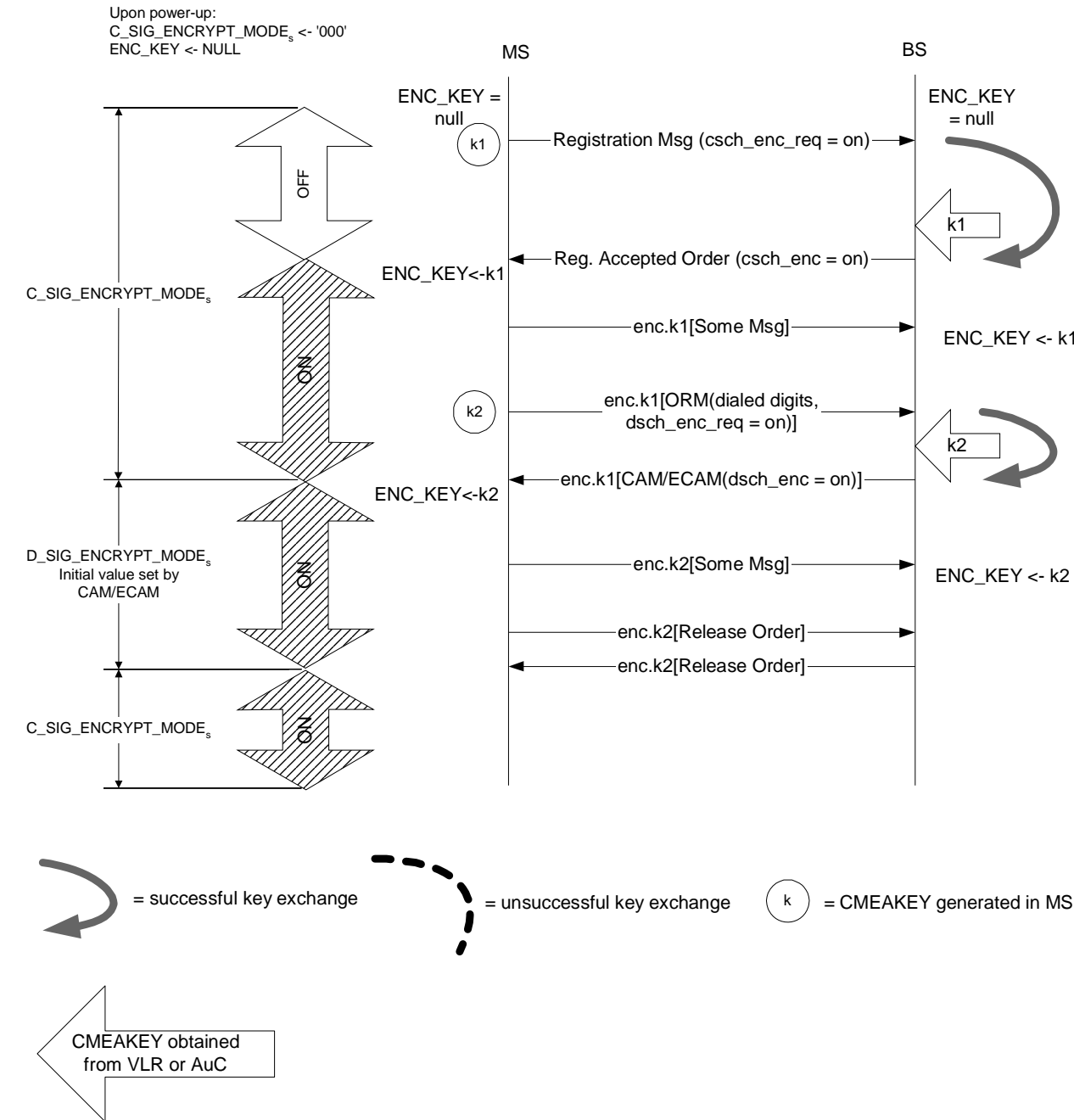
16 dsch\_enc\_req: D\_SIG\_ENCRYPT\_REQs

17 csch\_enc: C\_SIG\_ENCRYPT\_MODE

18 dsch\_enc: D\_SIG\_ENCRYPT\_MODE

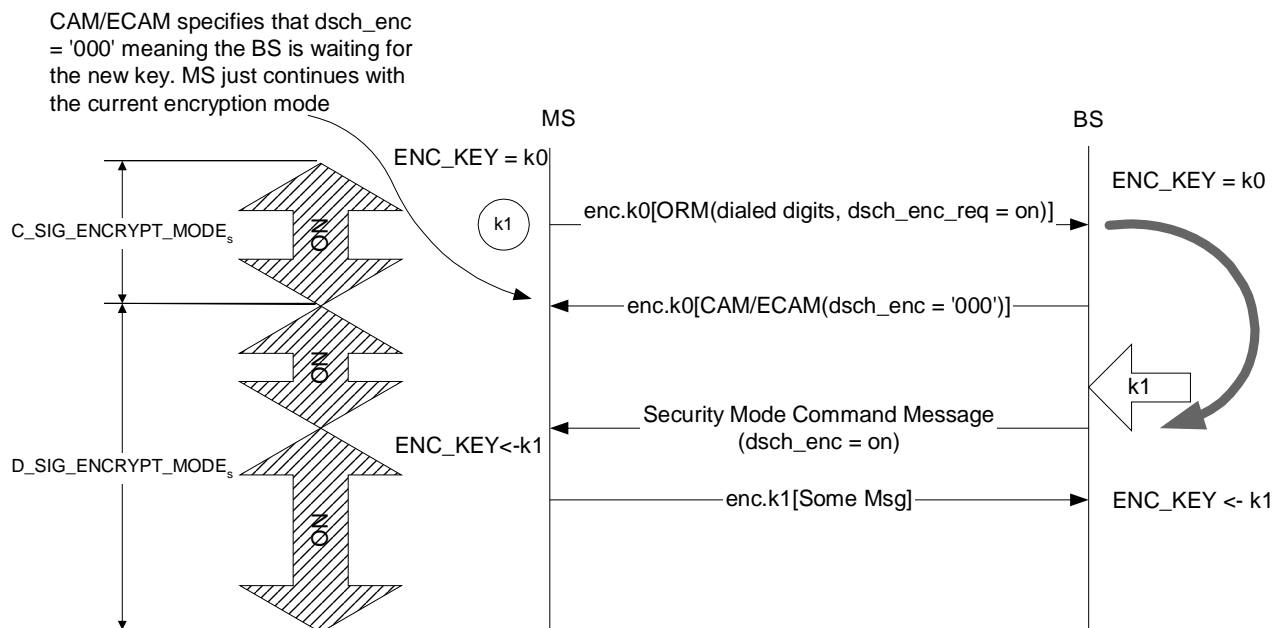
19 A <- B: assign value B to variable A

20



**Figure G-1. Power-Up Registration, Origination, and Call Release (BS waits for the new CMEKEY before sending CAM/ECAM)**





**1**

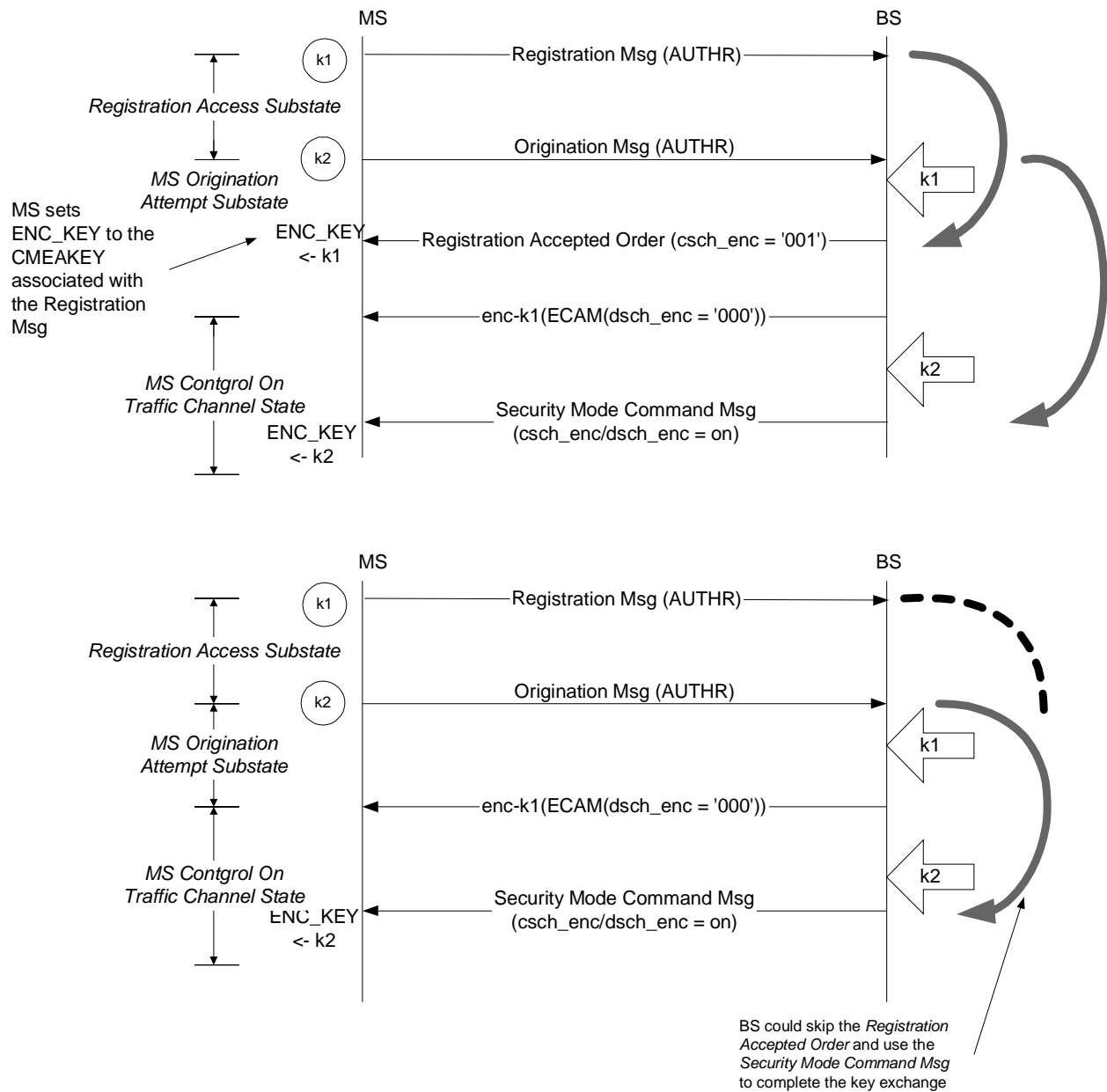
2

3

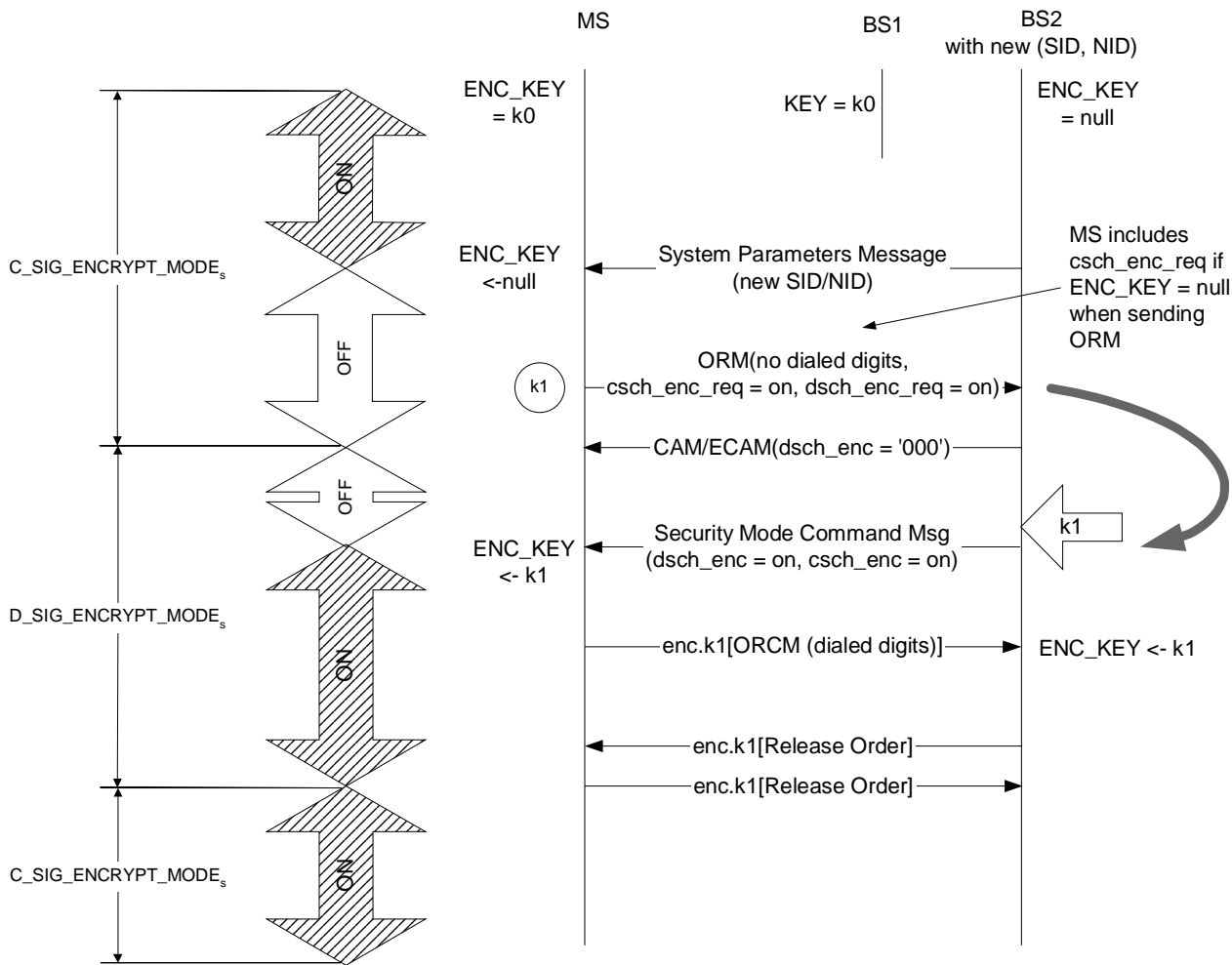
4

5

**Figure G-2. Quick Channel Assignment (BS does not wait for the new key before sending CAM/ECAM)**

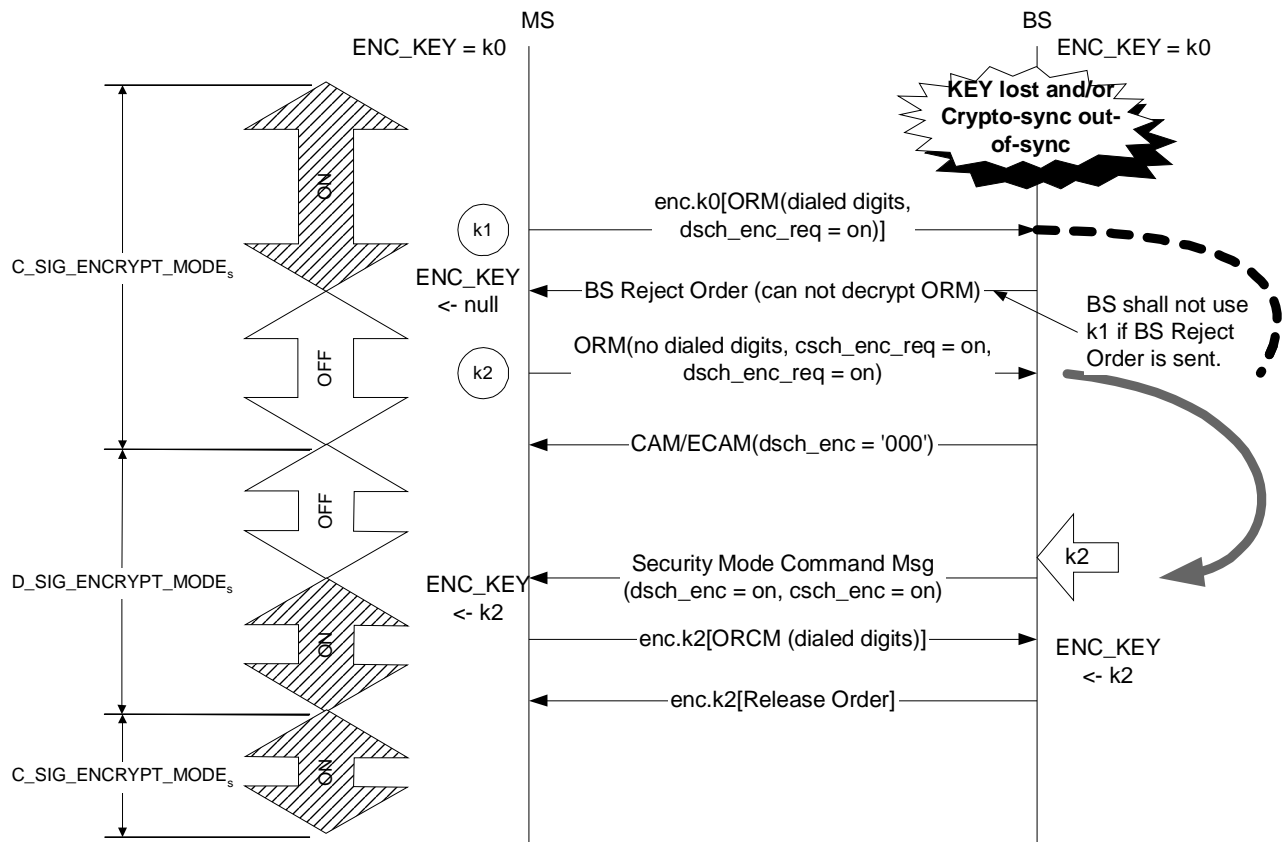


**Figure G-3. MS Initiates Call Origination During the Registration Access Substate**

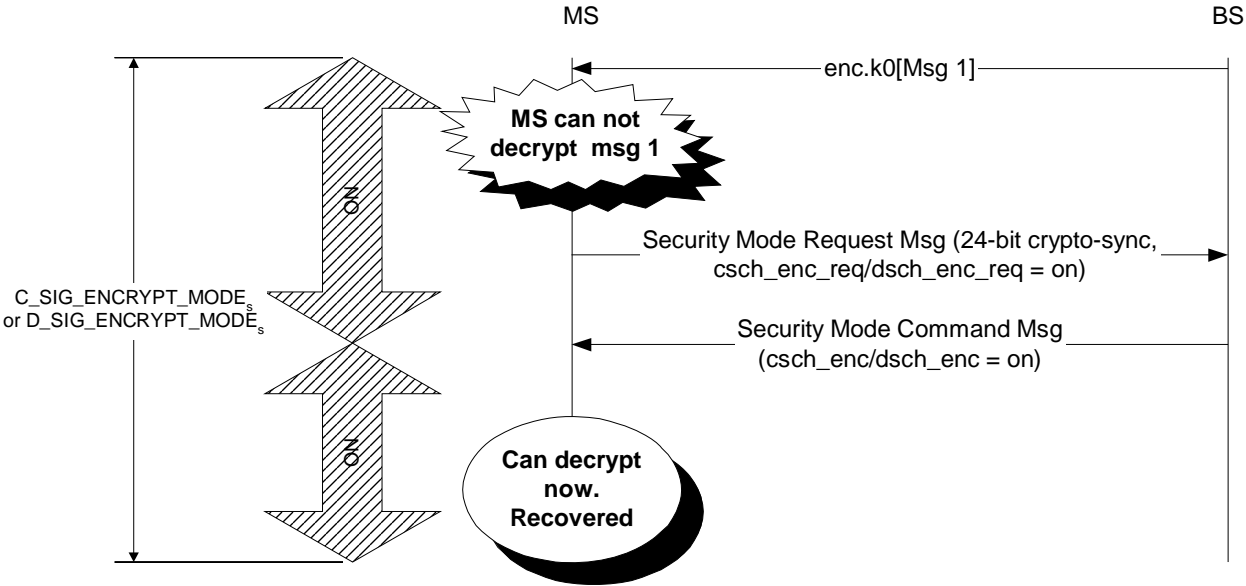


1  
2  
3  
4  
5

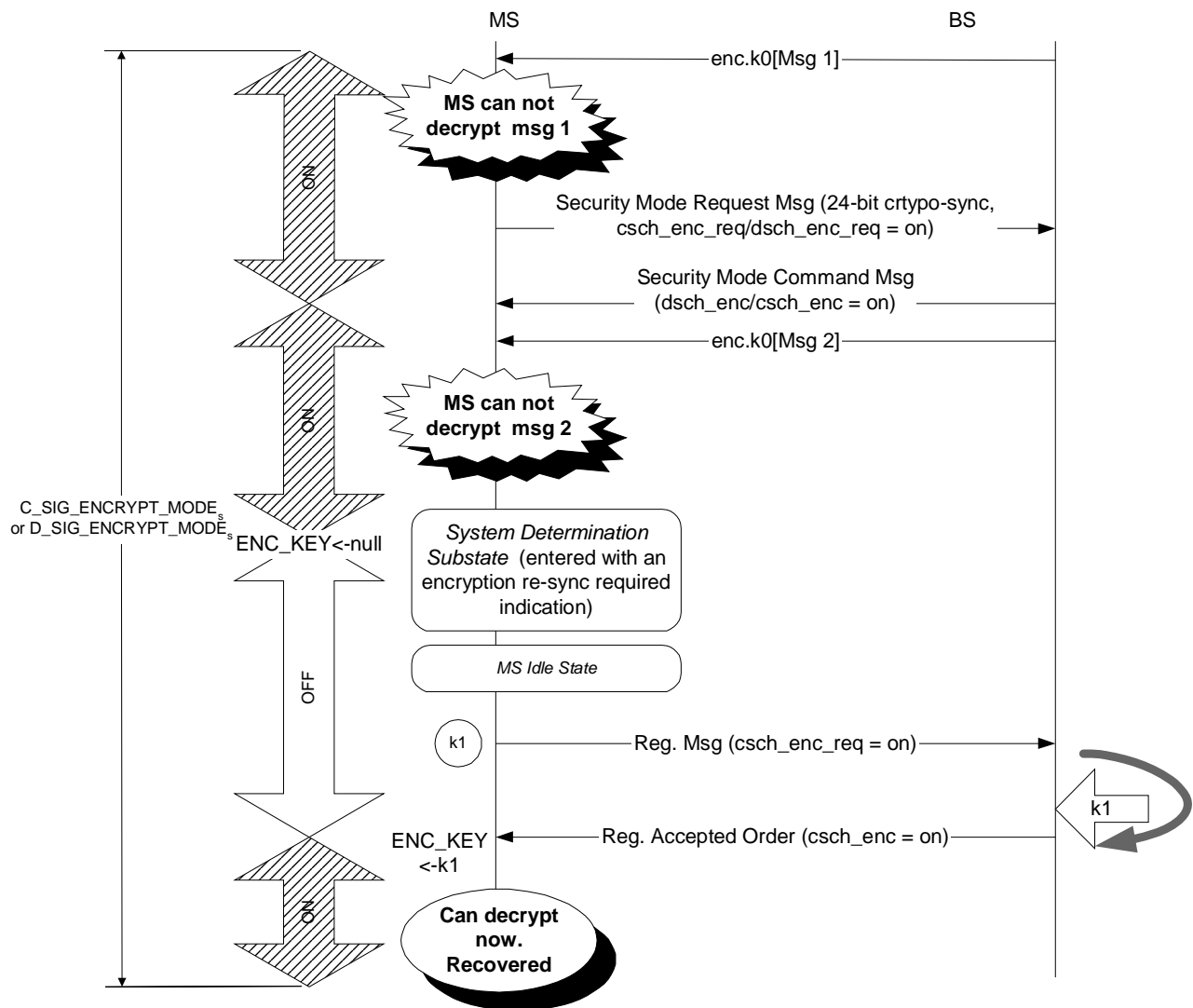
**Figure G-4. Implicit Registration (MS crosses a SID/NID boundary during MS Idle State. MS originates before registering)**



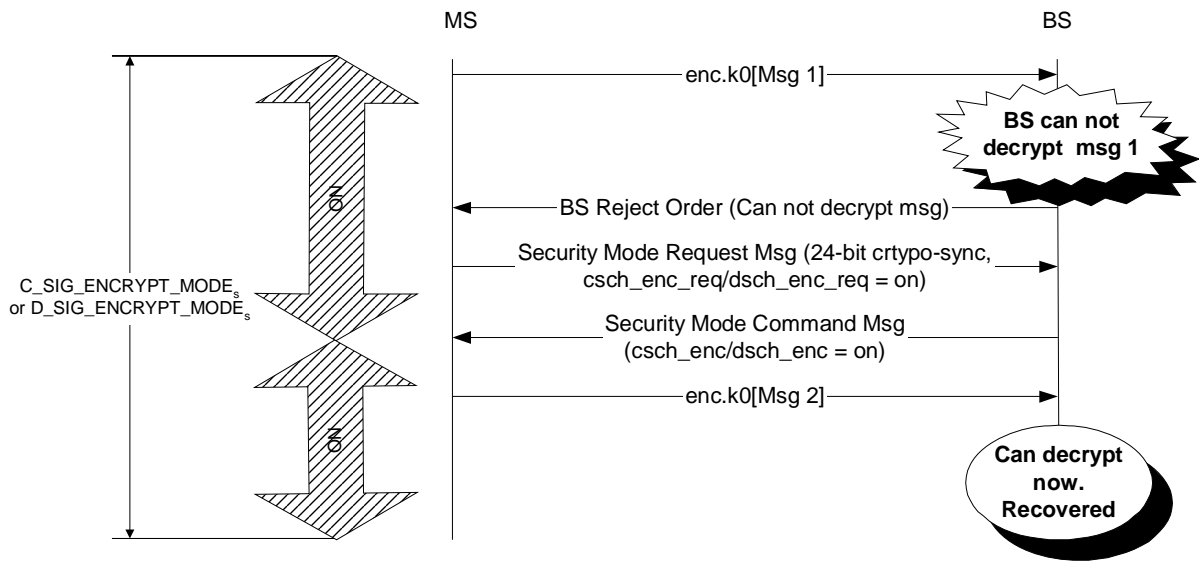
**Figure G-5. BS Lost the Stored Key (A rare out-of-sync case)**



**Figure G-6. MS Fails to Decrypt Messages (MS recovers by re-synchronizing the crypt-sync)**

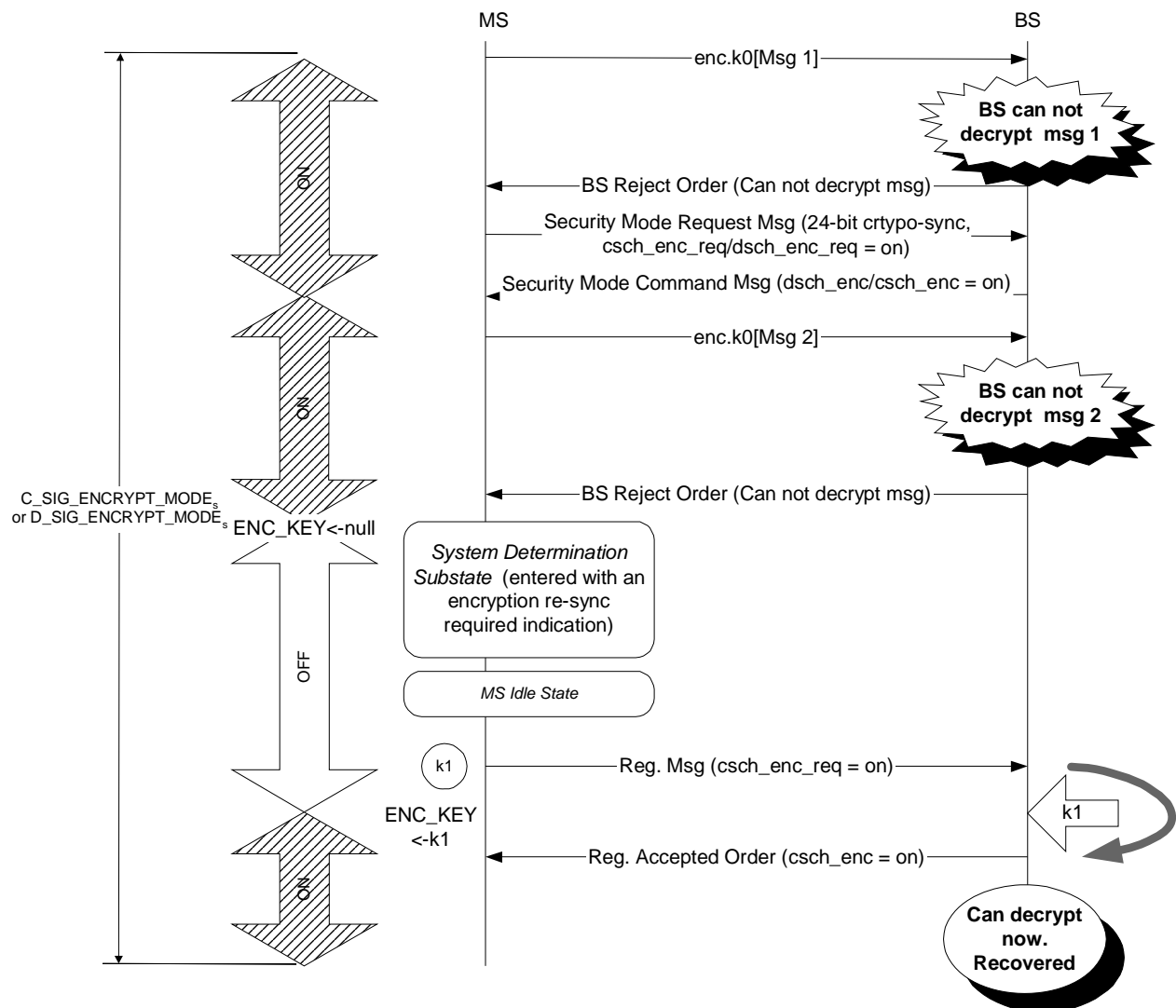


**Figure G-7. MS Fails to Decrypt Messages (MS recovers by re-registering after failing to re-synchronize the crypto-sync)**



1  
2  
3  
4

**Figure G-8. BS Fails to Decrypt Messages (BS recovers by re-synchronizing the crypt-sync)**



**Figure G-9. BS Fails to Decrypt Messages (BS recovers by forcing the MS to re-register after failing to re-synchronize the crypto-sync)**